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MANAGEMENT SCIENCES FOR HEALTH



U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT



UNITED STATES PHARMACOPEIA

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**FOR MORE INFORMATION, CONTACT:**

**MANAGEMENT SCIENCES FOR HEALTH  
1655 N. FORT MYER DRIVE, SUITE 920  
ARLINGTON, VIRGINIA 22209 USA  
PHONE: (703) 524-6575  
FAX: (703) 524-7898  
E-MAIL: rpm@msh-dc.org**

**U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT  
G/PHN/HH/HPSR  
WASHINGTON, DC 20523-1817 USA  
PHONE: (703) 875-4522  
FAX: (703) 875-4686  
E-MAIL: aboni@usaid.gov**

**UNITED STATES PHARMACOPEIA  
12601 TWINBROOK PARKWAY  
ROCKVILLE, MARYLAND 20852 USA  
PHONE: (301) 816-8385  
FAX: (301) 816-8374  
E-MAIL: rpm@the.usp.org**

PN-ABX-700

**INVEC-2 Inventory Management Program  
Operator's Manual  
Version 1.1**

**August 1, 1995**

**Management Sciences For Health  
1655 N. Ft. Myer Drive, Suite 920  
Arlington, VA 22209 USA**

## ABOUT THIS MANUAL

This manual is designed to serve as a training guide and a reference manual for all Medical Store (MS) staff who use the INVEC-2 program. For the learner, the basic commands and procedures for each option are explained step-by-step in the order in which they will be covered during a training session. For the experienced user, the manual has bold headings for referencing the INVEC-2 procedures or commands discussed within each section. Answers to specific questions or steps for a particular procedure can easily be located by looking up the key word in the index. Concepts unique to INVEC-2 and instructions on data interpretation are presented throughout the manual, and can also be found in the Glossary.

Important INVEC-2 features are covered in summary sections:

1. A summary of key INVEC-2 concepts and terms in Chapter 1;
2. A list of INVEC-2 command keys in Section 3.3;
3. An explanation of INVEC-2 calculated data fields in Appendix C; and
4. A sample listing of all INVEC-2 reports and appropriate criteria in Chapter 11.

In each chapter on INVEC-2 options, all data entry information is described in detail.

Throughout the manual, arrow brackets have been used to notate computer keystrokes. For example, <ENTER> means you should press the Return or Enter key on your keyboard. <PgDn> refers to the page down key. The key names which are used correspond to those printed on your keyboard. To activate some INVEC-2 functions or options, you may either type the first letter of the command; highlight the function and press <ENTER>; or if using a mouse, click on the function. Since any one of these actions can be used to access the function, the term **select** will be used throughout the manual to indicate that any one of the above actions may be performed. Whenever possible, the manual has used INVEC-2 notations so that what you see in the manual corresponds to what you see on your screen. See Chapter 3 for more details on key commands.

We suggest that new users read at least Chapter 1 before beginning to use INVEC-2. You will probably get more value from the manual and from the training sessions if you read through the entire manual once, and then explore each chapter in depth as it is presented in your training session.

## **HARDWARE/SOFTWARE SYSTEM REQUIREMENTS**

### **Hardware**

- 100% compatible IBM Computers (XT, AT, 386, 486)
- 640K RAM
- 1 Floppy Disk Drive (3.5" or 5.25") either low or high density
- 1 Hard Disk with at least 40MB of available space. However, if the Tender option is used a 80MB Hard Disk is recommended. (You will need at least 640K of free disk space on your hard disk while INVEC-2 is operating to run the reports.)
- A device such as an Uninterruptable Power Supply (UPS) is highly recommended in order to protect the system from surges and power failure.

### **Printer**

- A dot matrix EPSON or IBM compatible printer.
- A wide carriage printer is necessary if printing Tender Reports.
- The report generator supports a laser printer as well.

### **Software**

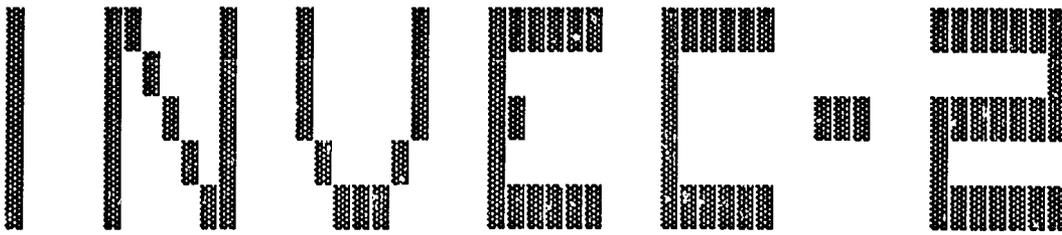
- MS-DOS Operating System, Version 5.0 or higher.
- A PC backup software package in order to optimize your back-up.
- A disk cache such as SMARTDRIVE.

### **Optional Hardware/Software**

- Mouse
- Network Operating System Software (Multiuser environment)

### **Recommended Hardware Configuration**

- 100% Compatible Intel 486 PC
- 4 MB RAM (4096K)
- 120 MB Hard Disk
- SVGA Monitor (Super Video Graphics Array)



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## INTRODUCTION TO INVEC-2

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## 1.0 INTRODUCTION TO INVEC-2

The INVEC-2 Inventory Management Program is a user-friendly relational database program written in Clipper 5.2. All predefined reports have been developed with R&R Report Writer Version 6. INVEC-2 maintains a perpetual inventory record of all Medical Store (MS) items and keeps track of all purchases and receipts from suppliers, as well as issues to health facilities. A relational database program like INVEC-2 allows you to manipulate, combine, and extract information from multiple database files. The process is similar to using a manual information system that contains several different record ledgers or files. When you want to get information from a ledger or a file cabinet, you go to the ledger or cabinet, remove or copy the information needed, and then use the information in whatever task is under way, or you may use it to develop a report on MS operations.

INVEC-2 performs very similar work, except that all of the information is managed by your computer. INVEC-2 transfers, copies, and reports the information you need. One significant advantage of INVEC-2 is that it can look at many different files at the same time, pulling only the needed information from each and combining the data for you to view on the computer screen or to print as a report.

### Files, Records, and Fields

INVEC-2 uses three main database files called INVEC-2 Master Files. For each of the master files there are other related data files containing supplementary information. Following is a description of the primary INVEC-2 master files.

#### Stock Master File

This master file contains one record for each generic item stocked at the MS. Linked sub-files provide information such as therapeutic alternatives, formulary codes, stock of each item from various suppliers, and tender contracts, if applicable.

#### Facility Master File

This master file contains one record for each facility receiving supplies from this MS. Linked sub-files provide information on current stock levels for items managed by the MS, budget and financial statistics, and monthly payments and expenditures.

## Supplier Master File

This master file contains one record for each supplier from which products are ordered by this MS. Linked sub-files include purchase and payment history and currency factors associated with the supplier.

The information from these master files is used to record purchases, receipts, and issues through INVEC-2 procedures. Then INVEC-2 lets you review these activities through Reports. These three features - *Master Files* (and linked sub-files), *Transactions*, and *Reports* - are the essence of INVEC-2.

Each INVEC-2 database file is made up of separate records, one for each item in the file (just like a ledger or file folder). In each database file, the records are organized like those in a ledger or spreadsheet with each record in the file resembling a line in the ledger or row in a spreadsheet.

All INVEC-2 records are composed of data fields which are like blanks that must be filled in on a form or ledger, or cells in the row of a spreadsheet. When you use INVEC-2, each step requires entering data into a field that is part of a record stored in a database file.

## 1.1 INVEC-2 Concepts and Overview

INVEC-2 is intended to improve information flow and supply management at the MS. The proper use of INVEC-2 employs three types of operations:

- Developing and maintaining Master Files and Validation and Reference Data Files;
- Using INVEC-2 Transactions to record MS operations; and
- Generating INVEC-2 Reports.

An additional module gives you the option of using INVEC-2 to process your tender Request For Bid (RFB) procedure.

The Stock, Facilities, and Supplier options are used to construct the master files and supplementary data files. If adding a new item to your inventory, you will update the master file following the procedures described in Chapter 4. If a new health facility is opened (or one is closed), you will update the Facility Master File as instructed in Chapter 5. If a new supplier comes on stream, you will update the Supplier Master File as described in Chapter 6.

The Purchase Order and Issues options record MS purchases, receipts, and issues. As you place purchase orders with suppliers, you will follow the steps described in Chapter 9 (Purchase Orders). The same chapter also explains how to enter receipts and produce receiving reports. When you fill requisitions from a health facility, you will process them as described in Chapter 8, Issues (S.O./S.I.V.).

All of these options are interactive. You do not have to access the master files after processing MS operations; INVEC-2 automatically updates the Stock, Facilities, and Supplier Master Files to register data entered through the Purchase Order or Issues option.

INVEC-2 produces over 30 standard reports through a simple selection of menu choices. In addition, you may further customize each report to obtain the desired information. These reports and their use are detailed in Chapter 11 of the manual. Finally, the Tender option updates tender information in the Supplier and Stock Master Files at the beginning of each procurement cycle and helps to process information about the tendering procedure. Using INVEC-2 with contracted items is described in detail in Chapter 10.

### **Integrating INVEC-2 into the MS Routine**

The first critical step in implementing INVEC-2 in your MS is assigning responsibility for data entry. You may wish to divide this work (i.e., have one person enter purchases and receipts and another enter issues) or assign responsibilities in any manner suitable to your MS. In any case, the division of responsibility should be made clear to all staff involved in the operation and maintenance of INVEC-2. Those persons assigned to perform data entry must have regular and timely access to the purchase orders, supplier invoices, and requisitions to be recorded in INVEC-2.

A second step is deciding which INVEC-2 features will be used routinely in your MS operations. Since INVEC-2 was designed to operate in a variety of warehouse settings, some INVEC-2 features may not be necessary in your MS.

Similarly, you will choose whether or not to use the INVEC-2 *allocation* and *picking list* features. The picking list is an optional INVEC-2 feature that allows busy warehouses, with several staff members involved in pulling orders, to predetermine which batches of an item will be issued to health facilities. When a requisition is received, the MS manager or head storekeeper will use INVEC-2 to determine which batches and what quantities of each item requested are in stock. A list will then be printed showing the personnel filling orders exactly which items from which suppliers to ship. Once the orders have been filled, the quantities are confirmed through INVEC-2 (or adjusted if necessary) and an invoice is printed. This feature requires two separate data entry steps to process each requisition.

Another step in the process of implementing INVEC-2 is customizing the INVEC-2 program to match your specific MS procedures. This requires setting or resetting the INVEC-2 defaults. For example, when setting up INVEC-2, you will note whether or not your store adds a markup to cost when issuing to facilities and whether or not a standard markup is added to purchase costs by a procurement group. You will set default procurement periods, forecasting periods, minimum stock values, and average lead times based on current established settings in your MS.

The advisors who help you install INVEC-2 will take you through each step in the process of choosing default settings and deciding how to use INVEC-2. These steps are described in Chapter 2 of the INVEC-2 manual. These are not irreversible decisions. If your requirements change, it is easy to reset defaults or to implement an INVEC-2 feature not previously used at your MS.

### **Quality Assurance**

INVEC-2 is a sophisticated computer program with many advanced features, but like any other computer program (or any manual record system), it is only as good as the data that are entered.

INVEC-2 itself is not intelligent. If you ship ampicillin to a health center but enter cotrimoxazole into the computer, INVEC-2 will not catch the error and records for both drugs will be incorrect. If you enter information saying you received fifty units of an item, INVEC-2 registers that you received fifty units. If in reality the number was sixty, the INVEC-2 files will be in error, and as a result, the INVEC-2 inventory system will not reflect a true physical inventory.

No record system is immune to error. If you want your INVEC-2 records to be correct, all data input must be entered with ATTENTION TO DETAIL. INVEC-2 data files should be checked against manual records occasionally and corrected when errors are found. This should be part of the annual or semi-annual inventory exercises.

In the same vein, when new items are added to any of the master files, it is critical that each user-input field contain the correct information in the proper format. INVEC-2 will not accept a word in a field where numbers are required, but it will not know if you entered the wrong word in a field that requires characters. If a non-pharmacist is responsible for routine data entry, the MS manager or senior pharmacist should check entries when new entries are added to master files. Chapters 4, 5 and 6 describe in detail the instructions for adding new entries to the master files; these instructions should be followed closely.

### **Timely Entries**

Just as INVEC-2 is dependent upon accurate entries, its usefulness to your MS is dependent upon data being entered as the action happens.

When you place a purchase order, it should be entered into INVEC-2 immediately, and when the shipment is received, the INVEC-2 receiving report should be completed before the items are added to stock. When supplies are shipped to health facilities, the requisitions should be entered into INVEC-2 as soon as possible, ideally on the same day. When errors are noted in stock levels, they should be corrected in INVEC-2 immediately.

If the INVEC-2 entries are made as the action occurs, you can - at any time - get a true picture of your current stock situation or generate accurate reports on consumption.

If the entries are regularly done on a delayed basis, you will have a hard time determining what your true situation is at any given time, and vital information may be lost as requisitions, purchase orders, and invoices are misplaced and never entered.

### **Extracting and Using INVEC-2 Information**

INVEC-2 would be of little use in the MS if it only absorbed data input. The real value of INVEC-2 is its ability to generate information that you can use to make decisions.

INVEC-2 allows you to generate a standard series of reports that provide information on purchases, receipts, issues, stock adjustment, reorder quantities, and payments. These reports can be generated at any time for any period using INVEC-2's optional report procedures.

Each MS will use the reports differently. You should discuss with the Ministry of Health which INVEC-2 reports should be distributed to facilities and to various Ministry officials. INVEC-2 reports can also be used to develop a MS newsletter or bulletin. This can improve relations with the Ministry and enhance the effectiveness of health workers in the public health care system.

It is not necessary to run a full report to get quick information about an item, supplier, or health facility. You will discover that INVEC-2 provides you with information on several data forms in the program. This information includes lead times, stock levels, reorder levels, and transactions with suppliers and facilities. You can always get a print-out of this information by printing the screen.

## **1.1.1 Tender Management Using INVEC-2**

### **INVEC-2 and Tender Items**

If you purchase items on tender, either independently or as part of a procurement agency, INVEC-2 will assist with the management of the tendering procedure and facilitate purchasing by processing the appropriate contract information on tender items. INVEC-2 Tender option manages the tendering procedure, if the MS carries out this process independently.

**Purchasing Tender Items:** The INVEC-2 Stock Product Catalogue File stores information on tender items, including prices and delivery information, and it lets you automatically call up a list of all tender items by supplier when you are preparing purchase orders. In order to use INVEC-2 to purchase tender items, you will need to assign separate supplier codes for suppliers from whom you purchase tender and non-tendered goods. For example, you might

have two files for ECHO, one coded ECO/(the Contract Supplier File) and one coded ECO/DIR for direct purchases from ECHO. Chapter 6 explains how to code MS suppliers. The only exception to this procedure is if the supplier uses the same currency code for tender and non-tender items. If that is the case, then only one code is necessary for the supplier.

**Managing the Tender Process:** The Tender option in INVEC-2 is a module designed to manage the tender procedure and update INVEC-2 files to reflect new contract information at the beginning of each procurement cycle. Chapter 10 explains how to use INVEC-2 in the tendering process, including forecasting needs, generating bidding documents, entering quotations, and awarding contracts.

### 1.1.2 Units of Measurement in INVEC-2

In INVEC-2, the issue unit is the basic counting unit and allows you to compare different packages of the same item. This system provides flexibility in ordering different pack sizes. Your MS may occasionally orders different pack sizes, which causes pricing problems. For these types of reasons, INVEC-2 is based on the *issue unit*, eg. 1 tablet, or 1 vial. Facilities usually order in issue units, and items are picked and sent to the facilities in issue units. Prices are based on issue units - this allows the price by unit (tablet, vial, towel) to remain consistent regardless of the pack size. This is an important feature of INVEC-2.

However, INVEC-2 does not dictate the issue unit that must be used. You are free to use pack or MS units by specifying, for example, the issue unit as container and the size as 1,000 tablets. If this is done, you must ensure that, in the stock detail, the pack size is one container. You must also have a separate record for each MS unit, and then consider this in forecasting and reorder levels. Consistency is very important.

<u>Product</u>	<u>Strength</u>	<u>Form</u>	<u>Route</u>	<u>Issue Unit</u>	<u>Issue Size</u>
<b>If "basic" units are used:</b>					
Paracetamol	25mg/ml	Elixir	Oral	Bottle	100ml
(In Lot Detail, the minimum order is 1 x 1 Bottle.)					
Paracetamol	500mg	Tablet	Oral	Tablet	1 Tablet
(In Lot Detail, the minimum order is, for example, 1 x 1000 Tablets.)					
<b>If "pack" units are used:</b>					
Paracetamol	25mg/ml	Elixir	Oral	Bottle	100ml
(In Lot Detail, the minimum order is 1 x 1 Bottle.) This is the same as above.					
Paracetamol	500mg	Tablet	Oral	Container	1000 Tablets
(In Lot Detail, the minimum order is 1 x 1 Container.)					

## 1.2 What's New in INVEC-2

While INVEC-2 contains many improvements over INVEC, some of the most noticeable improvements are listed below.

**Main Menu Screen** - INVEC-2's Main Menu has been organized into a simpler design which makes it easier to find all the INVEC-2 standard options.

**Master Files** - The Master Files (Stock, Suppliers, Facilities) main menu contains more descriptive information allowing quick access to basic information about each specific database.

**Validation Files** - INVEC-2 now allows you to build data dictionaries for many standard terms and options used throughout the system. This provides a means for all staff members to use the same terms without having to memorize all of the store terminology.

**System Features** - Some of the new system features include:

**Multi-user Support** - INVEC-2 has incorporated record-locking features which will allow it to be installed on a network. The system is capable of handling multiple users simultaneously, while tracking all changes made by each user, and locking records (when necessary) to prevent data from being changed by two or more users at the same time.

**Color Screen** - If you are using a color monitor, INVEC-2 can be displayed in any color scheme you select, using Color Setup found under Maintenance in the Main Menu option.

**Mouse Support** - INVEC-2 recognizes the presence of a mouse (or mouse driver) and can support mouse interactions.

**Popup Calculator** - A hot key has been added to provide an on-screen calculator to appear anywhere in the system. This feature is very helpful, when calculations are necessary, allowing users to perform calculations without having to leave the system.

**Security Levels** - You may now assign different access levels to your various staff members. This feature allows you to control which menu options are accessible by each staff member. When used properly, it can help prevent many system problems that may be caused by unauthorized users.

**Backup Utility** - INVEC-2 now has a backup utility which should be used on a regular basis to backup all important files.

**Hot Keys** - INVEC-2 has several pre-defined "Hot Keys" which give quick access to some of the main database files. This feature allows you to access database files from within other screens for form windows.

### 1.3 INVEC-2 Options: The Main Menu

The INVEC-2 inventory system has six options which are displayed on the Main Menu when you activate the program. Figure 1.1 is a reproduction of the INVEC-2 Main Menu. These options cover all of the principal INVEC-2 activities, as well as the basic features you will need to start and maintain the INVEC-2 system. To exit the Main Menu and the program, simply press the <ESC> key and choose *Yes* at the Exit prompt.

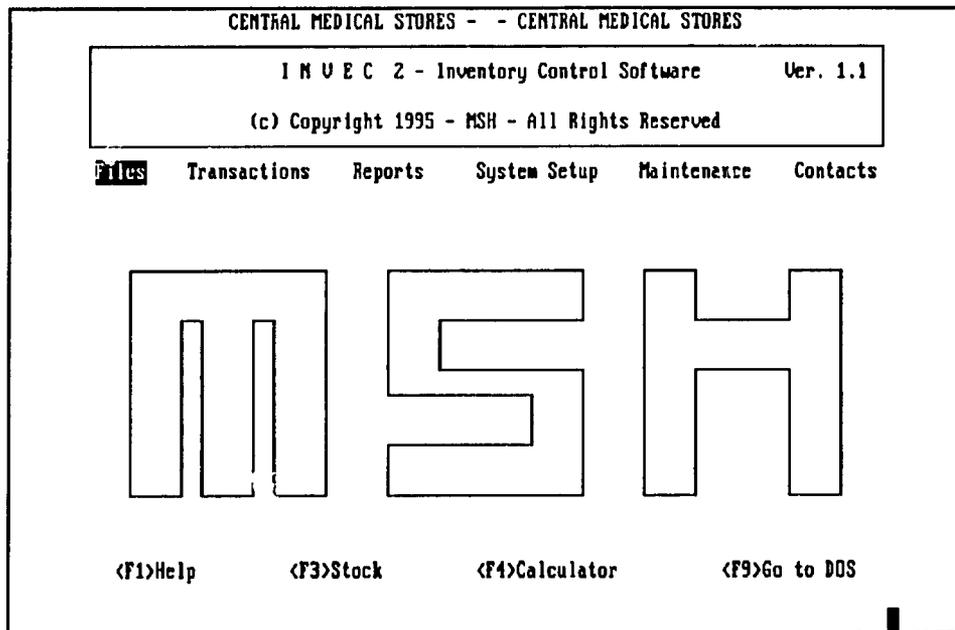


Figure 1.1 INVEC2 Main Menu

## **INVEC-2 Files Options:**

### **1. Stock**

The Stock option is used to construct and maintain the Master Item List for the MS. When INVEC-2 is installed in a medical store or when new items are added to the MS stock, descriptive information and stock levels for each item, detailed by lot and expiration date, are entered using this option. As receipts and issues are recorded through other INVEC-2 options, the inventory information is automatically updated so that the MS staff can easily and quickly retrieve up-to-date information about stock levels. In addition, INVEC-2 provides a wide range of reference information about each item including:

- item name, strength, and description;
- ordering information (suppliers, cost, terms);
- contracted suppliers and terms of contract;
- information about receipts and issues;
- therapeutic alternatives to the item;
- additional information on item classification; and
- reorder information.

### **2. Facilities**

Information about all health facilities served by the MS is added and modified using the Facilities option when INVEC-2 is installed in the MS and whenever a new health facility joins (or leaves) the MS distribution network. INVEC-2 automatically updates information about each facility as requisitions are entered and issued. This option can be used as a reference source for the MS when the following is needed:

- descriptive information about a facility (address, contact numbers, and names);
- requisition status (requisitions on order, date filled, last payment, and balance); and
- financial status (budget, expenditures, and purchase and payment history (if applicable) currently and over the last year).

### **3. Suppliers**

This option establishes the master list of all suppliers who supply items to the MS. This list is constructed when INVEC-2 is installed, and updated whenever new suppliers are used or existing suppliers discontinued. Through this INVEC-2 option, the MS staff can access up-to-date information about:

- contacting the supplier (address and contact names);
- currency, terms, and lead times (average, stated, and last);
- status of current transactions (invoice numbers, values, and amount paid); and
- summary of financial transactions currently and over the preceding 12 months.

#### **4. Validation Files**

This option allows you to build a database dictionary of various abbreviations and codes used throughout the INVEC-2 system. These dictionaries consist of terms common to your facility used to describe:

- items forms, sizes, dosages, issue units, and usage levels;
- other MS branches, authorities, and country districting; and
- storage locations, stock adjustments, and stock groups.

#### **5. Rates of Exchange**

This option allows you to build a database of all currency types associated with the MS and the current rate. In the event of a rate change, you may edit the system and make the changes accordingly.

#### **INVEC-2 Transactions Options:**

##### **1. Issues (Store Issues Vouchers or Sales Orders)**

The computer operator uses this option to enter and process all requisitions from health facilities. As each requisition comes in, it is entered into INVEC-2. INVEC-2 can be used to allocate quantities of each item, select batches to be shipped, generate picking slips (if desired), confirm the shipping quantity, produce and print the invoice, and record payments (if applicable). When issues are made, the stock level of the items issued, as well as the transaction history of the facility, are automatically updated.

##### **2. Purchase Orders**

Purchase orders are generated, printed, and tracked using this option. For tender items, INVEC-2 provides access to a list of items on contract with each supplier. INVEC-2 also tracks information on each invoice when shipments are received and payments made. Stock levels and all financial records are updated as purchase orders are placed and received.

##### **3. Tenders**

The Tender option tracks the entire bidding process from registering and compiling forecasts from facilities to awarding the tender to primary and secondary suppliers. This option also updates information on price and purchase conditions for tender items in the next procurement cycle.

**INVEC-2 Reports Option:****1. INVEC-2 Standard Reports**

INVEC-2 can generate a series of standard reports at any time for the MS. The reports provide information on purchases, receipts, issues, stock adjustment reorder quantities, and payments. In addition, these reports may also be customized at any time using the INVEC-2 optional *Interactive Report* option.

**2. Tender Reports**

This option is used if you are utilizing the features available with the Tender module;

**3. History Files**

You may also select several history reports that can be viewed from the screen; and

**4. Medical Stores Information**

This option provides a financial summary of the MS.

**INVEC-2 System Setup:****1. System Constants**

This option is used during setup of INVEC-2 in order to customize INVEC-2 conventions to those used in the MS. The Setup option also establishes defaults for INVEC-2 procedures, such as currencies used, exchange rates, procurement periods, and lead times. This information can be changed when necessary by using the Setup option.

**INVEC-2 Maintenance Option:****1. Color Setup**

If you are using a color monitor, this option allows you to set your own screen colors.

**2. Reindex Files**

This option allows you to reset the system after power failures by re-indexing database files.

### **3. Updates**

This option is the global recalculation step which is used to update all records before running reports.

### **4. User List File**

The User List file option allows you to control access to the various files for each user.

### **5. Check Config.Sys**

This option checks your system configuration file (Config.sys) parameters, and displays any changes that need to be made.

### **6. Memory and Space**

This option displays the total amount of RAM and Hard Disk space your system has available.

### **INVEC-2 Contact Option:**

This option simply displays a page containing INVEC-2 contact and support numbers.

## INSTALLATION AND SETUP

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## 2.0 INSTALLATION AND SETUP

This chapter outlines the requirements for installing INVEC-2 and briefly explains how to install and setup the program. Your installation advisors will be on hand to assist you with these steps and answer any questions you may have.

There are two system files that should be properly configured before starting the installation process. Your computer uses a system configuration file (CONFIG.SYS) and an auto-execute batch file (AUTOEXEC.BAT) to load any necessary system configuration parameters. These files can be viewed or changed using the DOS line editor EDLIN or the DOS text editor program EDIT. In order for INVEC-2 to run properly, make sure the following parameters are entered for each file.

### CONFIG.SYS

```
files = 75  
buffers = 20
```

### AUTOEXEC.BAT

```
set username = <your name> (without < >)
```

The parameters entered in the CONFIG.SYS file control how many files INVEC-2 (and any other program) can have open at one time. This file specification must be set to a minimum of 75. INVEC-2 uses many database files to track your MS system and needs to have enough room available to open all the necessary files. The parameter entered in the AUTOEXEC.BAT file is used by INVEC-2 to identify the system user, and should be no more than 7 characters.

Using a cache, such as SMARTDRIVE can also enhance performance of the program. Remember, if you change either your CONFIG.SYS or AUTOEXEC.BAT file, you must reboot the computer (or turn it off and back on again) before continuing the installation process, so your changes will be effective.

## 2.1 Installation Procedure

INVEC-2 is compressed into a zipped file on two diskettes. To install INVEC-2, complete the following steps:

1. Create a directory named INVEC2 by typing MD INVEC2 at the DOS prompt on the Hard Disk of your computer (for simplicity, the following discussion assumes that the C drive is being used). Change to your new directory, by typing CD\INVEC2 at the C:> prompt and press <ENTER>. The computer will give you a new prompt: C:\INVEC2>.

2. Place the INVEC-2 - DISK 2 diskette into your floppy drive, and copy the file PKUNZIP.EXE into your INVEC2 directory. Next, insert diskette 1 into the drive, and type the following command while you are at C:\INVEC2.

PKUNZIP A:INV2.ZIP <ENTER> (A: is assumed to be the floppy drive)

See Section 2.4 for a listing of all the necessary INVEC-2 files to verify that you have all the INVEC-2 files in your directory.

Note: Follow these instructions for network installations, substituting the network drive for C:.

## 2.2 Network Installation and Setup

Installing and using INVEC-2 on a network is essentially the same as using it from a hard disk on an individual computer. On the network, INVEC-2 will be available to other users, and allow them to make changes, or perform transactions.

Follow the instructions listed in Section 2.1, substituting the network drive (on the server) as your hard disk. Once the installation process is complete, and all files have been copied to the network directory, be sure to set up the network environment to allow all necessary staff members access to the program. Please be sure to address the following issues during the network installation.

1. The network must be in operation, and read-write access to the network directory in which you installed INVEC-2 must be available to all staff who will be using INVEC-2. For details on providing users access, see your network software documentation.
2. Make sure all the .EXE and .OVL files have been flagged as READ ONLY SHARABLE. This will allow multiple users to access the file, without the danger of someone deleting or overwriting the file. If using Novell NetWare, use the flag command. Other network operating systems (NOS) may require that you use the DOS ATTRIB command. Examples of each command follow. If you are not sure what command works for your NOS, consult your NOS documentation.

FLAG \*.EXE ROS and FLAG \*.OVL ROS  
ATTRIB \*.EXE +R and ATTRIB \*.OVL +R

You will have to reverse these commands, when restoring files from a backup copy, or upgrading your INVEC-2 files. The following commands have the reverse effect.

FLAG \*.EXE RW and FLAG \*.OVL RW  
ATTRIB \*.EXE -R and ATTRIB \*.OVL -R

3. If using a Non-Novell network, the DOS SHARE program must be run. This program allows for file sharing in a DOS environment. SHARE has two parameters that are vital if you want to use INVEC-2 on a network. These are the /F: and the /L: parameters. The /F: parameter allocates file space for file sharing information, expressed in bytes. The /L: parameter sets the number of locks you can have on at one time, expressed in bytes. For a more detailed explanation of SHARE, and how to use it on your network, consult your NOS documentation, or DOS manual. The following is a sample SHARE command. You may try these numbers, but they will probably have to be adjusted up or down depending on the size of your network. Larger networks require larger numbers!

```
SHARE /L:1024 /F:4096
```

4. Each workstation must have the minimum RAM requirements in order to run INVEC-2.
5. Each workstation must also have the necessary statements in the CONFIG.SYS and AUTOEXEC.BAT files residing on their own boot drive.
6. If your network software requires you to create an additional workstation configuration file, be sure to indicate (if necessary) the "Files=" statement with 75 as your minimum.

## 2.3 Upgrading Your Software

If upgrading from INVEC, most of the database files used by INVEC-2 are quite different. The advisors will assist you in transferring the data from one system to the other.

To upgrade from a previous release of INVEC-2, complete the following steps.

1. Go to DOS on your computer and change to the directory that contains the existing INVEC-2 software (Type `cd\inv2` or `cd\invec2`).
2. While in the INVEC-2 subdirectory, type the letter of the drive containing the upgrade diskette with the word UPGRADE. For example if the upgrade diskette is in your computer's B drive, type `B:UPGRADE`. The upgraded files will be automatically unzipped onto your computer's hard drive. If prompted, choose "yes" to overwrite all existing files.
3. Type `INVEC2 U` at the DOS prompt. This will start your new program and re-index and re-build the database. This process may take several minutes depending on the size of your database files.

## 2.4 INVEC-2 Files

INVEC-2 consists of several program and database files. In addition, in order to run reports, you need 2 text files and 11 files for running the Runtime Version of R&R Relational Report Writer. The following tables list all the files necessary to run INVEC-2, as well as the R&R program.

### INVEC-2 DATABASE FILES

ACCTHIST.DBF	INVNREAS.DBF	PRODUCT.DBF
AD_RRUN.DBF	INVOICE.DBF	PROVINCE.DBF
AP.DBF	INVPREAS.DBF	PURDET.DBF
AR.DBF	INVSTOC.DBF	PURORD.DBF
ARHIST.DBF	IN_ALL.DBF	PUR_PAY.DBF
AVAIL.DBF	IN_DET.DBF	REAUTH.DBF
AVAILST.DBF	IN_PAY.DBF	ROUTE.DBF
BANKACCT.DBF	IN_REQ.DBF	STORAGE.DBF
BIDITEM.DBF	ISSUNIT.DBF	STORLOC.DBF
BIDSUP.DBF	ITEMGRPS.DBF	SYSTEM.DBF
BRANCH.DBF	LEVUSE.DBF	TENDERS.DBF
CMS.DBF	MASTER.DBF	TENDITEM.DBF
CMSB.DBF	MAST_AL.DBF	TENDFORC.DBF
CURCHG.DBF	MSTFCST.DBF	THERA.DBF
CURRNCY.DBF	MTH_IN_.DBF	USERS.DBF
CUSTLEVE.DBF	NXTCLSNU.DBF	VFORM.DBF
DELIVERY.DBF	NXTIVNUM.DBF	AD_RRUN.DBT
DROUTE.DBF	NXTSONUM.DBF	AP.DBT
DISTRICT.DBF	OUTSTK.DBF	AR.DBT
FACFCST.DBF	PORCRP.DBF	BIDSUP.DBT
FACSTOC.DBF	POREC.DBF	MASTER.DBT
HISTORY.DBF	PO_PAY.DBF	PURORD.DBT
HOLIDAYS.DBF		
IHIST.DBF		

## INVEC-2 PROGRAM FILES

INV2.CNF INV2HELP.DBF INV2HELP.DBT INVEC2.EXE INVEC2.OVL (in some systems)
--

## INVEC-2 REPORT WRITER FILES

RR.CNF RRPRINT.CNF RRINVEC.DBF RRUNIN.DBF RRUNOUT.DBF RRSETUP.EXE RRUN.EXE RRUNP.EXE RRSETUP.HFC RRPRINT.PCF RR.UDF RRINVEC.NTX INV2RPT.RP1 *INVEC2.RP1 TENDER.RP1
--

**WARNING: YOU SHOULD NEVER ATTEMPT TO MODIFY THE DBASE III+ FILES. MODIFYING FILES COULD CAUSE A MALFUNCTIONING OF THE ENTIRE INVEC-2 SYSTEM.**

\* File may be called by another name specific to your choices selected in system setup.

## 2.5 INVEC-2 Installation Data Requirements

The following information must be prepared before your installation date. All data should be thoroughly checked to make sure the figures are accurate.

Items marked with "\*" are optional.

1. Detail of stock items
  - a. inventory code
  - b. generic name
  - c. supplementary name\*
  - d. route of administration
  - e. strength/size
  - f. form
  - g. issue unit
  - h. category (DMO)
  - i. issue unit size
  - j. issue unit cost
  - k. Per Lot
    - i. lot number
    - ii. pack size
    - iii. expiration date
    - iv. quantity of issue units in stock
    - v. supplier
    - vi. location
    - vii. budget\*
    - viii. catalog ref.\*
    - ix. brand name\*
    - x. manufacturer\*
  - l. unit price
2. Health Facilities
  - a. name
  - b. address
  - c. phone/fax\*
  - d. names of contacts
  - e. facility budget\*
  - f. population size served, inpatients, outpatients\*
  - g. type of facility (hospital, health center, clinic, etc.)\*
  - h. markup to apply
  - i. number of dental chairs\*

3. Suppliers
  - a. name
  - b. address (with country)
  - c. phone/fax
  - d. names of contacts
  - e. currency
  - f. payment terms\*
  - g. local or foreign
  - h. tender (Y/N)
  - i. lead times\*
  
4. Pending purchase orders
  - a. PO number
  - b. supplier reference
  - c. inventory codes for items in PO
  - d. minimum order
  - e. pack size
  - f. pack price
  - g. quantity ordered
  - h. date of order
  - i. rate of exchange at the time of order
  - j. supplier name
  - k. tender (Y/N)
  - l. items received
  - m. budget\*
  
5. Pending requisitions
  - a. requisition number
  - b. items requested
  - c. amount
  - d. price
  - e. facility name
  - f. date of requisition
  - g. budget\*
  
6. Average lead time
  
7. Procurement period
  
8. Forecast period
  
9. % markup to facilities

10. Safety stock in months
11. Currency used by suppliers and exchange rates
12. Local currency
13. Costing method
14. Shipping address
15. Mailing address
16. User names and passwords
17. ABC category %s
18. Forecasting periods

## **2.6 INVEC-2 Setup**

Once INVEC-2 has been installed on your computer, you must enter preliminary data about the items you have in stock, your suppliers, and the facilities serviced by the MS. This will go more smoothly if you gathered all information in Section 2.5 prior to installation.

1. Setup your system environment using the System Setup option. See Chapter 12 for details on how to configure INVEC-2. In order to customize the INVEC-2 program to run in your country, you must provide some basic information by using the System Constants option in the System Setup Main Menu. Most of this information only needs to be specified once (such as the country name or date format), however some settings, called default settings, may be changed to reflect changes in MS procedures or variations in rates of exchange. A default setting can usually be overridden by other information given elsewhere in the program.
2. Build a master inventory file for your MS using the INVEC-2 Stock Master database file.
3. Take a complete physical inventory of all items in stock. Record the supplier, quantity, expiration date, manufacturer, and pack size for each batch in stock. Make sure that the items you have in stock correspond with items on the INVEC-2 Master Stock List and add any new items which are not on the list. Chapter 4 describes in detail how to add new items, as well as descriptive information about the item, and the current stock level.

Enter prices for items in the field for Unit Cost, in the Catalog Information screen, using the Supervisor Mode. If you have accurate data on consumption by month, you can enter your actual monthly consumption for each of the past 12 months in the Consumption Details window.

4. Create your master files of all facilities and suppliers using the Facilities option (Chapter 5) and the Suppliers option (Chapter 6).
5. Enter items on order from outstanding purchase orders, using the Purchase Order option. See Chapter 9 for instructions on completing this process.
6. Enter requisitions filled, after the inventory count, through the Issues (S.O. or S.I.V.) option. See Chapter 8.
7. Complete any Tender/RFB processes.

## 2.7 Configuring Report Writer

For the reports to run, the R&R Report Writer file (RR.CNF) has to be configured according to the location of the INVEC-2 files and according to the printer in use. To do this type:

```
C:\INVEC2>RRSETUP <ENTER>
```

Using the space bar, move to CONFIGURATION and press <ENTER>. Select RR.CNF from the list of configuration files, then DEFAULTS from the subsequent menu options. Select the first item in the list and press <ENTER>. Type in the directory and subdirectory of the specified files (C:\INVEC2 for example). Repeat this for the next 2 lines. Also, specify the type of printer being used. Printer 1 is the primary printer. Press <ESC> and save the configuration before you exit.

## COMMANDS AND FUNCTIONS

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## 3.0 COMMANDS AND FUNCTIONS

### 3.1 Starting INVEC-2

Make sure that the program has been installed in a sub-directory called INVEC-2 (see Section 2.1 for Installation Procedures). At the DOS prompt type `CD\INVEC2` and press `<ENTER>`. Then at the `C:\INVEC2>` prompt, type `INVEC2` and press `<ENTER>`. The INVEC-2 Main Menu will appear. To continue, press any key. If the system is configured to use passwords (see Chapter 12), enter your user name and password, and press `<ENTER>`. If the password is incorrect, the program will prompt you to retry. After three incorrect attempts to login, INVEC-2 will exit and return to the `C:\INVEC2>` prompt. If you want to continue, you will have to start the procedure over again by typing `INVEC2` and entering the correct password. If the password is correct, the message `<Stand by ..... Opening Files>` will be displayed on the screen, followed by the Main Menu.

Hint: To speed the process, create a batch file called `I.BAT` in the root directory which contains the following:

```
CD\INVEC2
INVEC2
CD\
```

The first time you run INVEC-2, messages will appear on screen, prompting you to generate some necessary index files. When this appears answer "Yes" at the prompt.

#### Monochrome Display

If you wish to run INVEC-2 in monochrome mode type `<INVEC2 M>`. The program will be executed exactly the same, however instead of having a color display, all screens will be in black and white only.

#### Updating and Indexing on Start-up

If you wish to reindex all files prior to starting INVEC-2, type `<INVEC2 U>` at the DOS prompt. This option causes the system to update the file structure and reindex all system files. The `PASS` program will be executed after all files have been updated and indexed. This option should be used whenever the system has been abruptly halted, as in the case of a power outage.

**NOTE: INVEC-2 MUST BE STARTED FROM THE DIRECTORY WHERE ALL THE FILES ARE LOCATED. IF NOT, YOU WILL BE PROMPTED TO GENERATE ALL NECESSARY FILES AGAIN. TO AVOID THIS PROBLEM, DO NOT INCLUDE THE INVEC2 DIRECTORY IN YOUR PATH STATEMENT.**

## 3.2 The INVEC-2 Window System

INVEC-2 is operated by successively activating windows for various steps in each INVEC-2 procedure. The window system is easy to use and instructions about each window are clearly indicated on the screen. However, the system will be easier to use if you acquaint yourself with some basic commands and the various types of INVEC-2 windows: The Main Menu, Form Windows, Option Windows, and Browse Windows.

### The Main Menu

The Main Menu displays the main options in INVEC-2. This menu is the principal link between the different INVEC-2 options and procedures. There are several ways to access the options on the Main Menu:

1. Type the first letter of the option you want to use;
2. Use the arrow keys to highlight the desired option, and press <ENTER>; and
3. If available, use a mouse to click on the desired option.

### Form Window

A form window is a screen version of a form containing the information that you need in order to manage your inventory, such as data on items in stock, health facilities, suppliers, requisitions, and purchase orders. You will use these form windows to enter, modify, and view information in INVEC-2.

The data presented in these form windows can be divided into two types: data that can be added or modified by you, and data that is generated by INVEC-2. For some of the data fields, information is entered first by you, but becomes unchangeable after INVEC-2 has processed it. Other form windows contain only INVEC-2 generated data, while still others contain only data entered by you. Many form windows provide access to other windows and screens, including secondary form windows.

Tagged	PRODUCT INFORMATION				Category • D
Code 01003	Generic/Accepted Name • CHLORAMPHENICOL		Supplementary Name .		
Memo • Memo	Strength or Size • 250 MG	Dosage Form • TAB	Route of Adminst. • PO	Issue Unit (Size) • TAB	
Available	900.0	Average Sales/Mth.	Quantity	Stock Level :Current	999.9
Preset MIN •	0	to Order	0	(Months) :Potent.	999.9
INVEC2 MIN	0	Unit	0	Expiry(earliest)	01/11/95
Preset MAX •	0	Price •	0.1382	Period :Forecast • A=	3
INVEC2 MAX	0			(Months) :Procurmnt • A=	1
Arrived • No Ord	from •	at •	0.1223	Lead Time •	36 days
Last PO • 23548	to • ACS/DIR on •	04/06/95	Qty on Order •	37500	
Alternative • Info.	Fac. Forecasts • Info.	Budgets • Info.			
Supp. Info. • Info.	Upd. History • Info.	Stock • Info.			
Catalog • Info.	Consumption • Info.				

Enter unique code number for the Inventory Item.

Figure 3.1 Sample Form Window

### Option Window

An option window links one window with another or one activity with another by giving you a choice of all possible options. For example, when you are entering data in the Catalog Information form window for a stock item, an option window will give you the choice to *accept*, *retry*, or *cancel* changes made to the form before allowing you to access another sub-window. This type of option window is standard throughout INVEC-2, and will be displayed whenever such a choice needs to be made.

<p>▶ Action ◀</p> <p>Accept</p> <p>Re-Try</p> <p>Cancel</p>
---

Figure 3.2 Sample Option Window

Another type of option window is found on both the Issues and Purchase Order form window. This option window (accessed by selecting *Options*) displays all actions to be taken during the specific process. As you complete each step, you should select the option that is needed to continue the process.

## Browse Window

There are three types of browse windows displayed in INVEC-2. The first type of browse windows provide immediate access to your master files from several places in INVEC-2. At different stages during an INVEC-2 procedure, you will need to call up information from your master lists of Items in Stock, Suppliers, Facilities, or Validation files. You may either type in the code or use a browse window. To access a record with the browse window, select the data field and press <ENTER> (the field must be empty in order to access the browse window). Once you have located the desired data, highlight and select it with your keyboard or mouse. By doing this, you instruct INVEC-2 to enter the data from this window into the blank data field.

Tagged	PRODUCT INFORMATION			Category • D
Code 01003				Name
Memo Memo				(size)
Avail				Current 999.9
Prese INVEC				99.9
Prese INVEC				1/95
Arriv Last				TAB A= 3
				A= 1
				days
				7500
Alternat Supp. In Catalog	Forecast			0 TAB
	Previous Forecast			0 TAB
Search for Code				

FACILITIES: Master File			
* Code	Name	Account Type	
3604	COMPOUNDING SECTION		
3605	ROSEAU HEALTH DISTRICT		
3606	PORTSMOUTH HEALTH DISTRICT		
3607	MARIGOT HEALTH DISTRICT		
3608	GRAND BAY HEALTH DISTRICT		
3609	LA PLAINE HEALTH DISTRICT		
3610	CASTLE BRUCE HEALTH DISTRICT		
3611	ST. JOSEPH HEALTH DISTRICT		

**Figure 3.3** Sample Browse Window  
(When accessing master files)

The second type of browse window provides a link to another window (usually a form window) based on options selected from the browse window. These windows usually provide quick access to certain information, as well as detailed information by an attached form window. For example, the Consumption Details field, located in the Product Information form window, when accessed, displays a browse window. This window provides information at a glance about the quantity of the item received and sold for a specific month. Selecting a particular month from this browse window will cause another form window to be displayed providing detailed information about the consumption activity for the given month only when supervisor edit is on. Some of these browse windows contain additional information not readily

seen when accessed. These additional columns may be accessed by using the left and right arrows (←,→) to "pan" back and forth through the window.

PO: Purchase Order Header File				
Number	Ordered	Items	Supplier	Name
1/94-95	16/08/94	5	PHR/DIA	PHARMACY SALES (CARIBBEAN) LTD
2/94-95	16/08/94	2	BWE/	BURROUGHS WELLCOME INC.
23548	04/06/95	2	ACS/DIA	A.C. SHILLINGFORD & CO. LTD
3/94-95	15/09/94	2	APD/	APOTEX INC.
4/94-95	16/09/94	2	BRY/	A.S. BRYDEN & SONS LTD. (ICI, TR
6/94-95	29/11/94	0	AJL/DIB	AUSTIN JAMES INTERNATIONAL LTD

Figure 3.4 Sample Browse Window  
(Links to another window)

The third type of browse window is a special browse which displays information normally found in the linked form window. As the highlight bar moves through the items on the left portion of the screen, the information on the right changes to match the selected item.

Code	Quantity Ordered	Quantity Outstanding	Description
14001	0	23	ENVELOPES 1000/box sun (MISC) box Min. Order    Pack Size 1 x 1000/BOX
15018	0	4	Manufacturer Country Brandname
15047	0	3	
15139	0	4	
15200	0	2	
			Pack Price(BD\$) /Air            70.00 /Sea                    0.00 /Local                    0.00
			Ship by    A    Price            70.00

Figure 3.5 Sample Browse Window  
(Special Browse)

Use the following commands to find a record through a browse window (for some browse windows, there may be additional options; these will be indicated at the bottom of your screen).

- <PgUp>** Moves the cursor up one screen in the file.
- <PgDn>** Moves the cursor down one screen in the file.
- <Home>** Moves the cursor to the top of the list.
- <End>** Moves the cursor to the end of the list.

**Sorting:** Each database file that you access through a browse window will be sorted by one of the key fields. Usually, files are sorted by the name of the item to make it easier to locate records. A few are sorted by code where this is appropriate. In most browse windows, INVEC-2 gives you the option of re-sorting the file by another key. If the list is sorted by name, you can usually re-sort the list by code. In INVEC-2 **<F10>** is the sort key. This key activates an option window allowing you to choose your sort criteria.

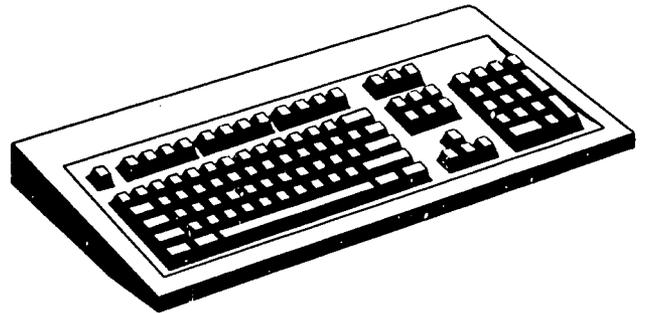
**Searching for records:** INVEC-2 allows you to automatically search for a particular item whenever you enter a browse window. If available, INVEC-2 will prompt at the bottom of your screen for the search criteria. If your list is sorted by name, INVEC-2 can locate any name you enter in the search field. If your list is sorted by code, it will locate any code in the database.

If your list is sorted by name, you can type the first letter or the first two letters of a name and INVEC-2 will reposition the cursor at the first record in the list beginning with that/those letter(s). Similarly, if the list is sorted by code, typing the first or first two numbers of the code will reposition the cursor at the first code starting with that/those number(s).

### 3.3 Standard INVEC-2 Commands and Functions

- Moving Between Windows** The escape key (<ESC>) will take you back to the previous window displayed on your screen. If you are entering or editing data and you wish to save and return to the previous window, pressing the <ESC> key will activate an option window prompting you to *accept*, *retry*, or *cancel* your changes.
- Editing Windows** Within a selected field, move the cursor using the left and right arrow keys. The <Home> key will place the cursor at the beginning of a field while the <End> key places the cursor at the end of a field.
- Movement from field to field may be controlled either by the arrow keys (up, down, left, or right), or by using a mouse to click on each field.
- In form windows, fields are identified by either an arrow or a bullet point preceding the field. If you are using a mouse, the fields will be marked with the bullet points. INVEC-2 will automatically detect if you have a mouse driver activated on your system and will display your form windows accordingly.
- If you have entered the wrong information into a field, you can correct it by returning to the field and deleting the information using <Del> or <BKSP>, or <Ctrl><U>. Then, you can type the correct information into the field.
- Saving Windows** After you have added or changed any data, INVEC-2 will automatically activate the "Action" option window. If you wish to save your changes, select *Accept*. INVEC-2 will save any changes you made in that window, and then complete your next key command. For example, if you made changes to the Product Information form window, and pressed <ESC> to return to the main Stock window, INVEC-2 will activate the "Action" option box. If you choose *Accept*, INVEC-2 will save your changes, and then return you to the Stock browse window.
- Dates** Dates are entered in the format you establish when you setup INVEC-2. For example, if the format used is: "DD/MM/YY," you must always enter dates: day, month, year. **You must also include a leading zero when a month or day only has one character** (for example, the 1st of January 1994 should be entered 01/01/94 and NOT 1/1/94).
- To Quit INVEC-2** To quit, go to the Main Menu and press <ESC> . An option window will appear asking if you want to exit the program. Select *Yes* or *No*.

### 3.4 Basic Keyboard Commands



- <ESC>** Takes you back to the previous window or step.
- <F1> Key** The <F1> key is used to get help.
- <F2> Key** The <F2> key is used to mark items to be included in INVEC-2 reports. This key is defined only in the three Master Files' main browse windows. Pressing the <F2> key will cause an "\*" (asterisk) to be displayed in the first column of the browse window.
- <F3> Key** The <F3> key is used as a "Hot Key" to gain immediate access to the master Stock file while in any other screen in INVEC-2.
- <F4> Key** Displays a calculator that can be used in any window in INVEC-2.
- <F9> Key** This key is used to gain access to DOS temporarily, while still running INVEC-2. When pressed, INVEC-2 will temporarily close, giving you access to DOS. To return to INVEC-2, type EXIT at the DOS prompt. The shell allows you to execute other DOS commands or applications if enough memory is available.
- <F10> Key** Is used to sort the display order within a browse or browse window.
- Arrow Keys**
- Right (→):** Moves one space to the right within a selected data field or moves to the next data field when *No* field is selected. **In a Browse Window:** Use this key to "pan" right in order to display any additional data in the window.
- Left (←):** Moves one space to the left within a data field or moves to the next data field when *No* field is selected. **In a Browse Window:** Use this key to "pan" left in order to review any additional data in the window.
- Up (↑):** Moves up to the preceding data field.

- <Home>**      **In a Form Window:** Moves to the first editable field at the top of the screen.
- In a Browse Window:** Moves the selection bar to the first item in the database file.
- Within a Selected Field:** Moves the cursor to the first character in the field.
- <End>**        **In a Form Window:** Moves to the last editable field at the bottom of the screen.
- In a Browse Window:** Moves the selection bar to the last item in the database file.
- Within a Selected Field:** Moves the cursor to the last character in the field.
- <Ins>**         **In a Browse Window:** Use this key to add new items to the database file. For example, you may use the <Ins> key to add a new supplier, while in the main Supplier browse window. Pressing the <Ins> key will activate a blank form window which will be used to hold information about the new item.
- <Del>**         **In a Browse Window:** Use this key to remove any items from the database file. For example, you may use the <Del> key to remove an option from the list in a validation file.
- <Ctrl><Home>** **In a Form Window:** Use this key combination to display data for the first item in the database file.
- <Ctrl><End>**    **In a Form Window:** Use this key combination to display data for the last item in the database file.
- <Ctrl><PgUp>** **In a Form Window:** Use this key combination to display data for the previous item in the database file.
- <Ctrl><PgDn>** **In a Form Window:** Use this key combination to display data for the next item in the database file.
- <Ctrl><T>**      Use this key combination to delete the word to the left of the cursor while you are editing or adding information in a selected field on a form window.
- <Ctrl><U>**      Use this key combination to delete the contents of a field when the cursor is in this field.

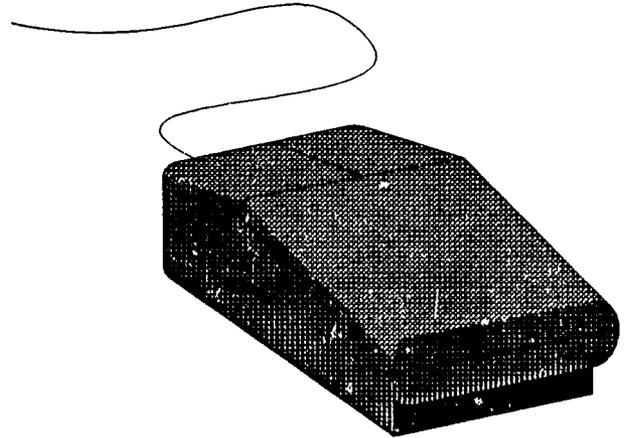
### 3.5 Basic Mouse Techniques

#### Mouse Buttons

**Left** = Enter

**Right** = Escape

**Click** - Quickly press and release the mouse button.



Your mouse may also be used to scroll through all the information in a browse window. You may use the following techniques to scroll.

ISSUES: Issues Header File				
Facility	Order #	Date Received	Date Processed	Date Shipped
3606	23/94-95	12/07/94	11/09/94	13/09/94
3604	9098	13/09/94	13/09/94	13/09/94
3606	24/94-95	12/07/94	09/00/94	09/00/94
3612	25/94-95	13/07/94	11/09/94	11/09/94
3613	26/94-95	14/07/94	00/00/94	00/00/94
3613	27/94-95	14/07/94	00/00/94	00/00/94
3699	28/94-95	13/07/94	00/00/94	00/00/94
3612	29/94-95	14/07/94	00/00/94	00/00/94
3609	32/94-95	18/07/94	00/00/94	00/00/94
3607	33/94-95	18/07/94	00/00/94	00/00/94

- ← Scroll Arrow
- ← Scroll Box
- ← Scroll Bar

Figure 3.6 Sample Window - Scroll Bar ↑

To Scroll	Do the following
One Line up/down	Click the up or down scroll arrow
Continuously	Point and hold down the left mouse button until the information you want comes into view.
One Screen	Click the scroll bar above or below the scroll box on vertical scroll bars.
Pan Left/Right	Click the scroll bar to the left or right of the scroll box on horizontal scroll bars.

### 3.6 R&R Report Writer Screen Display Commands

INVEC-2 uses R&R Report Writer to create reports and can display them on the screen. For printed reports, all you have to do is specify the printer you are using.

For screen displays, however, there are a few R&R Report Writer commands that you can use to make viewing your report easier. These commands are printed and explained at the bottom of your screen, as you view the report.

If you select *Display* as your destination output, or are using the Interactive Query mode, your report will be displayed on your screen. Once the report has been generated, the first screen of the report will be displayed on your screen. Most reports and forms are wider than the width of your video display (80 characters), so you will only see a portion of the report. The R&R screen commands will help you view the remainder of your report. The following is a description of each command.

- (L) Line**            Typing <L> will move the report down one line.
- (S) Screen**        Typing <S> will move the report down one screen.
- (P) Pan**            Typing <P> allows you to move your screen to the left and right using your arrow keys (←,→). This enables you to view any portion of the report not currently displayed on the screen.
- (W) Window**        Using this command, you can divide your screen into two windows, allowing you to see different parts of the page at the same time. For example, while viewing a wide report where the first column is a list of item names, you may want to keep the items in a window on the left of your screen, as you pan over to the right to view the rest of the information. Doing this will make it easier to see which other information on the report corresponds with the particular item.
- To split the screen into two windows, type <W>. There are three additional choices:
- (S) Split:* Splits the screen into two windows. When you choose this option, you will use your arrow keys (←,→) to set the size of the windows.
- (C) Clear:* Restores a split screen to one window.
- (P) Pan:* Allows you to move around either window. The <F6> key lets you move from one window to the next.
- (C) Continuous**    Typing <C> will cause the report to scroll without stopping. You may hit the <ESC> key to pause scrolling.

**(R) Restart**      Typing <R> will restart the report from the beginning.

**(Q) Quit**          Typing <Q> will exit the report and take you back to your previous INVEC-2 screen.

In addition to the screen commands, you can use the up and down arrow keys (↑↓) to move the report up or down one line at a time.

## STOCK MASTER FILE

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## 4.0 STOCK MASTER FILE

The Stock Master File is the primary database file that contains all descriptive information on drugs, medical supplies, and other items which will be managed by the MS. The database is maintained by adding new items, deleting obsolete products, and updating current information. This information includes the generic name or description of the item/product; other common or brand names; strength and dosage form or size; and the issue unit and size.

This master file provides access to information about the various types of items which are in stock and on order. In addition, you can view the consumption history of each item in stock and quickly access the suggested minimum and maximum stock levels, average cost, and current suggested reorder quantities. In the tutorial section of this manual, we will take you through the process of creating and building a new master inventory file by adding descriptive information about each item in INVEC-2. This process must be followed every time a new item is added to your inventory whether they are purchased, donated, or "mysteriously" appear on your shelf.

After a record with descriptive information has been added to the master file, stock data should be entered for the new item. If the item has been purchased and the purchase information is available, this information should be entered using the Purchase Order option under Transactions (discussed in Chapter 9). In other situations, however, information about the purchase order may not be available, and stock information should be entered using the Stock Details option (for example, when you first install INVEC-2 or if a purchase order has been misplaced). In the case of donations and gifts, you should enter stock information through the Stock option or the Purchase Order option. Chapter 9 describes the process of entering stock information using the Purchase Order option.

On a daily basis the Stock Master File is used most often to obtain information about the items in your inventory. In this section, we will primarily describe the information contained in the Stock Master File, as well as the procedures for editing the file. You will need to edit the master file if an error has been made when entering descriptive information about a product. Product on hand may need to be adjusted when errors are discovered during normal operation, after physical inventory, or if stock is damaged or expired. Figure 4.1 is a reproduction of the Stock database main screen.

INVENTORY DETAILS		
* Code	Description	Add. Info.
01001	Amphotericine B 250 mg TAB (PO)	† Issue Unit/Size
01002	Chloramphenicol 25MG/ML SUSP (PO)	TAB
01003	CHLORAMPHENICOL 250 MG TAB (PO)	Unit Price
01004	CHLORAMPHENICOL 1 G INJ	0.4030
01005	ERYTHROMYCIN 250 MG TAB (PO)	Qty. Available
01007	GENTAMYCIN 80MG/2ML AMP	0.0
01009	STREPTOMYCIN SULPHATE 1 g INJ (INJ)	First Exp. Date
01010	TETRACYCLINE HCL 250 mg CAP (PO)	/ /
01011	AMOXICILLIN 250 mg tab (PO)	Qty. on Order
01012	AMPICILLIN 500 MG AMP (INJ)	0
01013	AMPICILLIN 25 mg/ml SUSP (PO)	VEN-Code N
01014	PENICILLIN G BENZATHINE 2.4 MU VIAL (PO)	Security N
01015	PENICILLIN G SODIUM 1.0 MU VIAL (INJ)	Level of Use H
01016	CLOXACILLIN SODIUM 250 MG TAB (PO)	Status
01017	CLOXACILLIN SODIUM 25MG/ML SUSP (PO)	
01018	CLOXACILLIN SODIUM 500 MG INJ (INJ)	

<F2>Tag/Untag    <F10>Order    <Ins>Insert    <Del>Delete

Search for Code

Figure 4.1 Stock Details Screen

To access the above screen, select the Stock option from the Files menu. This window is called the STOCK DETAILS screen. This detail screen is a browse window containing four columns. The first column is used to indicate whether the item is to be included in a specific report that matches criteria generated by the Reports menu. If the item is "tagged" it will be included when those special reports are generated that request certain tagged items. The second column contains the item code. This code is assigned by the MS and is unique to each item in the MS. The third column is the Description column which contains a one line description of the item referenced by the code. This information is usually the same as the generic/accepted name of the item. The final column contains Additional Information about the item. It states information such as the issue unit or size, unit price, quantity available, first expiration date, and quantity on hand. There is also information indicating the Vital, Essential, Non-essential Code (VEN), whether this is a Security Medication, the Level of Use, and the Current Status. From this screen you may add new items to the stock database, remove items currently in the database, sort the items, and of course, tag or untag the items to be included in a report. This screen can be used as a quick check for current inventory.

## 4.1 Summary of Commands

### Tagging an Item

The <F2> key is used to toggle between the Tag/Untag option. Please note, when using the <F2> key, the position pointer will move to the next item in the database. This feature is used when a customized report is needed, and only the specific items are to be included in the report. Use this feature as a criteria in the interactive Query mode of the report generator.

## Adding an Item

As discussed in the Chapter 3, use the <Ins> key if you wish to add a new item to the database. Before adding a new item, you should check the Stock file records to determine whether the item requires a new inventory record or if it is simply a new package size of an existing item. The deciding factor is the description of the product including the strength, issue unit, and size.

For example, if you have been stocking ampicillin 250mg capsules in bottles of 1000, and you receive a shipment of the same drug in bottles of 500, it is not a new stock item because the issue unit (TAB) and the issue unit size (1 TAB) are the same. When you process the receiving report, you should add the item through the procedures described in Chapter 9, Purchase Orders, specifying the warehouse pack size of 500. This allows INVEC-2 to include all ampicillin 250mg capsules in one master file while showing the different warehouse packs through the Stock detail window which is appended to the master file. If you are using bottles of 1000 TABs, then your issue unit would be 1 Bott.

If, on the other hand, you have been stocking a liquid product in 1 liter bottles and you now receive bottles of 150ml, you will need to start a new stock record for this item since the issue units and sizes are not the same (1 LITER versus BOTTLE with a size of 150ml). Since the issue unit is listed as 1 liter, you cannot add bottles of 150ml to the same record and expect to get accurate average costs. INVEC-2 determines average "unit" costs based on the issue unit. The issue unit concept is explained in more detail in Section 4.2.

## Deleting an Item

The <Del> key may be used to delete an item from the main Stock Details screen. The item can only be removed from the main screen after additional stock information is deleted from the Catalog, Tender module under Transactions (discussed later), and the items have been physically removed from the storage location. Once that additional stock information has been removed, the item can be removed from the main Stock Details screen. An option window will appear, asking you to confirm the removal of the item. Once you select *Yes* to confirm the process, the data cannot be recovered. It is important that you are absolutely sure that you are removing the desired item from stock.

## View Order

The <F10> key is used to change the order in which items are displayed on the main screen. When you first access the Stock database, the items are sorted by the code. If you wish to view the items in order by their description, press <F10>, and an option window will appear. Choose the *Description* option and press <ENTER>. INVEC-2 will sort your stock items based on their generic/accepted names.

**Search Mode**

If you wish to search for an item, enter the information in the Search field located below the main screen. Please note the search is conducted based on the order you have selected. In other words, if your view order is by code, you must enter an item code on which to search.

To view any information about a current item in the Stock database file, simply select the item. The next screen that will be displayed is the Product Information screen.

**Moving Between Records**

You can move between records while within any form window by pressing <Ctrl><PgDn> or <Ctrl><PgUp>.

## 4.2 Product Information Screen

Tagged	PRODUCT INFORMATION			Category • D
Code 01004	Generic/Accepted Name • CHLORAMPHENICOL	Supplementary Name •		
Memo • Memo	Strength or Size • 1 G	Dosage Form • INJ	Route of Adminst. •	Issue Unit (Size) • VIAL
Available	110.0	Average Sales/Mth. Quantity to Order Unit Price •	Stock Level :Current 999.9 0 (Months) :Potent. 999.9 Expiry(earliest) 01/11/96 Period :Forecast • A= 3 (Months) :Procurant • A= 1	
Preset MIN • INVEC2 MIN Preset MAX • INVEC2 MAX	0 0 0 0	0 0 0 0	3.4355	
Arrived • 648 Last PD • DOM-70	from • COL/ to • COL/	at • on •	2.1192 28/07/93	Lead Time • 33 days Qty on Order • 0
Alternative • Info. Supp. Info. • Info. Catalog • Info.	Fac. Forecasts • Info. Upd. History • Info. Consumption • Info.	Budgets • Info. Stock • Info.		

Enter unique code number for the Inventory Item.

Figure 4.2 Product Information Screen

The following is a discussion that presents all the data fields to be entered in the Product Information Screen, as well as other sub-windows.

**Code** The code field is used to identify the stock code number for the generic item. This number should be unique and specific to the MS. Once the code has been assigned, it cannot be changed or deleted as long as the item is in stock. Code numbers should not be reused even if the former items have been deleted. INVEC-2 checks for duplicate codes.

**Category** The category field is used to categorize what type of item this item is. This is a browse window that contains either *drug*, *medical supply*, or *other* as an option to choose for the type of item. Highlight the category type for this item and press <ENTER>.

**Generic/Accepted Name** This field contains the description of the item. The "accepted name" is normally the International Non-Proprietary Name for a drug description.

**Supplement. Name** This field is used to enter additional information about the primary name of the product or item. This field is used for synonyms for the drug. This

may be the United States Accepted Name (USAN) (for example, acetaminophen for paracetamol or Vitamin C for ascorbic acid), the British Accepted Name (BAN), or a common brand name such as Benadryl. The field may also be used for additional descriptive information about an item. If a medical supply item comes in both adult and pediatric sizes, this field may contain either "adult" or "ped."

- Memo** The memo field contains an additional sub-window which, when selected, allows you to enter additional information. This field can be used to enter paragraphs of information about the current item, such as contents of kits, or components of a multi-vitamin.
- Strength or Size** This field is used to enter the strength or size of this product. For drugs, this field is used to enter the strength of the active ingredient in each dosage form, expressed in grams (G), milligrams (MG) or micrograms (MCG). For example, a tablet or capsule might contain 300mg of active ingredient. Liquid drugs are usually listed with the number of milligrams per milliliter. For gloves, the size would appear here.
- In the case of an item for which there is no easily distinguishable strength, you can use the pharmacopeia standard with which the product complies (BP, USP).
- Dosage Form** The dosage field contains the type or form that this item or product will take. A browse window linked to the validation file Pharmaceutical Forms (discussed in Chapter 7) can be used to enter the proper code for the dosage form. For example, if the item is acetaminophen and comes in tablet form, the dosage form would be TAB.
- Route of Adminst** Enter the route of administration for the item. This field, although primarily used for drugs, should still be completed for all items. This field is linked to the Validation file Route of Administration (see Chapter 7).
- Issue Unit** The issue unit is the primary inventory counting unit in INVEC-2. The standard issue units used by INVEC-2 may differ in some cases from the units now used on your bin card. It is important that these standard units be used so that different generic products can be related together in INVEC-2. Enter the appropriate issue unit from the browse window.
- (Size)** The issue unit size is used to compare different packages of the same item. For liquids where the issue unit is BOTTLE and for liquid injections, the issue unit size is expressed in milliliters (for example, a 2ml ampoule). For large volume liquids (1 liter and over), the size is 1 (one) liter. For powders,

creams, ointments, etc., the size is expressed in grams or kilograms. In the case of injections in the form of powder for reconstitution, the issue unit size is 1 (one) of the issue unit (ampoule or vial). For tablets and capsules, the size is 1 tablet. For all other items, the issue unit size is one of the issue unit.

Remember that this field is not used for the warehouse pack size, such as 1000 tablets unless you are not using the unit system.

- Available** This is an INVEC-2 calculated field. Once you fill in the data about the stock on hand and the amount committed (if any), INVEC-2 will automatically calculate the amount available and display the information. This figure is expressed in issue units.
- Preset MIN** INVEC-2 allows you to set your own minimum stock level. These figures must be entered in issue units.
- INVEC-2 Min** This is a calculated field generated by INVEC-2 based on consumption information and stock level and is expressed in issue units. See Appendix C for details on how INVEC-2 calculates this field.
- Preset MAX** INVEC-2 allows you to set your own maximum stock level.
- INVEC-2 Max** This is a calculated field generated by INVEC-2. See Appendix C for details on how INVEC-2 calculates this field.
- Average Sale/Mth.** This is a calculated field. INVEC-2 calculates this field based on consumption information, expressed in issue units. See Appendix C for details on how INVEC-2 calculates this field.
- Stock Level Current/  
Potent.** These are calculated fields generated by INVEC-2 and are expressed in months. See Appendix C for details on how INVEC-2 calculates this field.
- Qty. to Order** This is a calculated field generated by INVEC-2 based on consumption information and stock level. See Appendix C for details on how INVEC-2 calculates this field.
- Expiry** Displays the earliest expiration date logged for this item.
- Unit Price** Unit cost is a calculated field based on the costing method chosen in system setup (LIFO or AVG). This figure usually reflects the sales price of the item excluding any markup. It is automatically updated after new shipments of the item has been received. This field may only be edited by the Supervisor.

---

<b>Period</b> <b>:Forecast</b> <b>:Procurement</b>	These fields are completed based on options defined in the system setup. The forecast period corresponds to the number of months to be considered when calculating the average monthly consumption. The procurement period corresponds to the number of months between two orders for the item. Please note this figure is expressed in months.
<b>Arrived</b>	The PO number of the last supply received. This field may only be edited if the PO module is not used.
<b>From/At</b>	These fields display the code of the last supplier and the last cost of the item.
<b>Lead Time</b>	This field displays the lead time expressed in days, for the last order received for the selected item. This field may only be edited if the PO module is not used. See Appendix C for an explanation.
<b>Last PO</b>	This field displays the PO number of the last order sent. It may only be edited if the PO module is not used.
<b>To/On</b>	These fields display the supplier of the last order sent and the date the order was shipped.
<b>Qty on Order</b>	This field displays the number of issue units that are currently on order. This field is maintained by the PO module and can only be edited if the PO module is not used.
<b>Alternative</b>	This field provides access to another browse window used to define alternative items that may be used in place of the current item. See Section 4.3 for details.
<b>Supp. Info.</b>	This field activates a supplementary product information page. See Section 4.4 for details.
<b>Catalog</b>	This field activates a browse window which can be used to select information about the products available from various suppliers. See Section 4.5 for details.
<b>Facility Forecasts</b>	This window displays forecasting information about facilities supported by this MS. See Section 4.6 for details.
<b>Upd. History</b>	This field displays information regarding changes made to this record. INVEC-2 keeps track of any changes that are made to the master Stock file and indicates the last date and the person that made changes to the record.

**Consumption** This window displays the monthly sales receipts and balance for this particular stock item. See Section 4.7 for details.

**Stock** This Stock window contains detailed information for the current selected item by expiration date and lot number. See Section 4.8 for details.

### 4.3 Alternative

The Alternative window, when accessed, displays a browse window containing a list of therapeutic alternatives which should be considered when the requested item is out of stock.

Within this browse window, you may add or view alternative items. Selecting an item from this browse window will cause the following information to be displayed.

STOCK: Alternative Items		
Code	Accepted Name	Size
15506	ENDOTRACHEAL TUBE CLEANING BRUSH	

Alternative Item	
Code	15506
Name	ENDOTRACHEAL TUBE CLEANING BRUSH 6MM

Alternative • Info.      Fac. Forecasts • Info.      Budgets • I

Figure 4.3 Alternatives

**Code** The stock code number for the alternative item.

**Name** This field displays the generic/accepted name, the strength/size of the item, and the dosage form. This field cannot be edited.

## 4.4 Supplemental Information

Tagged	PRODUCT INFORMATION				Category • D
Code 01004	Generic/Accepted Name CHLORAMPHENICOL		Supplementary Name		
Memo	Strength or Size	Dosage Form	Route of Adminst.	Issue Unit (Size)	
Link Code 0	Inventory Additional Information			WHO Code • Memo • Memo	
Usage Level • H	Therap. Class •	0.00	National Form. • 08:12		
UEN Class • M	ATC Class •		Regional Form. •		
ABC Class • B	Def. Daily Dose •	0.0	Duty Rate • 0		
Security • M	Fac. Order from •		Storage Temp. •		
Controlled • M	Store Order from •		Storage Cond. •		
Schedule •	FOREX Req. •		Status •		

Enter Code for this inventory in another inventory system.

**Figure 4.4** Supplemental Information

The Supplemental Information page provides additional information about the currently selected stock item. Many of the fields on this page are optional and an entry may not be required, however, using these fields will enable you to further classify items in stock in order to generate specific reports.

**Link Code** This field does not need to be completed unless INVEC-2 is to be linked directly to another database system.

**WHO EDL** The WHO (World Health Organization) code number may be entered here if desired. See Appendix E for a listing of the codes.

**Memo** This memo field allows you to add any additional information about the item. Information here may pertain to classifications or special storage instructions.

**Usage Level** This code designates the facility level at which the item can be used. This field displays a browse window containing a list of codes assigned in the Level of Use validation file.

- VEN Class** This field is used by INVEC-2 to sort items into *Vital, Essential, and Non-essential* categories for reporting purposes. When accessed, an option window is displayed listing the three category choices.
- If your country does not classify items as V/E/N, leave the field blank.
- ABC Class** When you run an ABC analysis using the Report option, the ABC Class will automatically be assigned.
- Therap. Class** If your country classifies drugs and medical supplies according to their therapeutic use, enter the specific class type for this item. When accessed, this field becomes a browse window showing the available class types from the validation file Therapeutic Class.
- ATC Class** The ATC Class code may be entered here if desired. The ATC (Anatomical Therapeutic Chemical) Classification is an international code maintained by the World Health Organization (WHO).
- Def. Daily Dose** Enter the defined daily dosage amount expressed using the issue unit size. The defined daily dose is established by WHO and the Nordic Council on Medicine.
- National Regional Form.** These fields tell INVEC-2 whether the item is listed on a formulary and specifies the formulary code. You may enter information about a national and a regional formulary. This information is optional and may be used to sort inventory items when you generate reports.
- Duty Rate** The duty rate is the percent of duty used for each imported product. This information is necessary for price comparison as part of the tender process.
- Security** This field is used to indicate whether controlled collection procedures should be followed for this item. Enter *Y* or *N* to indicate the status.
- Controlled** If this drug is subject to regulation under local narcotics and controlled drug laws or the International Narcotics Control Board (INCB), enter *Y*. Otherwise, *N* will be automatically entered by INVEC-2.
- Schedule** If the item is controlled, it will be listed on one of the five standard narcotics schedules mandated by the INCB. Enter the number of the appropriate schedule for this item.

- Fac. Order From** This field should contain a code indicating from where the item can be ordered. The information is linked to the Facility Availability validation file and is available through a browse window.
- Store Order From** This field indicates from where a branch store should reorder the item. The information is obtained from a browse window linked to the Item Availability validation file.
- FOREX Req.** This field indicates whether you need to use a foreign exchange bureau to get hard currency to purchase the item from a supplier. When accessed, an option box is displayed listing three choices: *None*, *FOREX*, *OGIL*. Choose the appropriate option for this item.
- Storage Temp.** The storage temperature required for the item. If the manufacturer does not specify a temperature, you may assume room temperature is acceptable. Type in either the specified temperature range or *Room* for room temperature.
- Storage Cond.** If there are any special storage conditions (i.e. fragile or poisonous), enter the condition in this field.
- Status** This is an option window used to indicate the stock status of the item. Select the option which best applies to the current status of the item. Stock status examples are as follows:
- STOCK - Item Stocked Regularly
  - N.S.I. - Non-Stock Item
  - INTERN - Item Stocked only for Internal Use
  - PROD - Item Stocked only for Production
  - TEMP - Item Stocked Temporarily
  - DISC - Discontinued Item (Stock balance might exist)

## 4.5 Catalog

This window is used to give detailed information about the various suppliers for this particular item. When accessed, a browse window is displayed listing catalog information about the item by the item code, tender code, and supplier code. To obtain more detailed information about the product supplier, select an entry from the browse window. The product catalog file may only be edited by the Supervisor.

Tagged	PRODUCT INFORMATION			Category • D
Code				
SUPPLIER PRODUCT FILE				01004
Tender • Y	Tender Code • ECDS9495	Date • 01/07/94	Validity • 30/06/95	
Supplier • COL/ COLLINS LIMITED	Total Quantity Contracted •			0
Catalog Ref. • CHL1A	Brandname	Orig. Country		
Min. Order x Pack Size	• BIOCHEMIE	•		
• 1 • 100 VIAL	Manufacturer	Registration #		
	•	•		
	by Sea	By Air	Locally	
Pack Size Cost (USD)	• 75.00	• 78.00	• 0.00	
• I.U. Cost (USD)	• 0.7500	• 0.7800	• 0.0000	
I.U. Cost (EC\$)	2.0377	2.1192	0.0000	
Contract Lead Time	• 28 Days	• 14 Days	• 0 Days	

Figure 4.5 Catalog

- Tender** If the item is a tender item, the value of this field should be Y. If there are multiple suppliers for the item, enter Y for the primary product supplier only. See Chapter 10 for a detailed description of the Tender/RFB process.
- Tender Code** The supplier's code for the item.
- Date/Validity** Date indicates the date the tender was approved. Validity indicates the expiration date of the tender. These fields can only be edited if this is a tender product.
- Supplier** The code for the supplier. This information can be accessed from a browse window linked to the Supplier Master File if the field is blank.

---

<b>Total Quantity Contracted</b>	If this is a tender item, enter the amount to be supplied by the supplier, as stated on the tender contract.
<b>Catalog Ref.</b>	Indicates a reference number from the supplier's catalog or item listing.
<b>Brandname</b>	The product brandname, if applicable.
<b>Orig. Country</b>	The country in which the item is manufactured.
<b>Manufacturer</b>	The manufacturer of the item.
<b>Registration #</b>	This field is for the item's registration number, if applicable.
<b>Min. Order Pack Size</b>	The minimum number of warehouse packs which must be ordered. This is entered in the following format: <u>Minimum Order</u> X <u>Pack Size</u> . For example, if your supplier ships chloramphenicol in packages of 12 100 ml bottles and requires a minimum of 1 pack order, the minimum order is 1 x 12 bottles.

*Information about purchase price and terms are contained in the following fields:*

<b>Pack Size Cost/IU Cost</b>	First, defines the currency used by the supplier for this item. When selected, this field, located in between the parenthesis ( ), becomes a browse window allowing you to select the currency code. After selecting the currency code, enter the cost in the specified currency for each mode of delivery (Sea/Air/Local). INVEC-2 will automatically calculate the cost for each delivery mode in your local currency and display the information in the corresponding fields.
<b>Contract Lead Time</b>	The number of days required for delivery of the item based on the contract delivery mode.

### 4.6 Facility Forecasts

Facilities forecast is used to view and update forecasting information for individual facilities. When accessed, a browse window is displayed listing all facilities for which the MS has defined a forecast quantity. The information is categorized by item code, facility code, quantity authorized, and quantity forecasted. Selecting an item from this browse window will cause the following information to be displayed.

Tagged	PRODUCT INFORMATION			Category • D												
Code	STOCK:Forecast by Facilities			Name												
• 01002	Code	Facility	Quantity Authorized	Qty Forecasted												
Memo				(Size)												
• Memo	01002	3605	150	125												
Avail				Current 999.9												
Prese				99.9												
INVEC				9/97												
Prese				A= 3												
INVEC				A= 1												
Arriv	<table border="1"> <tr> <th colspan="2">QUANTITY AUTHORIZED AND FORECAST</th> </tr> <tr> <td>Item 01002</td> <td>Chloramphenicol 25MG/ML SUSP (PO) BOTT</td> </tr> <tr> <td>Facility 3605</td> <td>ROSEAU HEALTH DISTRICT</td> </tr> <tr> <td>Maximum Quantity Authorized</td> <td>150 BOTT</td> </tr> <tr> <td>Forecast</td> <td>125 BOTT</td> </tr> <tr> <td>Previous Forecast</td> <td>125 BOTT</td> </tr> </table>			QUANTITY AUTHORIZED AND FORECAST		Item 01002	Chloramphenicol 25MG/ML SUSP (PO) BOTT	Facility 3605	ROSEAU HEALTH DISTRICT	Maximum Quantity Authorized	150 BOTT	Forecast	125 BOTT	Previous Forecast	125 BOTT	days
QUANTITY AUTHORIZED AND FORECAST																
Item 01002	Chloramphenicol 25MG/ML SUSP (PO) BOTT															
Facility 3605	ROSEAU HEALTH DISTRICT															
Maximum Quantity Authorized	150 BOTT															
Forecast	125 BOTT															
Previous Forecast	125 BOTT															
Last				0												
Alternat																
Supp. In																
Catalog																
	Type Code for Facility															

Figure 4.6 Facility Forecast Detail

- Item** This field, generated in the previous browse window, displays the item code and generic/accepted name.
- Facility** This field cannot be edited from this screen. It simply displays the code and name of the facility.
- Max Qty Authorized** Maximum that could be issued to a facility at one time, expressed in issue units.
- Forecast** The projected amount of sales of the item (in issue units) for this facility. The forecast period for each facility may be defined by the MS.
- Previous Forecast** The amount of sales of the item for this facility for the previous year. This quantity is expressed in issue units.

## 4.7 Consumption

This window is used to give detailed information about the stock activity for this particular item. When accessed, a browse window is displayed listing stock information by the year and month. For each period, the quantity received, value received, quantity sold, and value sold are indicated. [Remember to use <→> (right arrow) in order to view additional fields.]

Tagged	PRODUCT INFORMATION			Category • D
Code • 01004	STOCK: Value Received/Sold mth			
	Year - Month	Qty Received	Value Received	Qty Sold
Memo • Memo	1994-9	0	0.00	20
Avail				t 999.9 . 999.9 1/11/96
Prese INVEC				• A= 3
Prese INVEC				• A= 1
Arriv Last				133 days 0
Alternative • Info.	Fac. Forecasts • Info.	Budgets • Info.		
Supp. Info. • Info.	Upd. History • Info.	Stock • Info.		
Catalog • Info.	Consumption • Info.			
Search for Year - Month				

Figure 4.7 Consumption Details

Selecting an item from this browse window will cause the following information to be displayed. This information is displayed in the Supervisor Edit Mode only.

- Incode**            The item code and description are displayed in this field.
- Period**            The year and month covered by the activity period. The display format is as follows: 1994-3 indicates the third month of the year 1994.
- Purchase/  
Sales**            Indicates the quantity and the value of the item for the specified activities. These quantities are expressed in issue units.
- Balance**            Displays current balance of the stock in issue units and the value of the stock.

## 4.8 Stock Detail

This window is used to give detailed information about the stock item. When accessed, a browse window is displayed listing stock information by the expiration date. For each expiration date the Lot Number, Package Size, Quantity on Hold, Quantity on Hand, and Location is displayed. Selecting an item from this browse window will cause the following information to be displayed.

Tagged	PRODUCT INFORMATION		Category • D
Code • 01004	01004	INVENTORY STOCK DETAIL	
Expir	CHLORAMPHENICOL 1 G INJ UIAL		
Memo • Memo	Expiry	01/11/96 Lot •	Budget •
Avail	PURCHASE INFORMATION		
Prese INVEC	Pack Size •	100 UIAL	Catalog Ref. •
Prese INVEC	Brandname •	BIOCHENIE	
Arriv Last	Supplier •	COL/	PO Num • 911
Alternative Supp. Info. Catalog	Manufacturer •		Origin •
	Issue Unit Cost •	2.4371/UIAL	
	Quantity Received	0 IU	Date
	Quantity Damaged	0 IU	Received 21/03/94
	Quantity on Hold	0.0 IU	
	Quantity on Hand •	110.0 IU	Location • TT

Enter Expiry Date

Figure 4.8 Stock Detail

- Expiry** The expiration date of the item.
- Lot** The lot number of the item. This number is assigned by the manufacturer and is used to identify a specific batch of items.
- Budget** This field displays a browse window linked to the Budget validation file.
- Pack Size** The supplier's warehouse package size. Examples of package sizes include: 1000 TAB, 100 CAP, 10 INJ.
- Catalog Ref.** The supplier's specific product code.
- Brandname** The brand name of the item.

<b>Supplier</b>	This field contains the supplier's code. This information can be accessed from a pick list linked to the Supplier Master File if the field is blank.
<b>Manufacturer</b>	The manufacturer of the item.
<b>PO Num</b>	The Purchase Order number used to order the current lot of the item.
<b>Origin</b>	The country where the item was manufactured.
<b>Issue Unit Price</b>	The price per issue unit for this lot. See Appendix C for an explanation on how INVEC-2 calculates this number.
<b>Quantity Received</b>	This field is calculated from information generated in the Purchase Order module. Expressed in issue units.
<b>Quantity Damaged</b>	This field is calculated from information generated in the Issues Module. Expressed in issue units.
<b>Quantity on Hold</b>	This field is calculated from information generated in the Purchase Order module, and is expressed in issue units.
<b>Quantity on Hand</b>	<p>This field can only be changed while in Supervisor Mode. Enter the number of issue units of this batch currently in stock. Any changes to this field made by the Supervisor will cause the Stock Adjustment browse window to appear.</p> <p>The Stock Adjustment window is linked to a validation file dependent on the value of the adjustment (positive or negative). Choose the appropriate code that best describes the reason for the adjustment.</p>
<b>Location</b>	The place in the warehouse where the item is stored. When blank, this field will display a browse window linked to the validation file Storage Locations. INVEC-2 may use this field to sort the inventory.

## FACILITY MASTER FILE

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## 5.0 FACILITY MASTER FILE

The Facility Master File is a database containing a list of all facilities that are currently served by the MS. INVEC-2 keeps track of all current information pertaining to each individual facility. In the database, INVEC-2 tracks addresses, phone numbers, facility contact, the type of account, the customer level, as well as the responsible authority for the facility. This information is used by the MS to manage each facility by keeping track of current stock levels at each facility, as well as tracking payments received and shipments made to the facility.

To access the Facility database, select *Facilities* from the INVEC-2 File Menu option. The primary Facility detail screen lists all of the facilities based on your search order. The first column indicates whether the item has been selected to be included in a report. This field, called the tag field, would contain an (\*) if this facility is designed to be included in a report to be generated by INVEC-2. The next field indicates the Code. This is a unique code used to identify each individual facility. It is important that each facility has a unique code so that INVEC-2 can properly identify stock levels and other pertinent information about each facility. The next field is the Name field. This field contains the name of the facility associated with the user code. The fourth and final column contains Additional Information about the facility: the facility's address, phone number, fax number, and contacts are displayed, as well as the account type, customer level, the district and province in which the facility is located, and the responsible authority governing over this facility. This primary screen can be used to provide quick detailed information about the current facility.

FACILITIES DETAILS		
* Code	Name	Additional Information
1604	COMPOUNDING SECTION	Address
3605	ROSEAU HEALTH DISTRICT	C. M. S.
3606	FORTSMOUTH HEALTH DISTRICT	
3607	MARIGOT HEALTH DISTRICT	
3608	GRAND BAY HEALTH DISTRICT	
3609	LA PLAINE HEALTH DISTRICT	Phone FAX
3610	CASTLE BRUCE HEALTH DISTRICT	82060
3611	ST. JOSEPH HEALTH DISTRICT	Contacts
3612	PRINCESS MARGARET HOSPITAL	D. ST. JEAN
3613	PSYCHIATRIC UNIT	H. LIBURD
3615	MEDICAL LABORATORY	
3616	DENTAL SERVICES	Markup Account Type
3699	MISCELLANEOUS	
		Customer Level
		Province
		District
		! Responsible Authority
<F2>Tag/Untag    <F10>Order    <Ins>Insert    <Del>Delete		
Search for Code <input type="text"/>		

Figure 5.1 Facility Master File

## 5.1 Summary of Commands

### Tagging a Facility

The <F2> key is used to toggle between the Tag/Untag option. Please note, when using the <F2> key, the position pointer will move to the next facility in the database.

### Adding a Facility

Use the <Ins> key if you wish to add a new item to the database. Pressing <Ins> instantly takes you to the Facility Information screen.

### Deleting a Facility

The <Del> key may be used to delete an item from the main Facility screen. An option window will appear asking you to confirm the removal of the facility. Once you select *Yes* to confirm the process, the data cannot be recovered. It is important that you are absolutely sure that you are removing the correct facility from the database. Please note when removing facilities from this list, you must first remove all other pertinent information before actually removing the facility from the list. INVEC-2 will not allow you to remove a facility if there are other information fields filled in about this particular facility.

### View Order

The <F10> key is used to change the order in which the items are displayed on the main screen. When the Facility database is first accessed, the items are sorted by the Code. If you wish to view the items in order by their name, press <F10>, and an option window will appear. Choose the *Name* option and press <ENTER>. INVEC-2 will sort your facilities based on their name.

### Search Mode

If you wish to search for a facility, enter the information in the Search field located below the main screen. Please note the search is conducted based on the order you have selected. In other words, if your view order is by Code, you must enter a facility code on which to search. If you wish to search for a facility based on its name, change the view order first.

### Moving Between Records

You can move between records while within any form window by pressing <Ctrl><PgDn> or <Ctrl><PgUp>.

To gain detailed information about each facility, simply select the facility.

## 5.2 Facility Screen

Code 3604		FACILITY INFORMATION		Tagged
Name	• COMPOUNDING SECTION	Phone	• 82060	
Address	• C. M. S.	Fax	•	
	•	Contact(s)	• D. ST. JEAN	
	•		• H. LIBURD	
Markup	• = 15%	Del. Route	•	Acc. Type
Remark	• Memo	Point	•	Holder
GMS Branch	•	Province	•	
Customer Level	•	District	•	
		Authority	•	
Population	• 0 Year	Beds	• 0 Year	
Inpatients	• 0 Year	Theatres	• 0 Year	
Outpatient	• 0 Year	Dental Chairs	• 0 Year	
Budget/Financial	• Info.			Stock
Monthly History	• Info.			• Info.

Type Code for Facility

**Figure 5.2** Facility Information

The Facility screen displays detailed information about each facility. The following is a description of all fields in this screen.

**Code** The code number is the unique code used to identify the facility. Once the facility has been created this field can no longer be edited. INVEC-2 checks for duplicates, and will return an error message if the code is currently being used.

**Name** The facility name is displayed in this field. It can be edited or changed at any time. Use this field to type in the name of the facility corresponding to the unique code.

**Address** The address field contains three sequential fields used to list the mailing address of the facility. Whenever possible, provide the complete address information for the facility.

**Phone** The phone field is used to enter the phone number, if available, of the facility.

**Fax** If the facility has a facsimile number, you may enter it here.

---

<b>Contacts</b>	If there are any special individuals at the facility that should be contacted, list those individuals' names here.
<b>Markup</b>	This field displays any markup on sales or sales service charge, to be added to the selected facility's issues. The options are set in the System Setup screen. Enter <i>A</i> , <i>B</i> , <i>C</i> , or <i>D</i> to indicate the correct markup value (if any).
<b>Remark</b>	The remark field is a memo field that when accessed displays a small window in which you may enter additional information about the facility. Use this field to enter any additional information not specifically asked for in the facility information screen. This information can always be displayed and changed throughout the duration of this facility's account.
<b>Delivery Route</b>	If the facility is located on a pre-defined delivery route, enter the code for the route here. This field is linked to the validation file Delivery Route. See Section 7.12 for details.
<b>Point</b>	This field corresponds to the facility's location in the sequence on the delivery route. This field is linked to the validation file Delivery Point. See Section 7.13 for details.
<b>Account Type</b>	This field, when accessed, displays an option window used to define the type of account this facility has. The options are: <i>Member</i> , <i>Group</i> , or <i>Single</i> . Select the appropriate option for the facility.
<b>Holder</b>	The account holder field is only used in the event that the account type is either a group or a member. This field, when accessed, displays a browse window of all facilities that have been defined as a group. Select the facility that holds the appropriate master account for the current facility.
<b>GMS Branch</b>	This field, when accessed, also displays a browse window linked to the validation file called Store Branches. From this list you may select with which store branch this facility is associated.
<b>Customer Level</b>	Customer level is another browse field. Once accessed, it is linked to the validation file Customer Levels. Select the corresponding customer level that best suits this facility.
<b>Province</b>	The province field is used to enter the code for the province in which the facility is located. This field, once selected, will display a browse window linked to the validation file Province. Select the province from the browse window which corresponds to the province in which this facility is located.

---

<b>District</b>	The district field is only accessible if the province field selected also contains a district database. For example, if you selected a province which has multiple districts that have been defined in the validation file (discussed in Chapter 7), then you would select the district from the available list. If the field is blank, select the field, then the District validation file will become available as a browse window. Select the district in which this facility is located.
<b>Authority</b>	Use this field to enter the responsible authority or governing body for this particular facility. This field will display a browse window which is linked to the validation file Responsible Authorities.
<b>Population/ Year</b>	Enter the total population served by this facility, if available. These figures can be used to evaluate necessary stock levels for certain standard items. The Year field is used to indicate the year in which this population figure was calculated.
<b>Inpatient/ Year</b>	Use this field to enter the number, if available, of in-house patients that have been serviced by this facility. The year field also corresponds to the year in which these inpatients were counted.
<b>Outpatient/ Year</b>	Use this field to enter the number of outpatients, if available, that have been serviced by this facility. The year field also corresponds to the year in which these outpatients were counted.
<b>Beds/Year</b>	This field is used to indicate the total number of beds at the facility, if applicable. The year field should indicate the year in which the count was taken.
<b>Theatres/ Year</b>	Use this field to indicate the total number of theatres in the facility, if applicable. The year field should indicate the year in which the count was taken.
<b>Dental Chairs/ Year</b>	Use this field to indicate the total number of dental chairs in the facility, if applicable. The year field should indicate the year in which the count was taken.
<b>Budget/ Financial</b>	This field is used to activate an additional page that defines the budget and financial information about this current facility. See Section 5.3 for more details.

- Monthly History** This field, when accessed, displays a browse window which provides detailed information on the monthly expenditure and payment activity for this facility. See Section 5.4 for more details.
- Stock** This field is used to display detailed information regarding the current items the facility has in stock. The items in this field are linked based on issues and purchase orders calculated and generated by INVEC-2. See Section 5.5 for more details.

### 5.3 Budget/Financial

FACILITIES DETAILS				
Code • 3664		FACILITY INFORMATION		Tagged
Name •	COMPOUNDING SECTION	Phone •	B2660	
Address •	C. M. S.	Fax •		
	•	Contact(s)		
	•	• D. ST. JEAN		
	•	• H. LIBURD		
Budget and Financial Information				
	Drugs	Supplies	Misc.	
Budget	0.00	0.00	0.00	
Spent	162.78	0.00	0.00	
Balance	-162.78	0.00	0.00	
MTD Expenditure •	0.00	YTD Expenditure •	162.78	
MTD Payments •	0.00	YTD Payments •	162.77	
MTD Balance	0.00	YTD Balance	0.01	

Enter Budget for Drugs

**Figure 5.3** Budget/Financial Information

The Budget/Financial screen is used to provide detailed information about the financial setting of the current facility. The following is a description of the information contained in the budget/financial field.

The budget and financial screen displays financial information divided into three categories (*drugs*, *supplies*, and *miscellaneous items*). The first field allows you to enter the amount budgeted for each category. The second field is used to indicate the amount spent on each category. The balance field is a calculated field generated by INVEC-2. INVEC-2 calculates the balance for each category based on the quantities entered in the fields Budget and Spent. In addition, there are five other fields that are used to track financial information about the current facility. The information displayed in the following fields is calculated by INVEC-2 based on information entered in the Issues module and may only be edited by the Supervisor.

---

<b>MTD Expenditure</b>	This field displays the total amount spent for the current month by the selected facility, expressed in local currency. MTD = Month-To-Date
<b>YTD Expenditure</b>	Displays the total expenditures for the current year for the facility. These figures are expressed in local currency. YTD = Year-To-Date
<b>MTD Payments</b>	This field indicates the total amount of payments received by the MS from this particular facility. Figures are in local currency.
<b>YTD Payments</b>	Calculates the number of payments to date that have been received from this facility. The remaining fields, Month to Date balance and Year to Date balance are both calculated by INVEC-2. These fields can only be edited by the Supervisor. All figures are expressed in local currency.
<b>MTD Balance</b>	This is an INVEC2 calculated field. The figure here shows the difference between the total expenditures and payments for the month.
<b>YTD Balance</b>	This is an INVEC2 calculated field. This figure indicates the difference between the total expenditures and payments for the year.

### 5.4 Monthly History

The Monthly History field, when accessed, displays a browse window which is used to provide detailed information on the expenditures and payments for this particular facility. The information is sorted by months within a given year. These fields may only be edited or updated by the System Supervisor.

**Supervisor only:** Select the month for which you would like to view detailed information. The next page that is displayed lists the expenditures for that facility and the payments that have been received from the facility. The final field displayed is the Balance field. This field is a calculated field generated by INVEC-2 showing the difference (if any) between any expenditures and payments received. A negative balance here indicates a credit for the facility.

FACILITIES DETAILS			
Cod	ISSUES: Facility Expend. & Pa		Tagged
Nam			3042
Add	Month-Year	Expenditure	Payments
	1994- 8	0012.60	0012.60
Mar			VERIM
GMS			marks
Pop			NO
Inp			
Out			
Budget/Financial		• Info.	
Monthly History		• Info.	

Monthly Activity	
Date	1994- 8
Expenditure •	0012.60
Payments •	0012.60
Balance	0.00

Figure 5.4 Monthly History

### 5.5 Facility Stock

Code • 3604		FACILITY INFORMATION		Tagged
Ma	Facility Stock: 3604		COMPOUNDING SECTION	
Ad	Item • 01002		Chloramphenicol 25MG/ML SUSP (PD) B	
	Stock	Supplied	Maximum Potential	Maximum Authorized
Ma	• 30 • •	• 0 =	30 Us. •	0
Re	• 13/09/94	• / /	(Expressed in BOTT )	
GM	Optimum Stock	In Stock (Max.)	Stock Value (Max.)	
	• 0	0.0%	222.93	
Cu	Qty. Suppl. this Month	0 =	0.0% of Forecast/Month	
	Qty. Suppl. this Year	0 =	0.0% of Forecast/Year	
Po	Qty. Suppl. last Year •	0		
In	Forecast Annual Usage	0 BOTT	Previous Year Forecast	
Ou			0 BOTT	
Bu	Monthly History • Info.			

Figure 5.5 Facility Stock

The Facility Stock detail screen is used to display information about the items the current facility has in stock. When accessed, a browse window is displayed listing the facility code, item code, and item description of all items in stock at the facility. Additional information may be viewed by pressing the right arrow key (<->) on your keyboard. Other information displayed in the browse window include: Quantity in Stock, Optimum Stock Level, MTD and YTD Quantities Received, and Total Receipts for the Prior Year. To obtain more detailed information about a particular stock item, select the item and the following information will be displayed.

**Facility Stock** This information is displayed only and lists the code and the name for the current facility.

**Item** The item field displays the unique code and description for the selected item. This field cannot be edited.

**Stock** This field indicates the quantity of the selected item currently in stock at the facility. This field may either be updated automatically by the Sales Order module under Issues, or may be edited by the Supervisor. The date below indicates the last date the inventory was checked.

<b>Supplied</b>	This field is used to indicate the last quantity (of the selected item) supplied to the facility, in issue units. It is automatically updated through the Sales Order module or may be edited by the Supervisor. The date below indicates the date of the supply after the last inventory.
<b>Maximum Potential</b>	This field is a calculated field generated by INVEC-2. The formula for this field is totaled based on the total number of the item in stock, plus the last amount supplied to the facility. This value is expressed in issue units.
<b>Maximum Authorized</b>	This field indicates the maximum quantity (expressed in issue units) the facility is authorized to have available.
<b>Optimum Stock</b>	This field is used for the MS to indicate the optimum stock level for the item at this particular facility, and is expressed in issue units. The information is very important as it may be used to calculate reorder quantities for the facility.
<b>In Stock (MAX)</b>	This field is a calculated field generated by INVEC-2 based on information entered in the optimum stock field and maximum potential and expresses it in issue units. INVEC-2 calculates the total percentage of the optimum stock. For example, if the optimum stock level for fluphenazine was 30 amps and the facility currently had a maximum potential of only 25 amps in stock, INVEC-2 would indicate the in stock maximum at 83.3% of optimum stock (25/30 x 100).
<b>Stock Value (MAX)</b>	This calculated field displays the value of the total items in stock, based on the unit price. This value is expressed using your local currency. For example, if a facility had 5 amps of fluphenazine in stock, INVEC-2 calculates the stock value as: <div style="text-align: center; margin-top: 10px;"> <math display="block">\begin{array}{rcccl} 5 &amp; \times &amp; \\$7.323 &amp; = &amp; \\$36.62 \\ \text{(Qty in stock)} &amp; &amp; \text{(unit price)} &amp; &amp; \end{array}</math> </div>
<b>Qty. Suppl. This Month/ This Year</b>	These fields are also calculated by INVEC-2 based on information entered in the Sales Order module. INVEC-2 will keep a running total of all quantities shipped to the facility for the current month. INVEC-2 also indicates the number as a percentage of the total amount forecasted for the month and year. All figures are based on issue units.
<b>Qty. Suppl. Last Year</b>	This field is used to calculate the amount of the item (in issue units) that was used by this facility in the previous year and may only be edited by the Supervisor.

The last two fields, Forecast Annual Usage and Previous Year, are calculated fields that are generated by INVEC-2 based on the information that has been entered into the system. As you will notice, INVEC-2 calculates many fields in order to make day-to-day processing in the MS easier. It is imperative that all of the information entered be correct and checked to the best of the MS ability. See Appendix C for an explanation of all INVEC-2 calculated fields.

## SUPPLIER MASTER FILE

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## 6.0 SUPPLIER MASTER FILE

The Supplier Master database file is used to track all suppliers from whom the MS purchases drugs, supplies, and other medical items. This file is maintained by INVEC-2 and is updated whenever the MS purchases items from a new supplier or discontinues its business with an existing supplier. Because the methods and terms of purchase will be different if an item is a tender versus a non-tender item, use two different codes if a supplier provides the MS with both tender and non-tender items. However, in the event that the currency is the same for both tender and non-tender items, you may use the same code for that supplier. To access the suppliers' database, choose *Suppliers* from the Files option on the INVEC-2 main menu. A browse field is displayed with the following information. In the first field, tag or untag is used to indicate whether this supplier should be included in any reports to be generated by INVEC-2. The Code field is used to generate and identify each supplier in a unique manner. The Name field is used to indicate the name of the supplier associated with the unique code. The Additional Information field provides the mailing address, phone, fax number, and contacts for this supplier. The bottom portion of the screen displays purchase and payment information at a quick glance by month-to-date and year-to-date. The final portion of this screen indicates what the last lead time was for this particular supplier.

SUPPLIERS DETAILS			
* Code	Name	Additional Information	
ABB/DIR	ABBOTT	Mailing Address	
ABB/DIR	ABBOTT	PUERTO RICO INC.	
ACS/DIR	A.C. SHILLINGFORD & CO. LTD	P.O BOX 4706	
ACY/	AMERICAN CYANAMID COMPANY	CAROLINA	
ADI/DIR		PUERTO RICO 00984-4706	
AJI/DIR	AUSTIN JAMES INTERNATIONAL LTD	Phone	Fax
ALC/	ALCON PHARMACEUTICALS LTD.	809-750-5454	809-257-4429
ALS/DIR	A.L.S. COMPUTER SYSTEMS, INC	Contacts	
AMD/DIR	AN-MED INTERNATIONAL	MS JOANNE MELENDEZ	
AMS/DIR	AMES COMPANY		
ANM/	AN-MED INTERNATIONAL		
	Month to Date	Year to Date	Last Lead Time
Purchases	0.00	0.00	= 0 Days
Payments	0.00	0.00	
<F2>Tag/Untag	<F10>Order	<Ins>Insert	<Del>Delete
Search for Code			

Figure 6.1 Suppliers Main Screen

## 6.1 Summary of Commands

### Tagging a Supplier

The <F2> key may be used to either tag or untag a supplier to be included in a report. Please note, when using the <F2> key, the position pointer will move to the next item in the database.

### Adding a new Supplier

Use the <Ins> key if you wish to add a new supplier to the database. Pressing <Ins> instantly takes you to a blank Supplier Information screen, which should be completed for each new supplier.

### Deleting a Supplier

The <Del> key may be used to delete a supplier from the Suppliers Details screen. Suppliers should not be removed from the main database file until all pending transactions have been completed.

### View Order

The <F10> key is used to change the order in which the suppliers are displayed on the main screen. When you first access the Suppliers database, the suppliers are sorted by the Code. If you wish to view them in order by their name, press <F10>, and an option window will appear. Choose the *Name* option and press <ENTER>. INVEC-2 will sort your suppliers based on their names.

### Search Mode

If you wish to search for a supplier, enter the information in the *Search* field located below the main screen. Please note, the search is conducted based on the order you have selected. In other words, if your view order is by Code, you must enter a Supplier's code on which to search.

### Moving Between Records

You can move between records while within any form window by pressing <Ctrl><PgDn> or <Ctrl><PgUp>.

## 6.2 Supplier Information Window

Code		Supplier Information		Tagged	
ABB/DIR					
Name	• ABBOTT	Physical Address			
Mailing Address	• PUERTO RICO INC.	•			
	• P.O BOX 4706	•			
	• CAROLINA	•			
Country	• PUERTO RICO 00984-4706				
Contact(s)					
Phone	Fax	Telex	• MS JOANNE MELENDEZ		
• 809-750-5454	• 809-257-4429	•	•		
Tender	Currency	Payterms	Local/Foreign	Manufacturer	Remarks
• M	• USD	•	• F	• M	• Memo
Leadtimes: Average • 0 days Latest • 0 days Stated • 0 days					
		This Month	This Year	Last Year	
Purchases	•	0.00	0.00	0.00	
Payments	•	0.00	0.00	0.00	
History • Info.					

Enter the supplier code, a pick list is available.

Figure 6.2 Supplier Information

The Supplier Information window is used to maintain and track detailed information on each supplier that services the MS. The following is a description of all the fields displayed in the supplier information window.

**Code** This code is a unique code to define the particular supplier. Once this supplier code has been entered, the code may not be changed. INVEC-2 check for duplicates and will indicate an error, if detected.

**Name** Use this field to enter the name of the supplier.

**Mailing Address** The next three consecutive fields are used to enter the mailing address of the supplier. Be sure to include any unique information, i.e., suite number or special postal box number.

**Country** Use this field to enter the country in which the supplier is located.

**Physical Address** If the actual location of the supplier is different from the mailing address, enter the information here. For example, if the mailing address is a post office box, enter the actual street address here, for delivery purposes.

---

<b>Phone</b>	The supplier's phone number.
<b>Fax</b>	If available, enter the facsimile number here.
<b>Telex</b>	Enter the telex number of the supplier, if available or applicable.
<b>Contact</b>	Enter the supplier's contacts. Contact names here are usually sales representatives assigned to your MS.
<b>Tender</b>	Indicate whether this supplier supplies tender items or not. Remember, if the supplier is going to provide tender and non-tender items and the currencies are not the same, you must enter a separate supplier code for tender and non-tender items.
<b>Currency</b>	This field is used to indicate the currency with which this supplier deals. A browse window is available which is linked to the rates of exchange database.
<b>Pay Terms</b>	Enter the payment terms for this supplier, such as net 15, net 30, net 45 or COD.
<b>Local/Foreign</b>	Enter "L" or "F" to indicate whether the supplier is local or foreign.
<b>Manufacturer</b>	Enter <i>Yes</i> or <i>No</i> , if the supplier is also a manufacturer.
<b>Remarks</b>	The remarks field is a memo field. When selected, a browse window appears in which you may enter any special information or requests for the supplier.
<b>Lead Time</b>	The lead times are used to indicate the number of days between the time the MS sends out the purchase order and the time that the items are received. Use the following fields: <i>average</i> , <i>latest</i> , and <i>stated</i> to indicate (in days) the observed lead times.
<b>Purchases/ Payments</b>	These fields are used to provide detailed information about purchases and payments made to and from the selected supplier. These purchases and payments are stated based on the current month's and year's and the previous year's activities. INVEC-2 automatically calculates these fields, however they may be edited by the Supervisor.
<b>History</b>	This field, when accessed, displays a browse window which provides information on purchases and payments for the selected supplier. See Section 6.3 for details.

### 6.3 History

The History field is a detailed field that, when accessed, displays a browse window providing information on purchases and payments for the current supplier. The information in this browse window can only be accessed in detail by the Supervisor. This browse window, titled PO - Purchase and Payment Supplier, provides detailed information on the amount ordered from the supplier, the amounts received from the supplier, and payments made to the supplier. This information is provided based on the value of the items.

Normally there is no need to edit or enter any data. This information is updated every time transactions are completed like the History database in the Product Information Module.

**Supervisor only:** To access more detailed information on activity dealing with the supplier, select the date in which you wish to obtain more detailed information. The following is a description of the information displayed on the suppliers orders and payments page.

The screenshot shows a multi-level window structure. The outermost window is titled 'Supplier Information' and contains fields for 'Code' (AJI/DIR) and 'Tagged'. Inside this is a window titled 'PO: Purchase & Payments Suppl.'. Within that is a window titled 'Suppliers Orders and Payments'. This window contains a table with the following data:

Supplier	AJI/DIR	AUSTIN JAMES INTERNATIONAL LTD
Month		
Orders		0.00
Received		0.00
Payments		0.00

Below the table, there is a summary row for 'Payments' with three columns of '0.00'. At the bottom of the window, it says 'History • Info.' and a note: 'Supervisor may edit month/year'.

Figure 6.3 History

**Supplier** The supplier code and name is displayed.

**Month/Year** This field is used to indicate the month and year for which the information will apply.

<b>Order</b>	The value of the total orders for that particular month to the supplier, in your local currency.
<b>Received</b>	The total value of the items received from the particular supplier, in your local currency.
<b>Payment</b>	The total amount of payments made to the supplier during this particular period. This amount is entered in your local currency.

## VALIDATION FILES

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## 7.0 VALIDATION FILES

The Validation Files option contains several small databases used to provide pick list options throughout the rest of INVEC-2. Validation files are often accessed as browse windows through INVEC-2 and make the process of completing forms much easier. Validation files are generated and used to maintain a list of options available for many fields. To create or access validation file databases, select *Validation Files* from the Files menu of the INVEC-2 Main Menu. The following is a description of each validation file and its purpose.

The main purpose of these files is to allow the user to develop his or her own data dictionary that can be used regularly to enter data in various fields, thereby making data entry more consistent. For example: Some people might enter TAB while others enter TABLET or Tablet; if TAB is used in the Validation Reference file, TAB will be entered each time.

### 7.1 Summary of Commands

#### Adding Options to a Validation File

To add an item to a validation file, simply select the validation file and press <Ins>. Fill in the corresponding page that is displayed to match the information requested for the validation file.

#### Removing Items from Validation Files

To delete an item from a validation file, simply highlight the item and press <Del>. This will prompt a confirmation option window asking if it is indeed okay to delete. Select *Yes* if you wish to remove the item from the validation file, select *No* if you wish to cancel the delete option.

#### Search Mode

If you wish to search for a particular record in a validation file, enter the code in the Search field located below the main screen. Please note, the search mode in all validation files, except Rates of Exchange, is conducted based on codes only.

## 7.2 Pharmaceutical Forms

The Pharmaceutical Forms validation file is used to maintain a list describing the form of the stock item. For example, to indicate the dosage form (stock - product information screen) of any item in stock as a capsule, add the code "TAB" and description "Tablets/Capsules" to your database. Below is a table of some sample forms. You may create your own forms list based on terminology used in your facility, or you may use the one listed below. The code can be up to five letters long.

Code	Item Type
AMP	AMPOULE
CREAM	CREAM
CRTDG	CARTRIDGE
DISP	DISPOSABLE
DROPS	ORAL DROPS
ELIXI	ELIXIR
ENEMA	ENEMA
INHAL	INHALER
LIQUI	LIQUID
LOTIO	LOTION
NASAL	NASAL DROP
OINTM	OINTMENT
OPHT	OPHTHALMIC
OTIC	EAR DROPS
PESSA	PESSARY
POWDE	POWDER
SHAMP	SHAMPOO
SOLUT	SOLUTION
SUPP	SUPPOSITORY
SUSP	SUSPENSION
SYRUP	SYRUP
TAB	TABLET
TINCT	TINCTURE
VIAL	VIAL

### 7.3 Route of Administration

The Route of Administration validation file is a database file used to describe how the drugs are to be administered. For example, if you defined acetaminophen as a stock item and the pharmaceutical form as tablets, the route of administration for this item would be oral. Below is a table containing some sample options for the Route of Administration validation file. You may build your own validation file or use the sample provided.

Code	Item Type
DROP	Oral Drops
INH	Inhaler
INJ	Injectable
IV	Intravenous
NASAL	Nasal Drop
OPHT	Eye Preparations
OTIC	Ear Drops
PO	Oral Preparations
RECT	Rectal Preparations
SC	Sub-Cutane
SL	Sublingual
STRIP	Diagnostic
TOP	Topical
VAG	Vaginal Preparations

## 7.4 Therapeutic Class

Therapeutic Class is another small database file designed to maintain the various therapeutic classes under which an item may fall based on their clinical use. There are several therapeutic classification lists available, some provided by the World Health Organization (WHO) and others by the American Hospital Formulary Service (ANFS). It would be suggested to use the therapeutic classification that is most common in your region. Below is a sample Therapeutic Class validation file. For a complete listing of the above mentioned classifications, see Appendix E.

Class	Description
86.00	ANTIASTHMATIC DRUGS
4.00	ANTIHISTAMINES
8.08	ANTHELMINTICS
8.12	ANTIBIOTICS
8.16	ANTITUBERCULARS
8.24	SULPHONAMIDES
8.32	ANTITRICHOMONAL AGENTS
8.36	URINARY ANTI-INFECTIVES
8.38	ANTILEPTOTICS
10.00	ANTINEOPLASTICS

## 7.5 Customer Level

The Customer Level database is designed to describe the various customer levels that you may assign to the facilities in your organization. Below is a sample Customer Level validation file. You may generate your own or use the ones listed below.

Code	Description
1	P.M.H.
2	District Health Centre
3	Medical Laboratory
4	Dental Services
5	Psychiatric Unit
6	Compounding Section
7	Miscellaneous

## 7.6 Medical Store Branches

This validation file is used to keep a small database list of any MS branches in your area.

## 7.7 Responsible Authorities

This database file is used to maintain a list of governing authorities that may be responsible for the facilities in your area. The Ministry of Health is an example of a Responsible Authority.

## 7.8 Provinces and Districts

The Provinces and Districts validation file is used to describe the province and districts that are located in the MS area. This information is used in the Facilities Details database. This database file actually contains a sub-file attached to it. The Provinces validation file allows you to create a list of all the provinces in your region. If a province has been subdivided into smaller districts, then an additional validation file will be attached listing all districts for the particular province. The district file may be accessed from the Province window.

## 7.9 Level of Use

The Level of Use validation file is used to define the usage levels of the stock items. Below is a sample Level of Use validation file. It is organized according to the medical practitioners who use the items and the clinical facilities at which they are used. Below is a sample.

Code	Description
C	Compounding
F	First Line
H	Hospital Only
S	Specialist Only

## 7.10 Facility Sources

If your MS consists of a number of branches, not all items are necessarily available to the facilities from all branches. Furthermore some catalog items might even be available from private suppliers only. By adding records to the Facility Availability validation file, a structure can be set up to indicate from where facilities can order items.

## 7.11 Branch Sources

This database should be created if your MS has more than one branch, and is used to indicate from where a branch should reorder an item. For example, if your store is a provincial store, for some items you might indicate that reordering is to be done at the regional store, while others might be ordered from the head office. In addition, there may be additional items which will probably have to be ordered directly from a private supplier.

## 7.12 Delivery Route

This database should be created if your MS has pre-defined delivery routes for the facilities. For example, if there are several facilities which are located in the Western District, define the region and assign a delivery code number to that area.

## 7.13 Delivery Point

If using pre-defined delivery routes for the facilities in your area, use this database to specify the location or sequence of each facility on the delivery route. For example a facility might be designated as the second stop on the route.

## 7.14 Issue Units

This validation file is used to describe the basic counting unit of measurement for your stock items. You may build this file or use the sample file below as a guide. For example, if you stocked acetaminophen tablets in bottles of 500 you should choose to indicate the issue unit as Tablet; therefore, in the event you receive a bottle containing 1000 tablets, you will not have to enter it as a new item. This field is used to designate the unit used to issue a particular stock item. See Section 1.1.2 for a detailed description on handling issue units.

Code	Item Type
AMP	Ampoule
BOTT	Bottle
BOX	Box of items
CAP	Capsule
CRTDGS	Cartridge
CYCLE	Oral contraceptives
DRUM	For solids over 1 kg
EACH	Single items
GM	GRAM
INHAIER	Inhalable drugs
LITRE	Litre

## 7.15 Storage Locations

This database file keeps a listing of all of the various storage locations where the MS may store stock items and other medical supplies. Below is a sample.

Code	Name
001	ANTIBIOTICS
002	COMPOUNDING FINISH
003	COMPOUNDING RAW MAT.
004	CONTROLLED DRUGS
005	DENTAL SUPPLIES
006	ENT & SYRUPS
007	FRIDGE #1
008	FRIDGE #2
009	FRIDGE #3
010	FRIDGE #4

## 7.16 Stock Adjustment Reasons (Pos.)

In the event the Supervisor must adjust the stock level in the positive direction, the various reasons why can be chosen from this Adjustment Reason validation file.

Code	Description
1	Physical Inventory
2	Gift for supplier
3	Donations
4	Installation (New Item)
5	Compounding Section Item

## 7.17 Stock Adjustment Reasons (Neg.)

The Stock Adjustment Reasons Negative validation file is the database that contains various reasons why the Supervisor may have to adjust the stock level in the negative direction.

Code	Description
1	Physical Inventory
2	Donation (Free Item)
3	Expired Item
4	Damage/Spoiled Item

## 7.18 Inventory Group Titles

This database file can be generated to cover a large variety of items that would fall under a particular group code. This is primarily used in the Tender option to provide headings on the reports as appropriate. Below is a sample.

Code	Description
01000	ANTIBIOTICS
02000	DANGEROUS DRUGS
03000	I.V.
04000	INJECTIONS
05000	LOS A (INTERNAL USE ONLY)
06000	LOS B (EXTERNAL USE ONLY)
07000	POWDERS
08000	TABLETS
09000	VACCINES
10000	CONTRACEPTIVES
11000	COTTON ITEMS
12000	DENTAL ITEMS
13000	LABORATORY ITEMS
14000	SUNDRIES ITEMS
15000	SURGICAL ITEMS
16000	SUTURES
17000	SYRINGES & NEEDLES

## 7.19 Tender Forecast Units

This database file may be used to specify a set of categories to be used when forecasting for tender items. Each set can contain up to 10 different categories. These categories or "units" will be displayed in the items details screen of the Tender module. For example, if you do forecasting for several branch stores, enter each store name as a unit in this database.

## 7.20 Budgets

Permits you to split your budget into categories, allowing you to see how your spending is allocated.

## 7.21 Bank Accounts

This database file enables you to track account balances. Although your finance/accounting department will be keeping detailed records of the store account, INVEC-2 will track deposits and payments made to or from specific accounts.

## 7.22 Rates Of Exchange

The Rates of Exchange validation file allows you to list all currency types encountered by the medical store, and the rate as it compares to your local currency. The last date the currency changed is also listed, and should be checked on a regular basis to make sure all values are current. You must enter your local currency here with the rate of exchange of 1.0000. The rate of exchange should be used to convert a foreign currency into your local currency using the following formula. For example: If you need 2.7 of your local currency to get a US dollar, the rate of exchange will be 2.7 for US dollar.

**PLEASE NOTE: IN ORDER FOR INVEC-2 TO CALCULATE EXCHANGE RATES FOR YOUR COUNTRY, YOUR LOCAL CURRENCY MUST BE ENTERED HERE WITH A RATE VALUE OF 1.000.**

Rates of Exchange			
Code	Name	Rate	Changed
BDS	Barbados Dollar	1.3542	20/05/94
EC\$	EC Dollar	1.0000	21/05/94
USD	US Dollar	2.7169	19/07/94

Figure 7.1 Rates of Exchange

## ISSUES

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## 8.0 ISSUES (S.O. OR S.I.V.)

INVEC-2 has been designed to ease the processing of requisitions by helping the MS staff to record requisitions, allocate quantities, generate issues vouchers, and to record payments if facilities pay directly for their shipments. Like the Purchase Order option described in the following chapter, this option is vital to INVEC-2 operations since it records the day-to-day transactions taking place within the MS. INVEC-2 uses information on stock issued to the health facilities by the MS to update perpetual inventory, stock detail, and accounts receivable files. To keep the INVEC-2 system up-to-date and to allow accurate reports at any time, it is essential to enter data about requisitions into the computer on a day-to-day basis.

Selecting *Issues* from the Transaction Menu option causes the browse window below to be displayed. This browse window displays the facility code, order number, the date the issues voucher was received, date the voucher was processed by INVEC-2, and the date the items were shipped. To obtain more detailed information about a particular sales order, simply select an entry from the browse window.

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ISSUES: Issues Header File

Fill contacts

Facility	Order #	Date Received	Date Processed	Date Shipped
3606	01000	14/09/94	14/09/94	14/09/94
3604	0900	14/09/94	14/09/94	14/09/94
3699	1000	13/09/94	13/09/94	13/09/94
3606	101	15/09/94	15/09/94	15/09/94
3606	23/94-95	12/07/94	11/09/94	13/09/94
3606	24/94-95	12/07/94	09/08/94	09/08/94
3612	25/94-95	13/07/94	11/09/94	11/09/94
3613	26/94-95	14/07/94	08/08/94	08/08/94
3613	27/94-95	14/07/94	08/08/94	08/08/94
3699	28/94-95	13/07/94	08/08/94	08/08/94

<F1>Help      <F3>Stock      <F4>Calculator      <F9>Go to DOS

Search for Order #

Figure 8.1 Issues Main Screen

The INVEC-2 quantity allocation and picking slip procedures used in processing requisitions from facilities are optional. The choice of which procedures to use regularly will vary depending on the currently established procedures, and size of your MS.

**The Quantities Allocation Procedure** allows the MS manager to review and approve the quantities of items sent to the facilities. When a requisition arrives from a facility, the computer operator enters the information about the items and quantities ordered using this option. The *quantities allocation procedure* prints a list of the quantities requested and current stock levels. This list is passed on to the manager for approval. This step assures that the MS manager will be able to investigate irregularities if unexpected products or quantities are requested by facilities, to control stock levels within the MS by making sure that items which are low in stock are not sent out to facilities in large quantities, and to check if the budget for a facility is adequate (if applicable). Be aware that any items that are expired cannot be allocated.

**The Picking Slip Procedure** assists the storekeeper with the selection of drugs using a pick list. To use this step, information on items and quantities from requisitions should be entered when the requisition is received at the MS. After this data from the requisition is entered and approved using the Quantities Allocation procedure, the batches that should be issued can be identified and a pick list printed using INVEC-2. Data about actual shipping quantities is entered after the items have been picked from the shelves using the pick list. The *picking list procedure* is most useful in warehouses which fill many orders each week and where the fill process is accomplished by several different warehouse staff people since it allows for more control over the selection of batches.

**Please Note: Sales Order (S.O.) and Store Issue Voucher (S.I.V.) are used interchangeably.**

## 8.1 Summary of Commands

### Adding new Issue Vouchers

Use the <Ins> key to add a new issue voucher to the Issues database. When adding an issue to the Issues menu, INVEC-2 automatically takes you to the item details screen after completing the basic information on the main Issues screen. INVEC-2 requires you to complete the following fields before going to the item details window:

- Facility Code,
- Order Ref. # (if not automatically generated),
- Prepared by - date,
- Approved by - date, and
- Received (date).

See Appendix A for a tutorial on adding a sales order.

### Deleting an Issue

The <Del> key may be used to remove an issue from the Issues database file. Issues can only be removed from the main screen after all requisition and payment information has first been deleted. Once all necessary information has been removed, pressing the <Del> key will cause an option window to appear asking you to confirm the removal of the issue.

### View Order

The <F10> key is used to change the order in which the issues are displayed on the main screen. When you first access the Issues database, the items are sorted by the order reference number. The view order here gives you three choices from which to select: *Order #*, *Facility (code)*, and *Date Received*. If you wish to change your view order, press <F10>, and an option window will appear listing the three choices. Choose the desired option and press <ENTER>. INVEC-2 will sort your issues based on order chosen.

### Search Mode

If you wish to search for an issue, enter the information in the Search field located below the main screen. Please note the search is conducted based on the order you have selected. In other words, if your view order is by Facility Code, you must enter a facility code on which to search.

### Moving Between Records

You can move between records while within any form window by pressing <Ctrl><PgDn> or <Ctrl><PgUp>.

## 8.2 Issues

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ISSUES			
Facility	3606	PORTSMOUTH HEALTH DISTRICT	Order Ref. • 01000
Prepared by • JP	- • 14/09/94	Approved by • JP	- • 14/09/94
Received on • 14/09/94	Date Processed 14/09/94	Date Shipped • 14/09/94	
Date Activated by INVEC 14/09/94	Date Received at Facility • / /		
Freight Information • Info.		Collection Slip No.	NOT USED
Shipment Value	321.83	Last Pay	/ /
Service Charge	48.27	Payments	0.00
Total Value	370.10	Balance Due	370.10
Payments • Info.	Nb. of: Requested	3 Item Details • Info.	
Requisitions • Info.	Items: Allocated	0 Options • 7	
Type Code for Facility			

**Figure 8.2** Issues Detail Screen

The following is an explanation of all the data fields in the store issues voucher screen, as well as any other sub-windows.

- Facility Code** This field displays the unique code for the facility that submitted the voucher.
- Order Ref. #** This is a unique order number which may either be automatically generated by INVEC-2 or entered by the MS staff based on settings selected in the System Setup, Issues Voucher Parameter option. See Section 12.2 for details.
- Prepared by** The initials of the individual (facility staff person) who submitted the requisition. The next field is used to indicate the date the requisition was prepared.
- Approved by** The initials of the individual who approved the requisition and the date it was approved.
- Received** The date the requisition was received at the MS.

- Date Processed** This field is completed by INVEC-2 once the issues voucher has been processed by the MS. Selecting #2 from the Options field causes the issues voucher to be processed. See Section 8.6 for an explanation of the Options field.
- Date Shipped** Date that the items were shipped. This field can only be completed once the shipping quantities have been confirmed and option #4 has successfully been completed. See Section 8.6 for an explanation of the Options field.
- Date Activated By INVEC-2** This field is completed by INVEC-2 once the issues voucher has been activated by the MS. This is done by selecting option #5 from the Options field. See Section 8.6 for an explanation of the Options field.
- Date Rec'd at Facility** The date the items were received by the facility. A shipping date must be entered before completing this field.
- Freight Information** When accessed, this field displays an additional window requiring the following information to be completed:
- weight of goods (can only be edited by Supervisor after S.O. is activated);
  - number of cartons (cannot be edited after S.O. is activated);
  - means of transport - *Own Truck, Private Contractor, Rail, Collected*;
  - method of delivery - *End user Delivery, Drop off Delivery, Collection at MS*;
  - delivery status - *OK, Damaged, Unknown*.
- This field can only be accessed after the shipping date is entered.
- Collection Slip No.** This feature is updated by INVEC-2 based on options set in System Constants. If an item designated as secured in the stock database is ordered, it will cause a collection slip number to be generated if the option is selected in System Setup. This allows you to track the distribution of any controlled item.

The following fields are automatically calculated by INVEC-2 based on information entered by the MS.

**Shipment Value**  
**Service Charge**  
**Total Value**

**Last Pay**  
**Payments**  
**Balance Due**

- Payments** This field displays additional payment information for this sales order. See Section 8.3 for details.
- Requisitions** When accessed, this field displays a listing of all requisitions received from the facility for this sales order. In many cases, the facility will send several requisitions to be processed as one sales order. See Section 8.4 for details.
- Items:  
Requested/  
Allocated** This field displays the total number of items ordered by the facility, and the total number of items which have been allocated to the facility. INVEC2 calculates these figures from the information entered in the item details screen. The system will not allow items that are expired to be allocated.
- Item Details** This field, when accessed, displays a browse window which provides detailed information on each item requested and issued. See Section 8.5 for details.
- Options** This option provides a option window listing all procedures involved in processing issues vouchers. See Section 8.6 for details.

### 8.3 Payments

ISSUES: Payment File				
PO	Date of Payment	Bank Account	Payment Amount	Order Ref. #
	09/08/94		1611.90	• 24/94-95
• Pr				- • 12/07/94
P-				ate Shipped • 09/08/94
Da				9/08/94
Fr				OT USED
Sh				
Se				
Total U				
Payment Requisi				

INVOICE PAYMENTS 24/94-95			
Facility # 3606 PORTSMOUTH HEALTH DISTRICT			
Date •	09/08/94	Balance	1611.90
Account •		Paid •	1611.90
		New Balance	0.00

Type Code for Facility

Figure 8.3 Payment File

This field activates a browse window which can be used to select a detailed payment information window. This browse window, linked to a payment database file for the ordering facility, contains the date of payment, the bank account number, and the payment amount.

When a payment is selected from the browse window, an additional window is displayed presenting the following information.

**Date** Date last payment was received.

**Account** The MS bank account to which the payment is to be credited. This field is linked to the Bank Account validation file, thus a browse window is available.

**Balance** Current balance due for this facility. This field is calculated by INVEC-2.

**Paid** The amount paid to the MS by the facility.

**New Balance** This calculated field displays the new balance owed to the MS by the facility.



## 8.5 Item Details

The Item Detail window, when accessed, displays a browse window listing all items ordered on the issues voucher. The browse window lists the Requisition #, the Item Code, Description, Quantity Requested, Quantity Allocated, Quantity Supplied, and Total Value for each item on the voucher. To view or change any information about an item on the issues voucher, select the item from this browse window then the item details page will be displayed for that item.

**PLEASE NOTE: THIS SCREEN IS ONLY AVAILABLE FOR VIEW OR EDIT PRIOR TO CONFIRMING QUANTITIES.**

Order	35/94-95	S.I.V. Item Details	Customer	3612
Requisition #	01379		IV No.	
Code	Description		Unit	
• 01004	CHLORAMPHENICOL 1 G INJ		VIAL	
Facility Stock	Medical Stores	Stock Level	Actual	Potential
• 0.0	Qty. Avail.	110.0 (months)	999.9	999.9
Quantity Requested	• 100.0	Quantity Authorized	• 50.0	
Quantity Supplied	0.0	at the total price of	0.00	
Re-Process Item		Lot Allocations		
• Process		• Info.		
Use F2 to view Facility Stock Information				

Figure 8.5 S.I.V. Item Details

The following is a description of all the information presented in this window.

**Hint: Use the <F2> Hot Key view Facility Stock. This is the only screen where the hot key is available.**

**Order/ Customer** These fields display the order number and facility code respectively and cannot be edited from this window.

**Requisition #** The requisition number on the form submitted by the facility. If multiple requisition forms have been submitted, use the number from the form which contains the item to be ordered.

<b>Code Description/ Unit</b>	This field should contain the MS code for the item being ordered. When blank, a browse window linked to the master Stock database file is displayed allowing you to select the item ordered. The generic/accepted name is listed under the Description field and the issues unit information is displayed under the Unit field. Once the code is selected, the description and unit information are automatically displayed.
<b>Facility Stock</b>	The quantity in stock at the facility. This information may be supplied by the facility, or may be obtained from the Facility master database.
<b>Medical Stores Qty. Avail.</b>	This field is completed by INVEC-2 from the current stock level information in the Master Stock database. The quantity indicates the total amount of the item that is available at the MS.
<b>Stock Level Actual/Potent.</b>	These are INVEC-2 calculated fields. See Appendix C.
<b>Quantity Requested</b>	The amount of the item the facility is requesting. This figure should always be entered in issue units.
<b>Quantity Authorized</b>	The amount of the item (in issue units) the facility is authorized to receive. This figure is entered by the MS staff and should coincide with forecasted quantities listed in the Facility Forecast window for the item, if forecasting is used.
<b>Quantity Supplied</b>	This field is automatically completed by INVEC-2 after the sales order has been processed and the amount being shipped has been confirmed. INVEC-2 also calculates the total price of the items shipped and enters that information in the field next to "at the Total Price of."
<b>Lot Allocations</b>	When selected, this field displays a browse window listing the lot numbers from which the item is to be selected. When selected, this browse window displays information about the item by the pack size, expiration date, lot number, quantity to collect, and the quantity to ship. This window can only be accessed after the sales order has been processed, however once the quantities have been confirmed (Options menu) it will no longer be accessible.
<b>Re-Process Items</b>	This option allows you to change the lot allocations for this item only. This can only be done after the sales order has been processed. This would be done for example, if after generating the picking list, the item was not found, or not taken from the recommended lot. The stock availability would have to be adjusted, and lot would also be reallocated for the item using this option.

## 8.6 Options

The Options field, when accessed, displays an option window listing all procedures used in processing requisitions from facilities. Each procedure is numbered according to the order in which it should be completed.

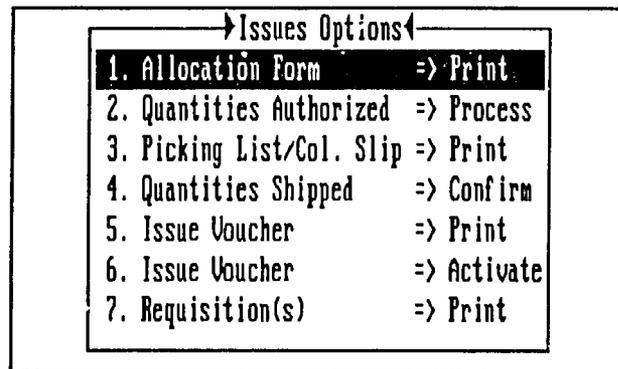


Figure 8.6 Issues Options

### 1. Allocation Form

Select this option to obtain a listing of all items ordered by the facility, quantities requested, and current stock levels. Before selecting this option, make sure that your printer is on and that the paper is aligned. If your printer is off, this listing will be sent to the screen. This listing should be given to the MS manager for approval. The form cannot be printed after the sales order has been processed.

### 2. Quantities Authorized

Selecting this option causes INVEC-2 to put all item quantities that have been ordered on hold. In order for this process to take place the Quantities Authorized field, found in the item details page, must be completed. This option causes INVEC-2 to process the sales order and enter a date in the Date Processed field.

### 3. Picking List/Collect. Slip

To generate a picking slip, you must first ensure that your printer is on and that the paper is aligned. Choose the *Picking Slip* option from the Requisition option window at the right of the screen and hit <ENTER> to print a picking slip. Remember that if your printer is not on, the pick list will print to your screen. Once the quantities have been confirmed, this slip cannot be printed.

After it is generated by INVEC-2, the picking slip should be transmitted to the storekeeper to prepare the shipment according to the printed recommendations. Any modifications should be entered on the picking slip and changed in INVEC-2.

- 4. Quantities Shipped** Once the items have been selected for shipping, use this option to confirm the actual quantities that will be shipped to the designated facility.
- 5. Issues Voucher Prt.** This procedure is optional. Select this option if you wish to print a delivery notice to be sent to the ordering facility.
- 6. Issues Voucher** Activating the issues voucher allows INVEC-2 to update the entire system. The stock levels are adjusted for both the MS and the facility, and sales information is automatically recorded. From this point on, no modifications can be made to the order since stock levels and all related accounts have already been updated. For this reason, **you should activate the order only when you are sure the items are issued and received!**
- 7. Print Requisition** This option allows you to print a copy of the various requisitions for this issue voucher.

See Appendix A for step-by-step instructions on how to process a sales order.

## PURCHASE ORDERS

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## 9.0 PURCHASE ORDERS (PO)

This option generates purchase orders, tracks receipts, and records receiving data and information on payments. The information which is entered into INVEC-2 through the Purchase Order option updates all other INVEC-2 information about items on order, stock levels, stock detail, and accounts payable. Along with data on stock issues, this option is the main channel for informing INVEC-2 of changes in inventory. The accuracy of the INVEC-2 system is heavily dependent on the information entered through this option. Therefore, if an error is discovered in this option, it should be corrected promptly.

The INVEC-2 Purchase Order option integrates the different ordering procedures for tender and non-tender items. If you order through a procurement agency, INVEC-2 can incorporate a service charge in its cost calculations for each order. For non-tender items, INVEC-2 gives you access to the Stock Master File while you are selecting the items to order. You will enter price information for non-tender items if the information is available when you order, otherwise the cost is entered when the invoice arrives from the supplier.

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PO: Purchase Order Header File

Fill

Number	Ordered	Items	Supplier	Name
1/94-95	16/08/94	5	PHA/DIR	PHARMACY SALES (CARIBBEAN) LTD
2/94-95	16/08/94	2	BWE/	BURROUGHS WELLCOME INC.
23548	04/06/95	0	ACS/DIR	A.C. SHILLINGFORD & CO. LTD
3/94-95	15/09/94	2	APD/	APOTEX INC.
3/94-95	29/11/94	0	AJI/DIR	AUSTIN JAMES INTERNATIONAL LTD
4/94-95	16/09/94	2	BRY/	A.S. BRYDEN & SONS LTD.(ICI,TR

<F1>Help      <F3>Stock      <F4>Calculator      <F9>Go to DOS

Search for Number

Figure 9.1 Purchase Orders Main Screen

## 9.1 Summary of Commands

### Adding a new PO

Use the <Ins> key to add a new purchase order to the Purchase Order database. When adding a PO to the Purchase Order header file, INVEC-2 automatically takes you to the item details screen after completing the basic information on the main Purchase Order screen. INVEC-2 requires you to complete the following fields before going to the item details window:

- PO number,
- Budget category,
- Supplier (browse available),
- Ordered (date),
- CIF/FOB,
- Tender/Tender Code (if applicable),
- Supplier Reference number, and
- Supplier Currency.

See Appendix A for a tutorial on adding a purchase order.

**Note: If you are going to order an item which is not listed in INVEC-2, it is important to first enter all information about that item into the master file using the Stock option before creating a purchase order.**

### Deleting a PO

The <Del> key is used to remove a PO from the Purchase Order database file. POs can only be removed from the main screen after all receiving reports and payment information have been deleted. Once all necessary information has been removed, pressing the <Del> key will cause an option window to appear asking you to confirm the removal of the PO.

### View Order

The <F10> key is not available here, as the only view order available is by PO number.

### Search Mode

If you wish to search for a PO, enter the information in the Search field located below the main screen. Since there is only one view order available, the only field to search on is the PO number.

### Moving between Records

You may move between records listed while within any form window by pressing <Ctrl> <PgDn> or <Ctrl> <PgUp>.

## 9.2 Purchase Order Form Window

When accessed, the Purchase Order option displays a browse window containing a list of all previously generated POs in the system. For a quick glance at a specific PO, the main Purchase Order header file browse window displays the following information:

- PO number,
- Number of items listed on the PO,
- Supplier code,
- Supplier name,
- Date Ordered,
- Date Activated,
- CIF/FOB,
- Tender Code (if any),
- Supplier PO Reference #, and
- Potential Value of PO.

Remember to use the right arrow key to view any remaining fields not visible within the browse window. The following is a discussion of all fields presented in the PO module, including any sub-windows.

PO Num 1/94-95		PURCHASE ORDER		Ordered • 16/08/94	
Deliver to Store • 0 CENTRAL MEDICAL STORES		• Memo		Budget •	
Supplier • PHA/DIR PHARMACY SALES (CARIBBEAN) LTD		FOB/CIF • F			
Tender • M		Tender Code •		Supplier Ref. •	
ORDERING		Currency • BD\$ # 1.3542		RECEIVING	
Estimated				In (EC\$)	
Cost In(BD\$) • 5650.00				Received Value 0.00	
Cost In(EC\$) 7651.23				Added Charges 0.00	
				Total Payment 0.00	
				Balance 0.00	
# Items on Order 5				# Receiving Reports 0	
Date Order Printed 16/09/94				# Activated Rec. Reports 0	
Date Order Activated 26/08/94					
Payments • Info.		Item Details • Info.			
Receiving Reports • Info.		Options • 3			

Enter Purchase Order Number

Figure 9.2 Purchase Order

---

<b>PO Num</b>	This number is the code that the MS assigns to a purchase order. Be sure you are not reusing a number which has already been assigned. Do not reuse numbers from orders which have been previously deleted. INVEC-2 checks for duplicates and if found will give an error message.
<b>Ordered</b>	This field identifies the date of the order. INVEC-2 will automatically assign the current date.
<b>No.Items</b>	The number of items to be ordered on this purchase order. INVEC-2 completes this field after you have entered all items being ordered.
<b>Supplier</b>	The supplier to whom you are sending the purchase order. A browse window linked to the Supplier Master file is available. The company name will automatically be placed in the field once you select the supplier code.
<b>Fob/ Cif</b>	When you place an order, you are asked to specify whether the price is <i>FOB</i> (Free On Board) or <i>CIF</i> (Cost, Insurance, Freight). This choice is important since INVEC-2 calculates average costs differently for FOB and CIF. This field contains an option window listing the two choices.
<b>Tender</b>	Indicates whether this purchase order includes items which are obtained via the tender process.
<b>Tender Code</b>	If this is a tender item, the code here corresponds to the code number assigned to the original tender or RFB. A browse window linked to the Tender module database file is available within this field.
<b>Supplier Ref.</b>	If available, enter the supplier's reference number.

The Ordering summary section of the screen contains the following information:

<b>Currency</b>	This code specifies the currency used by the supplier. INVEC-2 will enter the rate based on the values specified in the Rates of Exchange validation file.
<b>Estimated Cost In (Supplier Currency)</b>	The potential value calculated from the total value of all items ordered in terms of the specified currency. INVEC-2 automatically calculates this field, therefore it can only be edited by the Supervisor.
<b>Cost in (Local Currency)</b>	INVEC-2 automatically calculates this value based on the total value of items ordered in your local currency.

---

<b># Items on Order</b>	INVEC-2 calculates the total number of items that have been included in the current order, and displays the information here.
<b>Date Order Printed</b>	The date the receiving report was printed; the information is automatically entered once #1 from the Options field is selected.
<b>Date Order Activated</b>	Indicates the date the purchase order was activated. See Section 9.3 for details.

The Receiving summary section of the screen contains information calculated by INVEC-2 in the local currency. This information is completed based on information entered into the receiving reports (see Section 9.5). Upon activating the receiving report, the following fields are completed by INVEC-2.

<b>Received Value</b>	The total value of items received from the supplier.
<b>Added Charges</b>	Obtained from the receiving report and includes Freight, Insurance and any other charges added to the invoice from the supplier.
<b>Total Payment</b>	INVEC-2 gathers this information from the Payments (see Section 9.6) sub-window. This value is the total amount of payments sent to the supplier.
<b># Receiving Reports</b>	INVEC-2 calculates the number of receiving reports generated for this order, and displays the information here.
<b># Activated Rec. Reports</b>	INVEC-2 displays the number of receiving reports which have been activated.
<b>Payments</b>	When selected, this field displays another browse window used to list all payments made to the supplier for an outstanding balance on the specific PO. See Section 9.6 for details.
<b>Receiving Reports</b>	This field allows you to create or view receiving data about the shipment. See Section 9.5 for details.
<b>Item Details</b>	Selecting this field causes an additional browse window to appear listing all items which are to be included in the purchase order. See Section 9.3 for details.
<b>Options</b>	This option provides an option window listing all procedures involved in processing of purchase orders. See Section 9.4 for details.

### 9.3 Item Details - PO

This window is used to give detailed information about the item being ordered. When accessed, a browse window is displayed listing all items being ordered on this PO. When ordering items, the Purchase Order Detail screen is displayed. The following is a description of all information that should be completed, when a new PO is generated.

**NOTE: ONCE THE PO HAS BEEN ACTIVATED, THIS INFORMATION WILL NOT BE EDITABLE.**

PD Num 23548		PURCHASE ORDER DETAIL		Tender#	
Item 01003		CHLORAMPHENICOL 250 MG TAB (PO) TAB			
Code	Min. Order	Pack Size	Qty in Stock	900.0	
	1 x	2500 TAB	Qty on Order	0	
	Catalog Ref.		Suggested Qty to Order	0	
Manufacturer Brandname		Country of Origin		USA	
Expected Pack Price	Sea	Air	Local		
	125.00	0.00	0.00		
Currency	EC\$ 0	1.0000	<S>ea <A>ir <L>ocal	S	
Packs to Order	Expected Value(EC\$)		1875.00		
15	Equivalent. in Order Currency(EC\$)		1875.00		
Expected Price Per Package (EC\$)			125.00		
Expected Price Per Issue Unit(EC\$)			0.05000		
Expected Price of min. order					

Figure 9.3 Purchase Order - Items Details

**Item** The code for the item being ordered is entered here. A browse window is available, linked to the Master Stock database file.

**Catalog Ref.** The supplier's unique product code.

**Min. Order (x) Pack Size** The supplier's minimum order amount multiplied by the pack size in issue units. This must be entered correctly because INVEC-2 uses this information to calculate unit pricing. For example: suppose a supplier only sells erythromycin in bottles containing 100 tablets, and shipments are made in package sizes containing 5 bottles. If you wish to order from this supplier, your minimum order would be 1 package x 500 tablets (5 bottles/100 tablets).

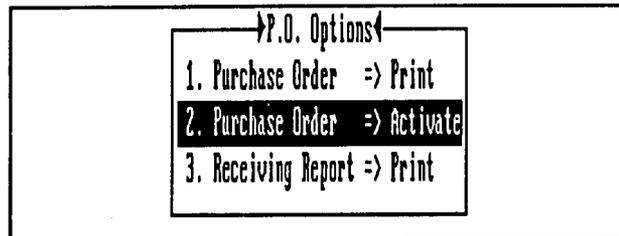
**QTY in Stock** This field is calculated by INVEC-2 from the current stock levels.

---

<b>Manufacturer</b>	The manufacturer of the item.
<b>Country of Origin</b>	The country where the item is manufactured.
<b>Brandname</b>	The manufacturer's brandname, if any.
<b>Expected Prices</b>	<p>For non tender items, you will have to enter the purchase information. Unless you have already negotiated a price with the supplier, the price will be left blank until the invoice arrives.</p> <p>For tendered items, INVEC-2 will fill in all fields describing the item and the purchase information.</p>
<b>Currency</b>	The code used to specify the currency used by the supplier. INVEC-2 will enter the rate based on the values specified in the Rate of Exchange validation file.
<b>Sea/Air/Local</b>	Use this field to indicate how you want the items shipped. Enter <i>S</i> for sea, <i>A</i> for air, and <i>L</i> for local.
<b>Packs to Order</b>	Enter the number of warehouse packs you are ordering. Make sure you are not entering the number of items you wish to order! When ordering from the supplier, indicate your order in the number of packages. For example, if the supplier's minimum order is 1 pack size containing 50 items, and you wish to have 100 items added to your stock level, you will enter 2 here. Each pack contains 50 items giving you a total of 2 packs with 100 items.
<b>Expected Value</b>	INVEC-2 will automatically calculate the expected value based on the number of packs being ordered multiplied by the expected price.
<b>Expected Price Per Package</b>	Enter the amount of the minimum order in the supplier's currency, if available. INVEC-2 automatically uses the figures entered in Expected Price, however you may change the figure, if necessary.
<b>Expected Price Per Issue Unit</b>	INVEC-2 will calculate the unit price in your local currency by dividing the expected value by the packs ordered, then multiplying by the currency rate.

## 9.4 Options

The Options field, when accessed, displays an option window listing all procedures used in processing purchase orders from facilities. Each procedure is numbered according to the order in which it should be completed.



**Figure 9.4** P.O. Options

- 1. Purchase Order (Print)** Use this option to print a copy of the purchase order. Selecting this option displays another browse window from which you will choose the destination of the output (*Printer* or *Display*). Make your selection to have the purchase order printed. INVEC-2 will automatically update the main Purchase Order screen with the date the PO was printed.
- 2. Purchase Order (Activate)** This option should only be selected once you have sent the purchase order to the supplier. When you activate a purchase order, you tell INVEC-2 that you have placed the order. INVEC-2 will then register that the items are on order in the Stock Master file and in the Suppliers file. INVEC-2 also changes the status on the PO to active. Once this is done, you can no longer modify the purchase order.
- 3. Receiving Report (Print)** When you select this option, INVEC-2 generates a report listing all items received, their package sizes, the number of packs received, and pricing information based on the stated prices on the invoice. Once the report is printed, you should check the information carefully to make sure that the data have been entered correctly and that the shipment value corresponds with the invoice.

## 9.5 Receiving Report

The receiving report is used to track shipments received for the purchase order. Once a shipment is received, you should edit the corresponding purchase order to input data about the shipment in the receiving report. If a purchase order comes in several shipments, you will have to repeat the following procedures for each shipment.

When the Receiving Reports field is accessed, a browse window containing a list of all reports created for this purchase order is displayed. The browse window displays the receiving report number, the date received, and the date the report was activated. On the receiving report, INVEC-2 will automatically assign the current date as the day entered. To obtain more details about a particular receiving report, select a report from the browse window and the following information will be displayed.

PO # 1/94-95		Budget #	RECEIVING REPORT	Report # • 1/94-95R1
Date Rec. • 26/08/94	Invoice # •	AWB/BOL •		
Unpacked by • JP on • 26/08/94	Verified by • JP on • 26/08/94			
INVOICE INFORMATION				
• Supplier Currency (BD\$) @	1.3542	Local Currency (EC\$)		
Invoice Amount •	1000.00	1354.20		
(Without Charges)				
Discount • - 1.00%	1000.00	1354.20		
Taxes • +15.00%	1150.00	1557.33		
Freight Charge •	0.00	0.00		
Insurance •	0.00	0.00		
Other Charges •	0.00	0.00		
Total Charges	0.00	0.00		
Grand Total	1150.00	1557.33	↩	
Grand Total Based on Items Received		2640.69	↩	
Activate Report • Process	Date / /	Item Details • Info.		

Figure 9.5 Receiving Report

**PO No.** The purchase order number is automatically displayed by INVEC-2.

**Report No.** This number allows you to differentiate between different shipments, since an order can arrive in several installments. The report number that you assign will also be your reference number for your payment report. We recommend using the PO number plus R1 for receiving report one, and so on. For example, if the PO number is 2/9495 the corresponding receiving report number should be 2/9495R1.

---

<b>Date Rec.</b>	The date the items are received at the MS facility. This field is automatically assigned by INVEC-2 with the current date.
<b>Invoice No.</b>	The number assigned by the supplier, which usually appears on the packing slip. This is the reference number for your account with the supplier. Payments made to the supplier should include this invoice number as reference.
<b>AWB/BOL</b>	If the shipment was sent by air, enter the airway bill number. If it is a sea shipment, input the bill of lading number. If shipment is by land, enter any shipping document reference number.
<b>Unpacked</b>	Enter the initials of the MS employee who unpacked the shipment.
<b>On (date)</b>	The date the shipment was unpacked. Be sure to use the correct date format.
<b>Verified by</b>	Enter the name or initials of the MS staff who verified the status of the shipment. Each shipment should be carefully checked to make sure that the items, quantities, and price are the same as the amounts listed on the invoice. The shipment should also be checked for damaged goods.
<b>On (date)</b>	The date the items were verified by the MS staff.

The Invoice Information portion of the screen has been divided into two sections - Supplier Currency and Local Currency. Information about the shipment received is entered in the Supplier Currency section and INVEC-2 automatically calculates the figures in your local currency value on the right portion of the screen. After completing all information about the shipment received and the supplier's invoice, the two totals at the lower right portion of the screen should match. Below is a description of all information requested on this portion of the screen.

<b>Supplier Currency</b>	The specified currency used on the supplier's invoice. This field is linked to the Rates of Exchange validation file, thus a browse window is available.
<b>Invoice Amount</b>	The total amount of the invoice in the supplier's currency. It is important that the correct currency value is entered here. INVEC-2 will make all the necessary calculations based on the currency information entered. This figure should not include any additional charges.
<b>Discount</b>	If applicable, any discount granted should be entered here.
<b>Taxes</b>	If applicable, any taxes should be entered here.

**Freight Charge Insurance** Add the value of freight and insurance charges in the appropriate field. If there are no charges, leave these fields blank.

**Other Charges** If there are any other charges specified on the invoice, enter those charges here. INVEC-2 uses these numbers when calculating unit prices. For items ordered through a procurement agency, charges may refer to the agency's service charge. This amount will be automatically calculated from the invoice value if it has been specified in the System Constants (see Chapter 12). For other items, this field may be used for all other charges such as bank charges.

**Total Charges** These fields are automatically calculated by INVEC-2 based on the information entered above. The total charges are in the currency specified on the supplier's invoice and INVEC-2 automatically converts that figure into your local currency value.

**Grand Total** The actual total including any additional charges.

**(Local Currency)** Grand total based on items received. This field is automatically calculated based on the value and charges of the items received. This amount should be equal to Grand Total. A difference of  $\pm 0.01$  is acceptable because of rounding error. It is important that both values match before the receiving report is activated.

**Activate Rec. Report** When selected, this field displays an additional window displaying PO option number, the receiving report number, and the date received. The Action option box is also displayed. Choosing *Accept* will cause INVEC-2 to update all stock and supplier databases with the receiving information. It is extremely important that the information entered be correct, so that all affected databases will remain accurate.

**PLEASE NOTE:** If the two Grand Totals at the bottom of the receiving report screen do not match, you will be asked, via an additional option window, if you wish to proceed despite the discrepancy. If you choose *YES*, the report will be activated. If you choose *NO*, you will be returned to the top of the receiving report to correct the discrepancy.

**Date Activated** This field is completed by INVEC-2 once the report has been activated.

**Item Details** When accessed, this field displays a browse field displaying information about all items listed on the receiving report. The browse window displays the date received, the item code, description of the item, the quantity received, and the unit price for each item. See Section 9.5.1 for details.

### 9.5.1 Item Details - Receiving Report

The Purchase Order Number, Report Number, Supplier Code, and Item Information are displayed at the top of the page. This information may not be edited at this point. When completing the receiving report, it is necessary enter information on all the items that are on order even if they were not received, in which case packs received = 0.

PO # 23548	RECEIVING REPORT DETAIL # R-23548	Supplier ACS/DIR
Item # 01003	CHLORAMPHENICOL 250 MG TAB (PO) TAB	
Package Price		
Package Size	<S>ea .	125.00 Currency . EC\$
Ordered 2500 TAB	<A>ir .	0.00 @ 1.0000
Received 2500 TAB	<L>ocal .	0.00 Mode of Transp. . S
Catalog Ref.	Brandname	Manufacturer Country Orig.
.	.	. USA
Packs Ordered/Outstanding		15 Issue Units Received
Packs Received & Entered in Stock .		15 = 37500 TAB
Exp. Date . / /	Lot .	Location . 007
Packs Damaged & Not Entered in Stock .		0
Packs Cancelled .		0
Prices Excl. Charges:	In (EC\$)	in (EC\$)
Pack Price .	125.0000	125.0000/2500 TAB
Issue Unit Price	0.0500	0.0500/TAB
Extended Price	1875.00	1875.00

Figure 9.6 Receiving Report Detail

**PLEASE NOTE: THIS INFORMATION IS FOUND IN THE ITEM DETAILS WINDOW OF THE RECEIVING REPORT AND SHOULD NOT BE CONFUSED WITH THE ITEM DETAILS WINDOW OF THE PRIMARY PURCHASE ORDER SCREEN. BY DEFAULT MOST OF THE INFORMATION IS PROVIDED FROM THE INFORMATION ON THE PO; HOWEVER SOME FIELDS CAN BE EDITED.**

**Package Size:** INVEC2 displays the total number of items ordered from the supplier, and prompts you to enter the total number of items received from the supplier. The number is displayed in issue units.

**Sea, Air, Local** The price per package based on the mode of delivery.

**Mode of Transp.** The mode by which the current shipment was delivered.

**Catalog Ref.** This field is used to indicate the supplier's product or catalog code.

---

<b>Brandname</b>	The manufacturer's brandname, if any.
<b>Manufacturer</b>	The manufacturer of the item.
<b>Country of Origin</b>	The country where the item was manufactured.
<b>Packs Ordered/ Outstanding</b>	The number of packages ordered.
<b>Packs Received &amp; Entered in Stock</b>	The number of packages actually received. You should make sure that the quantity of packages received matches the amount specified on the invoice.
<b>Issue Units Received</b>	INVEC-2 calculates this field by multiplying the number of packages by the number of issue units per package.
<b>Exp. Date</b>	The expiration date of an item, if applicable.
<b>Lot No.</b>	The lot number is assigned by the manufacturer and is used to identify a group of items. The lot number can usually be found on the packing slip. Enter the number here.
<b>Location</b>	The storage location of the item in the warehouse. This field is linked to the validation file Storage Locations, so you may select the storage location from the browse window.
<b>Packages Damaged &amp; Not Entered in Stock</b>	The number of items that were damaged, if any. It is important that each item is inspected thoroughly during the receiving process. If damage is detected during this period, it can easily be returned to the supplier for a replacement or refund.
<b>Packs Cancelled</b>	If any packages were cancelled, enter that number here.

The remainder of the screen is divided into two columns. One column contains pricing information in the supplier's currency and in the other column, INVEC-2 automatically calculates pricing in your local currency.

<b>Pack Price</b>	The purchase price per package.
-------------------	---------------------------------

- Issue Unit Price** INVEC-2 calculates the issue unit price by dividing the pack price by the pack size, if the issue unit pricing option is chosen.
- Extended Price** INVEC-2 calculates this figure by multiplying the packs received by the pack price.

### 9.6 Payment

The Payment window, when accessed, displays a browse window containing a list of payments made to the supplier for the purchase order selected. Within this browse window, you may add or view additional payment information. The browse window displays the payment date, the corresponding receiving report number, the initials of the payor, the bank account paid from, and the amount paid.

**Supervisor only:** Selecting an item from this browse window will cause the following information to be displayed.

Figure 9.7 Purchase Order Payments

**PO Number** The purchase order number that has been selected to view payment information is displayed, but cannot be edited.

---

<b>Date of Payment</b>	The date the payment was made. INVEC-2 automatically places the current date in this field, however, you may change it if the payment date is different.
<b>Receiving Report</b>	This field is used to define the receiving report number for which the payment should be applied. This information can be accessed from a browse window linked to the Receiving Report database file for this purchase order.
<b>Made by</b>	The name or initials of the person responsible for the payment.
<b>Outstanding Balance this PO</b>	INVEC-2 keeps track of all payments made to the supplier for the specific purchase order. This field is calculated by subtracting any previous payment for the purchase order from the invoice amount recorded in the receiving report.
<b>Account</b>	The bank account from which this payment is to be debited. A browse window is available linked to the Bank Account validation file.
<b>Amount Paid</b>	The payment amount for this record. INVEC-2 expects this amount to be entered in your local currency value.
<b>New Balance</b>	This value is calculated by INVEC-2. The amount paid is subtracted from the outstanding balance and any difference is assigned as the new balance for the PO.

## TENDER

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## 10.0 TENDERS

The Tender module is an optional feature in INVEC-2 which allows the MS to manage the process when establishing an invitation bid for acquiring new items for the facility. This module allows the MS to track all suppliers submitting a bid for process, the date the bid should be closed, and all detailed information involved with the bid. Before the bidding process can begin, you must indicate which suppliers are interested and eligible for bids and for which items they can bid. To use the Tender option, it must be selected and set up in the System Setup as a feature available to this MS. When this feature has been selected, you can access the Tender option by selecting *Tender* from the Transaction menu. Once this option is selected, a browse window is displayed providing a list of all tenders currently in the system. The browse window displays the code of the tender, the description, the date the tender was closed, the date the tender was printed, the status of the tender, and the date completed, as well as the TBR (Tender Board Resolution) number and TBR date. Select a tender to gain more detailed information.

CENTRAL MEDICAL STORES - - CENTRAL MEDICAL STORES			
I N V E C 2 - Inventory Control Software			Ver. 1.1
TENDER: Master File			
Code	Description (1st Line)	Date Due	Printed
ECDS9495	ECDS TENDER	30/06/95	/ /

<F1>Help      <F3>Stock      <F4>Calculator      <F9>Go to DOS  
 Search for Code

Figure 10.1 Tenders Main Screen

## 10.1 Summary of Commands

### Adding a new Tender

Use the <Ins> key to add a new tender to the Tender database. When adding a tender to the Tender Master File, INVEC-2 automatically takes you to the main tender database form window, where the following information must be completed to start the process:

- Tender Code,
- Description,
- Date Started, and
- Closing date.

### Deleting a Tender

The <Del> key is used to remove a tender from the Tenders master database file. Tenders should only be removed after all processes have been completed and closed. Once all necessary information has been removed, pressing the <Del> key will cause an option window to appear asking you to confirm the removal of the tender.

### View Order

The <F10> key is used to change the order in which the tenders are displayed on the main screen. When you first access the tenders database, the items are sorted by the tender code. The view order here gives you two choices from which to select: *Code*, and *Date Closed*. If you wish to change your view order, press <F10> and an option window will appear listing the choices. Choose the desired option, and press <ENTER>. INVEC-2 will sort your issues based on order chosen.

### Search Mode

If you wish to search for a tender, enter the information in the Search field located below the main screen. Please note the search is conducted based on the order you have selected. In other words, if your view order is by Code, you must enter a tender code on which to search.

### Moving between Records

You may move between records listed while within any form window by pressing <Ctrl> <PgDn> or <Ctrl> <PgUp>.

## 10.2 Tender Database

CENTRAL MEDICAL STORES - - CENTRAL MEDICAL STORES			
I N U E C 2 - Inventory Control Software			Ver. 1.1
TENDER			
Fi	Tender Code • ECDS9495	Description • ECDS TENDER	Due Date • 30/06/95
	Date Started • 17/05/94		
Forecast Unit Set • 1	Roseau	Grand Bay	Marigot
Date Tender Document Printed • / /		T.B.R. Number •	Date of T.B.R. • / /
Tender Status • Open		Transfer->Catalog • Process	
Date Closed • / /		Date of Last Transfer / /	
Delivery Details • Info.		Add Titles • Process	
Tender Items <input type="checkbox"/> Info.		Quotations • Info.	

Add/Edit/Delete Tender items. If Doc. printed: view items on tender

Figure 10.2 Tender Database

The following is a detailed description of the Tender database screen.

**Tender Code** For each tender generated, a unique code must be assigned so you can distinguish one tender from another. The MS should develop a standard numbering process for numbering each tender.

**Description** The description field is used to enter information about the tender. You may categorize the tender by the group of items for which you are requesting a bid, or you may assign a unique name to the tender.

**Date Started** The date the tender/RFB was initiated. Enter the date that you initiated the process. This date may either be the date that you presented the tender to the facilities or to the various suppliers.

**Due Date** The last date the MS will accept any quotes for this tender.

**Forecast Unit Set** Enter the code for the set of categories or branch stores that will be used when forecasting items on this tender. This field is linked to the validation file Forecasting Units. Each unit listed in the validation file will be displayed in the area to the right of the code.

---

<b>Date Tender Document Printed</b>	The date the tender document was printed. This date is usually the same date that the tender was started. This document provides detailed information about the items which you are placing on tender. The document is printed by choosing <i>Tenders</i> under the Reports option of the Main Menu. See Section 11.3 for details.
<b>TBR Number</b>	TBR number is the Tender Board Resolution number. This number is assigned to the tender as a means of identification after the closing date of the tender.
<b>Date of TBR</b>	Enter the date the Tender Board Resolution number was assigned.
<b>Tender Status</b>	This field is used to determine the status of the tender. It is marked open until the entire tender process has been completed and you close out the tender. The tender document becomes closed once the items have been assigned/awarded to a supplier.
<b>Date Closed</b>	The actual date the tender process was completed. This date should be the date you accepted a quote from a supplier and closed out the tender process.
<b>Transfer Catalog</b>	<p>This field is completed by INVEC-2. Once the entire process has been completed and the bid has been awarded to a supplier, the transfer catalog process may then be completed. When accessed, this field simply provides an option window asking you to confirm the transfer. Choosing <i>Yes</i> allows INVEC-2 to update all necessary files regarding this tender. The stock inventory will be updated, as well as the Supplier database file.</p> <p>For example, if the tender process requested several items and the tender has now been closed and you have chosen a supplier, INVEC-2 will automatically update the items to be on order in your stock inventory. It will also update the catalog information for this supplier, as well as for the individual items.</p>
<b>Date Transferred</b>	Once INVEC-2 has completed this transfer catalog process, the transfer date will automatically be entered.
<b>Delivery Details</b>	This field, when accessed, displays an additional page providing detailed information on the delivery details required by your MS. See Section 10.3 for more details.
<b>Add Titles</b>	This field is only accessible if the document has not yet been printed. See Section 10.4 for details on this field.

- Tender Items** This field, when accessed, displays an additional browse window listing all items to be included in this particular tender. For detailed information, please see Section 10.5 describing tender items.
- Quotations** This field, when accessed, displays a browse window listing all suppliers bidding in the process. It provides detailed information about each supplier's bid. For information, please see Section 10.6 on quotations.

### 10.3 Delivery Details

The screenshot shows a window titled "Tender Database" with the following information:

Tender Code	• ECDS9495	
Description	• ECDS TENDER	
Date Started	• 17/05/94	Closing Date • 30/06/95
Date Tender Document Printed • 29/11/94		

Below this is a section titled "Tender Module Constants" with the following data:

1st Shipment %	25	Delivery Dates 1	• 30/08/95
2nd Shipment %	• 50	2	• 30/10/95
3rd Shipment %	• 25	3	• 31/12/95
Balance in 4th		4	• / /

At the bottom of the window, there is a status bar with the text: "Percentage for 1st Shipment".

Figure 10.3 Delivery Details

The Delivery Details field, when accessed, displays an additional page allowing the MS to enter the specified delivery date for this tender. For example, if in your request for bid you include specifications on when and how many of the items should be delivered by a specific date, that information should be entered here. This page, called the *Tender Module Constants*, allows you to divide your shipping quantities into four different shipments and allows you to specify the date each shipment should be received. However, each Tender does not have to be divided up into four different shipments. For example, you may request that all the items on your tender be delivered in one shipment and specify the delivery date. This information is part of the bid, and suppliers who bid on the process must meet your delivery schedule.

## 10.4 Add Titles

The screenshot shows a terminal window with the following content:

```

Tender Database
-----
Tender Code   • ECDS9495
Description   • ECDS TENDER
              •
Date Started  • 17/05/94   Closing Date • 30/06/95

Group Titles
-----
Group Code   01000
Group       ANTIBIOTICS

process
info.

(F1)Help (F3) Master (F4)Calculator (F9)Shell to DOS
Enter code for Item Group
  
```

**Figure 10.4** Titles on Tender

The Titles on Tender field is only accessible if the document has not yet been printed. This field is used to select any group titles linked to the validation file Stock Group Titles. Select this field and an additional page will be displayed entitled *Group Titles*. The first field, Group Code, when blank, can be used to access the validation file Stock Group Headers. From this list of Group Files you may choose a group of items to be included in your tender. This information can be used as header information on the tender document. All individual items will still be listed on the tender document.

## 10.5 Tender Items

TENDER: Item File		
Item Code	Description	Group Title?
01000	ANTIBIOTICS	Y
01002	Chloramphenicol 25MG/ML SUSP (PO) BOTT	N
02000	DANGEROUS DRUGS	Y
07000	POWDERS	Y

Figure 10.5 Tender Items

The Tender Items module allows you to list all the items to be included in this bid. When accessed, it displays a browse window that provides a list of all items by their unique code in the stock inventory, the description of the items, and whether or not this item is a Group Title. Press <Ins> to add an item or select an item from the list, and an additional page will provide detailed information. For new tenders, this option immediately takes you to the Tender Forecast screen.

The Tender Forecast screen provides additional information about items listed in this tender. The inventory code and a full description of the item is provided including its generic/accepted and supplementary name. In addition, the purchase pack and warehouse pack are also specified. The final ten fields allow you to list the quantities that will be required for each forecasting unit. One of the features of the tender management process is that it allows the MS to forecast item requirements for store branches in this MS system. The forecast information can be gathered by generating a report on each store branch and estimating the forecasting requirements for a particular item. INVEC-2 can provide the report, thus allowing you to estimate or forecast what your total needs would be for a particular item. See Chapter 11 for details on generating Reports.

## 10.6 Quotations

The Quotation field, when accessed, displays a browse window containing a list of all suppliers bidding on the process. The browse window provides information by the unique code of the supplier, the name of the supplier, the list number of the supplier, and the last date the quote is valid. Additional information can be obtained by selecting an entry from the list. This additional information is displayed on the *Bidding by Supplier* page.

## 10.7 Bidding by Supplier

The screenshot shows a window titled "ECDS9495 Bidding by Supplier". On the left is a vertical menu with options: F, T, D, F, U, S, D, P, T, and a scroll bar. The main area contains the following data:

Supplier <input type="checkbox"/> ACY/ AMERICAN CYANAMID COMPANY	
List Num. • 1	Quote valid until • 30/06/95
Preferred Currency • USD @	2.7169 19/07/94
CIF/FOB • C	Remark • Memo
Primary Manufacturer	Country of Origin
Quoted Items • Info.	

At the bottom, there are fields for "Date Closed" and "Date of Last Transfer", and a "Tender Items" section with "Add Titles • Process" and "Quotations • Info." buttons. A "DOS" label is visible at the bottom right.

Figure 10.6 Bidding By Supplier

This page provides the following information: the supplier's name and unique code; the list number awarded by the tender board; and the quote-valid-until date (provided by the supplier). Once the supplier has submitted a bid, it will generally assign a date that the quote for the items placed on the tender will expire.

**List #** This field is used to indicate what list number this supplier has been awarded.

**Currency** The currency which will be used for this tender. Usually, tenders are conducted in one currency regardless of the suppliers origin. This is why it is suggested that you create a separate record for suppliers who will be

providing tender items. This field, when accessed, can provide a browse window linked to the Rates of Exchange validation file. Select the currency type used for this tender, and the rate information will automatically be calculated and placed in this field along with the last date this rate information was changed.

- Freight** The Freight field provides an option window which is used to indicate whether the supplier's quote includes cost, insurance, and freight (*C*); or are free on board (*F*).
- Remark** The Remark field, when accessed, displays an additional page window provided to type detailed information about the supplier in this bidding process. Information here could possibly be specific contact names, as well as any other unique information that might aid in the process of selecting this supplier for the bid.
- Quoted Items** This field, when accessed, displays a browse window listing all items on which the supplier has placed a bid. The information is displayed by the unique code number of the item derived from your stock inventory, as well as the description of the item. Select an item to gain access to more detailed information. The following is a discussion of the information presented on the Bidding Information page.

### 10.8 Item Bidding Information

BIDDING INFORMATION									
Tender ECDS9495		Supplier ACY/ AMERICAN CYANAMID COMPANY				List Present Price			
Item # 01002		Chloramphenicol 25MG/ML SUSP (PO) BOTT				7.4310			
Min. Order ---		Pack Size							
Req. 1	x 1 BOTT	Currency • USD		Pack Price(USD)		Days			
Offer • 1	x • 1 BOTT	2.7169		Sea • 25.00		• 5			
		Date 19/07/94		Air • 0.00		• 0			
				Loc • 0.00		• 0			
Unit Name		Request	Offer	Local Deliv. Costs • 0.00					
Roseau	9000 •	9000							
Grand Bay	2500 •	0							
Marigot	350 •	0							
	0 •	0		Forex Req(USD)			Forex Req(EC\$)		
	0 •	0		Sea • 0.00			0.00		
	0 •	0		Air • 0.00			0.00		
	0 •	0		Loc • 0.00			0.00		
	0 •	0		Pack Price(EC\$)			Total Value(EC\$)		
	0 •	0		Sea 67.92			611302.50		
	0 •	0		Air 0.00			0.00		
	0 •	0		Loc 0.00			0.00		
Total	11850	9000							
Quote Valid Until • 30/06/95				CIF/FOB • C		Awards & Delivery • Info.			
Remark •						Product Details • Info.			
Code of item with quote from this supplier (PopUp available).									

Figure 10.7 Item Bidding Information

The Bidding Information page provides detailed information about the items on which the supplier has placed a bid. Information displayed, but not editable, includes the tender number, the list number, and the supplier.

**Item**

The Item field displays the code for the item with the quote from this supplier and automatically the description of the item. When blank, this field will provide a browse window which will list all items available to receive a quote on by this tender. The price for the item will also be displayed.

The second portion of this field displays the total number of each item requested by unit number, and below what the supplier offers for each unit section. For example, if in your request you put that you are requesting 1000 sterile dispenser brushes for each unit, the supplier would also provide you with information on how many of those items they could provide for each unit. Additionally, the minimum number of packs and the pack size required by the MS is listed, as well as the corresponding numbers offered by the supplier. Unit pricing should be completed for each mode of delivery (*sea, air, or local delivery*). In addition, the number of days required for delivery by the specific mode should be stated. The freight method (*CIF or FOB*) for

this particular supplier should also be stated.

INVEC-2 automatically calculates the local unit price by sea, air, and local delivery based on the currency information and the unit price provided by the supplier. The total local price is calculated based on the items for each forecasting period. If used, the foreign exchange amount is also displayed.

<b>Quote Valid Until</b>	The date at which the supplier will guarantee the quote of the item listed above.
<b>Remark</b>	When accessed, this field displays one line to input information that can be used to contain any additional information concerning the bid.

## 10.9 Award and Delivery Details

Tender ECDS9495		Bidding Information		List no. 1	
Supplier • ACY/ AMERICAN CYANAMID COMPANY		Country • P.R.			
Item • 01002				Price 0.00	
Request	Unit-1	Unit-2	Unit-3	Unit-4	Total
Offer •	0	0	0	0 =	0
	9000 •	0 •	0 •	0 =	9000
Min. Packs	Pack	Delivery Schedule			
Req. 1	x 1 BOT	Type of Award	<input type="checkbox"/> P	Shipping • S	69
Offer • 1	• x 1 BOT	Total Award Units •	9000		
Lcl. Del. Cost •	Local Unit Price Tot	Delivery 1	•	2250 • 30/08/95	
Sea	67.92	Delivery 2	•	4500 • 30/10/95	
Air	0.00	Delivery 3	•	2250 • 31/12/95	
Loc	0.00	Delivery 4	•	0 • / /	
Quote Valid Until • 30/06	Manufacturer •	Remainder		0	
Award & Del. Details • In					

P/S Primary or Secondary Award

Figure 10.8 Award and Delivery Details

When accessed, this page displays delivery information based on the award status of this particular supplier. If the supplier will be awarded this item, specify that information in the field labeled *Type of Award*. This information is provided by an option window where your choices will be *No Award*, *Primary*, or *Secondary*. If the item has been awarded to this supplier, the shipping method (*sea*, *air* or *local*) must also be entered here. An option window is provided. Additionally, you will enter the total number of units awarded to this supplier. Finally, complete the delivery schedule based on the information provided by the supplier.

## 10.10 Product Details

Tender ECDS9495		Bidding Information			List no. 1
Supplier • ACY/		AMERICAN CYANAMID COMPANY		Country • P.R.	
Item • 01002		Price			0.00
Request	Unit-1	Unit-2	Unit-3	Unit-4	Total
Offer •	Brandname	TYLENOL #3			0
	Manufacturers Code	03-54TY			9000
	Registration Num.				• C
Req. 1	Test Required	• N			• USD
Offer • 1	Test Received	• N			2.7169
Lcl. Del.	Test Passed	• N			/07/94
Local					Value
Sea					.00
Air	Logo Required	• Y			.00
Loc					.00
Quote Val					
Manufactu					
Award & Del. Details • Info.			Added Details • Info.		

Figure 10.9 Product Details

The Product Details field also displays a page providing you with additional information about this particular item for the tender process. You would enter the brand name for the item, the manufacturer's code, the registration number, if any tests were required, if they were received, and if the item passed the test. Additionally, you would indicate whether a logo is required for this item. This information is used by INVEC-2, once this has been awarded, to update the Inventory and Supplier master database files. After all this information has been entered, this process can be repeated for any other supplier bidding on items for this tender.

## REPORTS

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## 11.0 REPORTS

As stated earlier, INVEC-2's reporting module can be extremely helpful in evaluating and monitoring stock quantities and cost expenditures. This menu option provides access to the various reporting modules. The following is a description of each menu option available under the reports option.

### 11.1 INVEC-2 Standard Reports

This option contains over 30 standard reports to assist you while you keep track of all pertinent information needed to manage the MS. It is important to remember that, as good as this feature is, it can only generate reports based on the information entered by the users. This makes it imperative that the information entered be correct and up-to-date.

The following is a brief description of all the standard reports generated by INVEC-2.

#### **FACILITY - By Code**

This report generates a list of all facilities sorted by their code number. The facility name and address, phone number, and contact person are listed for each facility code. When printed, this report can be used to provide quick access to this information in places where the system is not readily available. You may print this information for one facility only, by specifying the facility name in the interactive query mode. See Appendix B for details.

#### **FACILITY - By Name**

This report generates a list of all facilities sorted by their name. The facility name and address, phone number, and contact person are listed for each facility. When printed, this report can be used to provide quick access to this information in places where the system is not readily available. You may print this information for one facility only, by specifying the facility name in the interactive query mode. See Appendix B for details.

#### **POs - Pending by Item**

This report produces a list of all pending orders sorted by item. You may specify in the interactive mode that you wish to list all tender items, non-tender items, drugs, or any specific category of items. You may also specify the time period to be covered by the report.

#### **POs - Pending by Supplier**

This report is similar to the one above, but sorted by supplier instead of by item. This will allow you to highlight overdue items. As is the case above, you may specify any criterion you wish to customize in the report using the interactive query mode.

**STOCK - Actual Stock by Code**

This report produces a listing of all available items in your Master Stock database, sorted by code for each category. If you wish to narrow the scope of the report, you may use the interactive query mode to specify an additional field on which the report should be sorted.

**STOCK - Actual Stock by Name**

This report produces a listing similar to the one above, but sorted by the item description, rather than by the item code.

**STOCK - All Stock by Code**

This report produces a listing of all items in your Master Stock database, sorted by code for each drug, medical supply, and other category. If you wish the report to include only drugs, or some other criteria, use the interactive query mode to specify an additional field on which the report should be sorted.

**STOCK - All Stock by Name**

This report produces a listing similar to the one above, but sorted by the item description, rather than by the item code. The same criteria options are available.

**STOCK - Detail by Lot by Code**

For every available (on hand) item in your inventory, this report will detail information on all lots, sorting them by the item code.

**STOCK - Detail by Lot by Name**

This report prints out the same as the above report, but the items are sorted by their description rather than by the item code.

**STOCK - Expired Items by Code**

Provides a detail of all available items which have expired, or have no expiration date listed. This report is sorted by the item code.

**STOCK - Expired Items by Name**

This provides a detail of all available items which have expired, or have no expiration date listed. This report is sorted by the item description.

**STOCK - Out of Stock by Code**

This report generates a list of items currently out of stock, and specifies the number of days the item has been out of stock. This list is sorted by the item code for each category (drug, medical supply, and other).

**STOCK - Out of Stock by Name**

This report produces a list similar to the one above, but the items are sorted by their description rather than the item code.

**STOCK - Phys. Inventory Adjustment by Code**

After taking inventory, the adjustment sheet is used to adjust your stock levels. This sheet is sorted by code for each category, and provides the current stock level in issue units.

**STOCK - Phys. Inventory Adjustment by Name**

After taking inventory, the adjustment sheet is used to adjust your stock levels. This sheet is sorted by item description for each category, and provides the current stock level in issue units.

**STOCK - Phys. Inventory Sheet by Code**

This sheet is used for taking inventory. This report lists all items that are in the Master Stock database, and is sorted by code for each category. You may also want to sort the items by location which would make it easier to use the sheet during the actual inventory process.

**STOCK - Phys. Inventory Sheet by Name**

This produces the same count list as above, but the items are sorted by their description rather than item code. This is helpful if your items are stocked according to their names.

**STOCK - Variance by Code**

This report generates a list of all inventory movements which are not made through the normal procedures of requisitions and purchase orders. This should be used to monitor all changes in stock levels made by directly modifying stock data.

**STOCK - Variance by Name**

This is the same report as explained above, however the items are sorted by description.

**SUPPLIER - Accounts Payable**

This report is used to produce a list of all transactions made with each supplier. These transactions include completed and outstanding payments.

**SUPPLIER - List of Suppliers by Code**

This report may be used as a directory of all suppliers in the Master Suppliers database file. This list is sorted by the supplier code.

**SUPPLIER - List of Suppliers by Name**

This produces the same report as above, however the suppliers are sorted by name.

**VALIDATION REPORTS**

These reports simply list all information entered in each validation database file. For each report, the information is sorted by the code field. The available validation reports are:

Customer Level	Storage Locations
Inventory Group Headers	Store Branches
Provinces and Districts	Therapeutic Class
Responsible Authorities	

## 11.2 Generating INVEC-2 Standard Reports

```

MEDICAL SUPPLIES UNIT - St. Lucia - CENTRAL MEDICAL STORES
-----
I N V E C 2 - Inventory Control Software      Ver. 1.1
-----
INVEC2 - Report Request
-----
Report Name.....: FACILITY-By Code
Printer/  Destination
File Nam  A - Ascii File
          1 - OKIDATA 321
Number o  2 - NEC P3
Begin wi  3 - HP IV
          1 End page: 999
Scope of
Low Scope.....:
High Scope.....:
Query.....: S
Preview.....: N
-----
(F1)Help      (F3)Stock      (F4)Calculator      (F9)Go to DOS
  
```

Figure 11.1 Reports

To generate a standard report, select *INVEC-2 Standard Reports* from the Reports Menu on the main screen. From the INVEC-2 print job request window press the <ENTER> key, to access the R&R Master Control File browse window. This window contains the list of all INVEC-2 standard reports. Once you've selected the report you wish to have generated, the INVEC-2 Reports Specification window will appear. Use this window to set up any special parameters for your report. The following is a description of the various parameters available for you to generate the report.

**Destination** This option window allows you to select the device to which your output will be directed. If you wish to have the report displayed on your computer screen, choose *Display*. Choosing *ASCII file* will cause your report to be sent to a file on your computer's hard drive. This is useful if you wish to have the report saved to disk, or if you wish to print the file at a different location. ASCII files can be printed out without requiring the original program. Selections 1-8 contain configuration options for various printers in your store. During the setup process (see Chapter 2), the system was configured based on the kind of printer you would be using. If you only have one printer in your facility, you can probably assume that Printer #1 has been configured for that printer.

## 11.4 History Files

The History files, when selected, provide several options from which you can obtain historical information. History files are for information purposes only, and are all displayed in a browse window, therefore the information cannot be edited in this portion of the program.

**Currency Change History** - provides a browse window containing the last date a rate change was made for the various currencies listed. It is important to note that currency rate changes made will only affect new transactions. The system will not update any old purchase orders, or tenders that have already been activated.

**Stock Adjustment** - lists all stock adjustments for items in the stock database. When selected, a browse window appears listing the item's code number, expiration date, and lot number. Additional information includes the amount added (negative adjustments are noted with a minus (-)), the new balance, the specified reason, the user making the change, and the date and time of the change. Remember to use the right arrow key to view any additional fields not visible in the browse window.

**Stock Transactions** - displays a browse window listing all transactions processed, by the item code. The information provided includes the transaction date, quantity processed, balance, unit price, location (if specified), receiving report number, facility code, sales order number, and expiration date. Items shipped to facilities will list the sales order number, while items received from suppliers will contain a receiving report number.

**Bank Transactions** - displays a browse window listing all transactions processed, by the bank account number. The information provided includes the amount of the transaction, the reference number (receiving report # or PO #), the date of the transaction, and the account balance.

## 11.5 Medical Stores Information

The Medical Stores Summary is included as the last report in the Report option. To access the summary form select *Medical Stores Info* from the Reports menu. This form contains an up-to-date summary account statement of all purchase and sale transactions made. This summary screen allows you to track your expenditures and the impact they have had on the medical store's budget. To obtain a print out of this form, press the <Shift> and <Prt Sc> (Print Screen key).

At the beginning of the fiscal year, data on the MS and facility budgets should be entered by the MS manager in Supervisor Mode. Budgets can be adjusted during the year in the same way. All other information on the Medical Stores Summary form is generated by INVEC-2.

As data on orders issued and received are entered into the system, INVEC-2 will automatically update the fields on this form.

M E D I C A L   S T O R E S   S U M M A R Y			
<b>PURCHASES</b>	<b>Budget this Year</b>	<b>Received this Year</b>	<b>Month to Date</b>
Drugs	150000.00	0.00	0.00
Supplies	85400.00	0.00	0.00
Other	0.00	0.00	0.00
<b>Total</b>	<b>235400.00</b>	<b>0.00</b>	<b>0.00</b>
	<b>Paid to Suppliers</b>	<b>Balance Due Supplier</b>	<b>Funds Available</b>
	0.00	0.00	235400.00
<b>SALES</b>	<b>Budget this Year</b>	<b>Shipped this Year</b>	<b>Month to Date</b>
Drugs	150100.00	0.00	0.00
Supplies	92000.00	0.00	0.00
Other	0.00	0.00	0.00
<b>Total</b>	<b>242100.00</b>	<b>0.00</b>	<b>0.00</b>
	<b>Paid by Facilities</b>	<b>Balance to Receive</b>	<b>Sales Still Required</b>
	0.00	0.00	242100.00
<b>Inventory Value</b>	<b>0.00</b>	<b>On Order</b>	<b>0.00</b>

Figure 11.2 Medical Stores Summary

## 11.6 Sample INVEC-2 Standard Reports

The following pages contain a sample of the reports that may be generated using the INVEC-2 Standard Reports option.

LIST OF ITEMS AVAILABLE (SORTED BY CODE) - 29-Oct-1994

Query: Include all records where (MASTER->STOCK is greater than "0")

CMS CODE	DESCRIPTION	LEVEL	CURRENT STOCK	EARLIEST	STOCK	AVG	AVG
		OF USE	IN ISSUE UNIT	EXP.DATE	LEVEL	MONT.CONS.	UNIT COST
01002	CHLORAMPHENICOL 25MG/ML SUSP (PO)	H	31 BOTT	Sep-1997	NOT USED	0	7.4310
01003	CHLORAMPHENICOL 250 MG TAB (PO)	H	900 TAB	Nov-1995	NOT USED	0	0.1382
01004	CHLORAMPHENICOL 1 G INJ	H	110 VIAL	Nov-1996	NOT USED	0	3.4355
01005	ERYTHROMYCIN 250 MG TAB (PO)	F	27490 TAB	Apr-1995	27.2	1012	0.1492
01007	GENTAMYCIN 80MG/2ML AMP	H	1772 AMP	Jan-1997	77.0	23	0.2583
01009	STREPTOMYCIN SULPHATE 1 G INJ (INJ)	F	75 VIAL	Mar-1996	NOT USED	0	1.3967
01010	TETRACYCLINE HCL 25G CAP (PO)	F	2000 CAP	Jul-1995	NOT USED	0	0.0457
01011	AMOXICILLIN 250 MG TAB (PO)	F	24500 TAB	May-1996	8.4	2905	0.1281
01012	AMPICILLIN 500 MG AMP (INJ)	F	315 AMP	Jun-1996	22.5	14	1.1193
01014	PENICILLIN G BENZATHINE 2.4 MU VIAL (PO)	F	356 VIAL	Sep-1996	2.1	124	1.5888
01015	PENICILLIN G SODIUM 1.0 MU VIAL (INJ)	F	544 INJ	Mar-1995	NOT USED	0	2.5900
01016	CLOXACILLIN SODIUM 250 MG TAB (PO)	F	20900 TAB	Feb-1997	98.1	213	0.1484
01017	CLOXACILLIN SODIUM 25MG/ML SUSP (PO)	F	369 BOTT	Sep-1996	30.8	12	3.1087
01018	CLOXACILLIN SODIUM 500 MG INJ (INJ)	F	2708 AMP	Jun-1996	NOT USED	0	1.3668
01020	PENICILLIN V 25MG/ML SUSP (PO)	F	82 BOTT	Mar-1995	6.8	12	2.3417
01021	PENICILLIN G PROCAINE 4.8 MU INJ (INJ)	F	345 VIAL	Nov-1995	31.4	11	3.9367
01022	RIFAMPICIN 300 MG TAB (PO)	F	600 TAB	Jul-1995	NOT USED	0	0.4030
01024	GRISEOFULVIN 125 MG TAB (PO)	H	1000000 TAB	Sep-1996	NOT USED	0	0.0891
01026	NYSTATIN .5MU TAB (PO)	F	400 TAB	Oct-1995	NOT USED	0	0.1557
01027	NYSTATIN .1 MU SUSP (PO)	F	185 BOTT	Sep-1995	92.5	2	6.8711
01028	RIFAMPICIN 150 MG TAB (PO)	F	1500 TAB	Jun-1996	NOT USED	0	0.2445
01030	ERYTHROMYCIN ETHYL SUCCINATE 25 MG/ML SUSP (PO)	F	303 BOTT	Mar-1996	3.2	95	4.4350
01034	CYTARABINE 100MG VIAL (INJ)	H	5 VIAL	Jul-1991 EXPIRED	0.0	0	25.7146
01036	CEPHALEXIN 500MG CAP (PO)	H	1000 CAP	Feb-1995	NOT USED	0	0.6208
01037	CEPHALEXIN 250MG TAB (PO)	H	2000 TAB	Feb-1995	NOT USED	0	0.2589
01038	CEPHALEXIN 500MG AMP	H	800 AMP	Sep-1996	20.0	40	2.4142
01039	AMOXICILLIN 500MG TAB (PO)	F	13000 TAB	Nov-1996	29.2	445	0.2436
01040	TIGARCILLIN 3G INJ (INJ)	H	20 AMP	Nov-1992 EXPIRED	0.0	0	29.1870
01041	PENICILLIN G BENZYL 5 MU INJ (INJ)	F	600 VIAL	Apr-1997	NOT USED	0	2.1838
01042	AMOXICILLIN 25MG/ML SUSP (PO)	F	926 BOTT	Dec-1997	46.3	20	2.8360
01044	DOXYCYCLINE CAPSULE 100MG CAP (PO)	H	2500 CAP	Sep-1994 EXPIRED	NOT USED	0	0.1797
01045	CLOXACILLIN 500MG CAP (PO)	F	13000 CAP	Feb-1997	32.2	404	0.2968
02005	MORPHINE SULPHATE BP POW (CPD)	R	100 TIN	Nov-1993 EXPIRED	NOT USED	0	20.4458
02007	PETHIDINE HCL 50MG/ML AMP (INJ)	F	2400 AMP	May-1998	NOT USED	0	0.9724
02008	PETHIDINE HCL 100MG/ML AMP (INJ)	F	1710 AMP	Jun-1998	NOT USED	0	1.1410
02012	MORPHINE MIXTURE 0.1 % MIXT. (PO)	F	3 LITRE		NOT USED	0	22.5300
02013	FENTANYL CITRATE 50MCG/ML AMP (DD)	H	200 AMP	Oct-1996	NOT USED	0	3.4619
03002	DEXTROSE/SODIUM CHLORIDE 4.3%/0.18 INJ	F	2 EACH	Dec-1994	NOT USED	0	3.1827
03004	DEXTROSE IN WATER 5% IV ( IV)	F	445 VIAL	Nov-1994	NOT USED	0	3.3104
03005	DEXTROSE IN WATER 10 % VIAL (INJ)	F	96 VIAL	Feb-1995	NOT USED	0	3.5420
03006	HARTMANS B.P VIAL (INJ)	F	815 VIAL	Sep-1995	34.0	24	6.3531

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FACILITY INFORMATION - 29/10/94

Query: Include all records

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COMPOUNDING SECTION(3604)

C. M. S.

Telephone: 82060

Contact Person(s): D. ST. JEAN  
H. LIBURD

ROSEAU HEALTH DISTRICT(3605)

ROSEAU HEALTH CENTRE

ROSEAU, DOMINICA, W.I.

Telephone: 83042

Contact Person(s): EDMOND SEVERIN

PORTSMOUTH HEALTH DISTRICT(3606)

PORTSMOUTH HEALTH CENTRE

PORTSMOUTH, DOMINICA, W.I.

Telephone: 55016

Contact Person(s): MR. PAUL PETER  
MRS. YOLANDE CASIMIR

MARIGOT HEALTH DISTRICT(3607)

MARIGOT HEALTH CENTRE

MARIGOT, DOMINICA, W.I.

Telephone: 57271

Contact Person(s): MR. HERMAN JAMES

GRAND BAY HEALTH DISTRICT(3608)

GRAND BAY HOSPITAL

GRAND BAY, DOMINICA W.I.

Telephone: 63706

Contact Person(s): MRS. T. SHILLINGFORD  
DR. NASIRO

LA PLAINE HEALTH DISTRICT(3609)

LA PLAINE HEALTH CENTRE

LA PLAINE, DOMINICA, W.I.

Telephone: 62051

Contact Person(s): MR. CLOVEL DAVID

CASTLE BRUCE HEALTH DISTRICT(3610)

CASTLE BRUCE HEALTH CENTRE

CASTLE BRUCE, DOMINICA, W.I.

Telephone: 60112

Contact Person(s): MR. MC.DONALD BANNIS

Query: Include all records

CMS CODE	DESCRIPTION	STOCK/ISSUE UNIT	EXP. DATE	SUPPLIER	WAREHOUSE	TOTAL		TOTAL		WAREHOUSE
					PACK	BIN	CARD	COUNT	SUPP.	EXP. DATE
01001	ACE INHIBITOR, LONG ACTING TAB (PO) /TAB									
		2856 TAB	Jan-1998	UNKNOWN	28 TAB					
		=====								
	TOTAL IN STOCK	2856 TAB			TOTAL				TAB	
01002	ACETAZOLAMIDE 250MG TAB (PO) /TAB									
		7000 TAB	Nov-1999	UNKNOWN	1000 TAB					
		=====								
	TOTAL IN STOCK	7000 TAB			TOTAL				TAB	
01003	ACETYLSALICYLIC ACID (ASPIRIN) 600MG TAB (PO) /TAB									
		20000 TAB	Aug-1995	APO/ EXPIRED	500 TAB					
		18000 TAB	Aug-1995	UNKNOWN EXPIRED	1000 TAB					
		8000 TAB	Sep-1996	UNKNOWN	1000 TAB					
		=====								
	TOTAL IN STOCK	46000 TAB			TOTAL				TAB	
01004	ACETYLSALICYLIC ACID (ASPIRIN) 75MG TAB (PO) /TAB									
		400 TAB	Sep-1996	UNKNOWN	100 TAB					
		=====								
	TOTAL IN STOCK	400 TAB			TOTAL				TAB	
01005	ACETYLSALICYLIC ACID (ASPIRIN) 300MG TAB (PO) /TAB									
		30000 TAB	Jun-1997	UNKNOWN	1000TAB					
		=====								
	TOTAL IN STOCK	30000 TAB			TOTAL				TAB	
01006	ALBENDAZOLE OR MEBENDAZOLE 200MG TAB (PO) /TAB									
		10000 TAB	Sep-1999	B00/	1000 TAB					
		28000 TAB	Jun-1995	UNKNOWN EXPIRED	1000 TAB					
		=====								
	TOTAL IN STOCK	38000 TAB			TOTAL				TAB	
01007	ALLOPURINOL 100MG TAB (PO) /TAB									
		100 TAB	Mar-1996	UNKNOWN	100 TAB					
		=====								
	TOTAL IN STOCK	100 TAB			TOTAL				TAB	
01009	AMITRIPTYLINE 25MG TAB (PO) /TAB									
		18000 TAB	Mar-1999	UNKNOWN	1000 TAB					
		=====								
	TOTAL IN STOCK	18000 TAB			TOTAL				TAB	

INVENTORY COUNT LIST (SORTED BY NAME FOR EACH DRUGS/MEDICAL SUPPLIES/OTHERS CATEGORY) - 10/29/94

Query: Include all records

CHS CODE	DESCRIPTION	STOCK/ISSUE UNIT	EXP.DATE	SUPPLIER	WAREHOUSE PACK	TOTAL BIN	TOTAL CARD	TOTAL COUNT	SUPP. EXP. DATE	WAREHOUSE PACK
04070	ACEDAPSONE 150 MG/ML AMP (INJ) 5 ML/AMP									
					TOTAL				AMP	
08002	ACETAZOLAMIDE 250 MG TAB (PO) /TAB			APO/	500 TAB					
					TOTAL				tab	
06074	ACETONE B.P LIQ. (CPD) /LITRE			HAL/DIR	1 litre					
					TOTAL				litre	
05079	ACETYLCYSTEINE SOLUTION 4ML /EACH									
					TOTAL				EACH	
04137	ACETYLCYSTINE 200MG/ML INJ 4ML/VIAL			COL/DIR	1 EACH					
					TOTAL				VIAL	
08003	ACETYLSALICYLIC ACID 300MG TAB (PO)			APO/ APO/	500 TAB 1000 TAB					
					TOTAL				TAB	
08157	ACETYLSALICYLIC ACID 600MG TAB (PO) /TAB			PAM/	1000 TAB					
					TOTAL				tab	
08004	ACETYLSALICYLIC ACID SOLUBLE 75 MG TAB (PO) /TAB			NA	1000 TAB					
					TOTAL				tab	
06033	ACRIFLAVINE 0.1 % LOTIO (TOP) /LITRE			COS/DIR	1 litre					
					TOTAL				litre	
06076	ACRIFLAVINE B.P EMUL. (TOP) /LITRE			COS/DIR	1 LITRE					
					TOTAL				LITRE	
07001	ACRIFLAVINE B.P POW. (CPD) 100 GM/TIN			HAL/DIR	1 TIN					
					TOTAL				tin	

INVEC-2 Therapeutic Class Report  
Validation File  
C:\TEMP\THERA.DBF  
Printed: 10/29/94 07:14

Query: Include all records

Class	Description
86.00	ANTI-ASTHMATIC DRUGS
4.00	ANTI-HISTAMINES
8.08	ANTHELMINTICS
8.12	ANTIBIOTICS
8.16	ANTI-TUBERCULARS
8.24	SULPHONAMIDES
8.32	ANTI-TRICHOMONAL AGENTS
8.36	URINARY ANTI-INFECTIVES
8.38	ANTI-LEPROTICS
10.00	ANTI-NEOPLASTICS
12.04	CHOLINERGIC AGENTS
12.08	ANTICHOLINERGIC AGENTS
12.12	ADRENERGIC AGENTS
12.16	ADRENERGIC BLOCKING AGENTS
12.20	SKELETAL MUSCLE RELAXANTS
20.04	IRON PREPARATIONS
20.12	ANTICOAGULANTS & COAGULANTS
24.04	CARDIAC DRUGS
24.08	HYPOTENSIVE AGENTS
24.12	VASODILATING AGENTS
28.04	GENERAL ANESTHETICS
28.08	ANALGESICS/ANTI-PYRETICS
28.10	NARCOTIC ANTAGONISTS
28.12	ANTI-CONVULSANT AGENTS
28.16	PSYCHOTHERAPEUTIC AGENTS
28.24	ANXIOLYTICS, SEDATIVES & HYPNO
36.00	DIAGNOSTIC AGENTS
38.00	DISINFECTANTS (NOT SKIN)
40.08	ALKALINIZING AGENTS
40.12	REPLACEMENT SOLUTIONS/AGENTS
40.20	CALORIC AGENTS
40.28	DIURETICS
40.40	URICOSURIC (ANTI-GOUT) AGENTS
48.00	ANTI-TUSSIVES/EXPECTORANTS
52.04	EENT ANTI-INFECTIVES
52.08	EENT ANTI-INFLAMMATORY
52.10	CARBONIC ANHYDRASE INHIBITOR
52.16	EENT LOCAL ANESTHETICS
52.20	MIOTICS
52.24	MYDRIATIC/CYCLOPLEGIC

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STOCK DATABASE SORTED BY CODE

Query: Include all records

CODE	DESCRIPTION	STRENGTH	FORM	ROUTE	ISSUE UNIT	ISSUE SIZE	BUD-GET	U S E N	V A C. ORDERED FROM	STORE TEMP	NATURE	SECUR-ITY	FOR EX CLASS	STORE ORDER FROM	STATUS	UNIT COST
01001	Amphotericine B	250 mg	TAB	PO	TAB		D	H N				F	C			0.48
01002	Chloramphenicol	25MG/ML	SUSP	PO	BOTT		D	H N				F	None	C		7.43
01003	CHLORAMPHENICOL	250 MG	TAB	PO	TAB		D	H N				F	C			0.14
01004	CHLORAMPHENICOL	1 G	INJ		VIAL		D	H N				F	B			3.44
01005	ERYTHROMYCIN	250 MG	TAB	PO	TAB		D	F N				F	A			0.15
01007	GENTAMYCIN	80MG/2ML	AMP		AMP	2 ML	D	H N				F	C			0.26
01009	STREPTOMYCIN SULPHATE	1 g	INJ	INJ	vial		D	F N				F	C			1.40
01010	TETRACYCLINE HCL	250 mg	CAP	PO	CAP		D	F N				F	C			0.05
01011	AMOXICILLIN	250 mg	tab	PO	tab		D	F N				F	A			0.13
01012	AMPICILLIN	500 MG	AMP	INJ	AMP		D	F N				F	A			1.12
01013	AMPICILLIN	25 mg/ml	SUSP	PO	BOTT	100 ml	D	F N				F	C			2.46
01014	PENICILLIN G BENZATHINE	2.4 MU	VIAL	PO	VIAL		D	F N				F	C			1.59
01015	PENICILLIN G SODIUM	1.0 MU	VIAL	INJ	INJ		D	F N				F	B			2.59
01016	CLOXACILLIN SODIUM	250 MG	TAB	PO	TAB		D	F N				F	B			0.15
01017	CLOXACILLIN SODIUM	25MG/ML	SUSP	PO	BOTT	100 ML	D	F N				F	B			3.11
01018	CLOXACILLIN SODIUM	500 MG	INJ	INJ	AMP		D	F N				F	A			1.37
01019	PENICILLIN V	250 MG	TAB	TAB	TAB		D	F N				F	C			0.06
01020	PENICILLIN V	25MG/ML	SUSP	PO	BOTT		D	F N				F	C			2.34
01021	PENICILLIN G PROCAINE	4.8 MU	INJ	INJ	VIAL		D	F N				F	B			3.94
01022	RIFAMPICIN	300 mg	tab	PO	tab		D	F N				F	C			0.40
01023	AMPHOTERICIN B	50 mg	vial	INJ	vial		D	H N				F	C			0.00
01024	GRISEOFULVIN	125 mg	tab	PO	tab		D	H N				F	C			0.09
01025	GRISEOFULVIN	500 mg	tab	PO	tab		D	F N				F	B			0.37
01026	NYSTATIN	.5MU	TAB	PO	TAB		D	F N				F	C			0.16
01027	NYSTATIN	.1 MU	susp	PO	BOTT	60 ML	D	F N				F	C			6.87
01028	RIFAMPICIN	150 mg	tab	PO	tab		D	F N				F	C			0.24
01029	PENICILLIN G. BENZATHINE	1.2 MU	INJ	INJ	AMP		D	F N				F	C			0.65
01030	ERYTHROMYCIN ETHYL SUCCINATE	25 MG/ML	SUSP	PO	BOTT		D	F N				F	B			4.44
01033	DAUNORUBICIN	20mg	vial	INJ	vial		D	H N				F	C			127.97
01034	CYTARABINE	100mg	vial	INJ	vial		D	H N				F	C			25.71
01035	CEPHALEXIN	25MG/ML	SUSP	PO	BOTT		D	H N				F	C			5.38
01036	CEPHALEXIN	500MG	CAP	PO	CAP		D	H N				F	B			0.62
01037	CEPHALEXIN	250MG	TAB	PO	TAB		D	H N				F	C			0.26
01038	CEPHALEXIN	500MG	AMP		AMP		D	H N				F	C			2.41
01039	AMOXICILLIN	500mg	TAB	PO	TAB		D	F N				F	A			0.24
01040	TIGARCILLIN	3G	INJ	INJ	AMP	50 ML	D	H N				F	C			29.19
01041	PENICILLIN G BENZYL	5 MU	INJ	INJ	VIAL		D	F N				F	B			2.18
01042	AMOXICILLIN	25mg/ml	susp	PO	BOTT	100 ML	D	F N				F	B			2.84
01044	DOXYCYCLINE CAPSULE	100MG	CAP	PO	CAP		D	H N				F	C			0.18
01045	CLOXACILLIN	500MG	CAP	PO	CAP		D	F N				F	A			0.30
01046	CEFTAZIDINE		VIAL		VIAL		D	H N				F	C			0.00
02002	COCAINE HCL	BP	pow	CPD	VIAL	25 GM	D	R N				F	C			6.79
02003	MORPHINE SULPHATE	10 mg/ml	amp	INJ	AMP	1 ml	D	F N				F	C			0.75
02004	MORPHINE SULPHATE	15 mg/ml	amp	INJ	AMP	1 ml	D	F N				F	C			1.85

Query: Include all records

CODE	DESCRIPTION	STRENGTH	FORM	ROUTE	ISSUE UNIT	ISSUE SIZE	BUD-GET	U S E N	V A C. ORDERED FROM	STORE TEMP	NATURE	SECUR-ITY	FOR EX CLASS	STORE ORDER FROM	STATUS	UNIT COST
01001	Amphotericine B	250 mg	TAB	PO	TAB		D	H N				F	C			0.48
01002	Chloramphenicol	25MG/ML	SUSP	PO	BOTT		D	H N				F	None	C		7.43
01003	CHLORAMPHENICOL	250 MG	TAB	PO	TAB		D	H N				F	C			0.14
01004	CHLORAMPHENICOL	1 G	INJ		VIAL		D	H N				F	B			3.44
01005	ERYTHROMYCIN	250 MG	TAB	PO	TAB		D	F N				F	A			0.15
01007	GENTAMYCIN	80MG/2ML	AMP		AMP	2 ML	D	H N				F	C			0.26
01009	STREPTOMYCIN SULPHATE	1 g	INJ	INJ	vial		D	F N				F	C			1.40
01010	TETRACYCLINE HCL	250 mg	CAP	PO	CAP		D	F N				F	C			0.05
01011	AMOXICILLIN	250 mg	tab	PO	tab		D	F N				F	A			0.13
01012	AMPICILLIN	500 MG	AMP	INJ	AMP		D	F N				F	A			1.12
01013	AMPICILLIN	25 mg/ml	SUSP	PO	BOTT	100 ml	D	F N				F	C			2.46
01014	PENICILLIN G BENZATHINE	2.4 MU	VIAL	PO	VIAL		D	F N				F	C			1.59
01015	PENICILLIN G SODIUM	1.0 MU	VIAL	INJ	INJ		D	F N				F	B			2.59
01016	CLOXACILLIN SODIUM	250 MG	TAB	PO	TAB		D	F N				F	B			0.15
01017	CLOXACILLIN SODIUM	25MG/ML	SUSP	PO	BOTT	100 ML	D	F N				F	B			3.11
01018	CLOXACILLIN SODIUM	500 MG	INJ	INJ	AMP		D	F N				F	A			1.37
01019	PENICILLIN V	250 MG	TAB	TAB	TAB		D	F N				F	C			0.06
01020	PENICILLIN V	25MG/ML	SUSP	PO	BOTT		D	F N				F	C			2.34
01021	PENICILLIN G PROCAINE	4.8 MU	INJ	INJ	VIAL		D	F N				F	B			3.94
01022	RIFAMPICIN	300 mg	tab	PO	tab		D	F N				F	C			0.40
01023	AMPHOTERICIN B	50 mg	vial	INJ	vial		D	H N				F	C			0.00
01024	GRISEOFULVIN	125 mg	tab	PO	tab		D	H N				F	C			0.09
01025	GRISEOFULVIN	500 mg	tab	PO	tab		D	F N				F	B			0.37
01026	NYSTATIN	.5MU	TAB	PO	TAB		D	F N				F	C			0.16
01027	NYSTATIN	.1 MU	susp	PO	BOTT	60 ML	D	F N				F	C			6.87
01028	RIFAMPICIN	150 mg	tab	PO	tab		D	F N				F	C			0.24
01029	PENICILLIN G. BENZATHINE	1.2 MU	INJ	INJ	AMP		D	F N				F	C			0.65
01030	ERYTHROMYCIN ETHYL SUCCINATE	25 MG/ML	SUSP	PO	BOTT		D	F N				F	B			4.44
01033	DAUNORUBICIN	20mg	vial	INJ	vial		D	H N				F	C			127.97
01034	CYTARABINE	100mg	vial	INJ	vial		D	H N				F	C			25.71
01035	CEPHALEXIN	25MG/ML	SUSP	PO	BOTT		D	H N				F	C			5.38
01036	CEPHALEXIN	500MG	CAP	PO	CAP		D	H N				F	B			0.62
01037	CEPHALEXIN	250MG	TAB	PO	TAB		D	H N				F	C			0.26
01038	CEPHALEXIN	500MG	AMP		AMP		D	H N				F	C			2.41
01039	AMOXICILLIN	500mg	TAB	PO	TAB		D	F N				F	A			0.24
01040	TIGARCILLIN	3G	INJ	INJ	AMP	50 ML	D	H N				F	C			29.19
01041	PENICILLIN G BENZYL	5 MU	INJ	INJ	VIAL		D	F N				F	B			2.18
01042	AMOXICILLIN	25mg/ml	susp	PO	BOTT	100 ML	D	F N				F	B			2.84
01044	DOXYCYCLINE CAPSULE	100MG	CAP	PO	CAP		D	H N				F	C			0.18
01045	CLOXACILLIN	500MG	CAP	PO	CAP		D	F N				F	A			0.30
01046	CEFTAZIDINE		VIAL		VIAL		D	H N				F	C			0.00
02002	COCAINE HCL	BP	pow	CPD	VIAL	25 GM	D	R N				F	C			6.79

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STOCK DATABASE SORTED BY NAME

Query: Include all records

CODE	DESCRIPTION	STRENGTH	FORM	ROUTE	ISSUE UNIT	ISSUE SIZE	BUD-GET	U S E N	V A C. ORDERED FROM	STORE TEMP	NATURE	SECUR-ITY	FOR EX CLASS	STORE ORDER FROM	STATUS	UNIT COST
16106	2898	9/0	SUT	SUR	BOX	12 SUT.	M	N				F				364.59
13898	4 MOLAR KCI FILL SOLUTION	477428-000		LAB	EACH		O	N				F				124.23
13494	4-DIMETHYLAMINOBENZALDEHYDE SOL	500ML		LAB	BOTT		O	N				F	C			159.60
13002	4C PLUS NORMAL	6 ML		LAB	KIT		O	N				F	C			113.33
13569	4G SUDAN BLACK			LAB	TIN	100 G	O	N				F	C			91.26
16092	759B	4/0	sut	SUR	BOX	12 SUT.	M	N				F	C			5.17
16091	766B	3/0	sut	SUR	BOX	12 SUT.	M	N				F	C			5.17
16107	7799G	10/0	SUT	SUR	BOX	12 SUT.	M	N				F				0.00
13036	ABN SERUM	5 ml		LAB	EACH		O	N				F	C			28.93
13922	ABNORMAL URINE CONTROL				EACH		O	N				F				0.00
13201	ABRASIVE			LAB	EACH		O	N				F	C			61.26
13670	ABRASIVE POWDER COARSE			LAB	EACH		O	N				F	C			29.52
13050	ABRASIVE POWDER FINE			LAB	BOTT		O	N				F	C			462.46
13701	ABSORBENT PADS			LAB	EACH		O	N				F				71.62
13627	ABSORBENT PAPER			LAB	EACH		O	N				F	C			82.96
12198	ABSORBENT POINTS	#501		DEN	EACH		O	N				F	C			0.07
15375	ACCESSORY KIT FOR NEBULIZER SCHUCO			SUR	EACH		Medic	N				F				10.03
13756	ACCU-FREEZE			LAB	EACH		O	N				F				297.18
13005	ACCUVETTES	11		LAB	VIAL	35 ML	O	N				F	C			0.40
04070	ACEDAPSONE	150 mg/ml	amp	INJ	AMP	5 ml	D	H N				F	C			1.00
08002	ACETAZOLAMIDE	250 mg	tab	PO	tab		D	H V				F	C			0.07
13053	ACETIC ACID GLACIAL ANALAR			LAB	LITRE		O	N				F	C			23.74
13573	ACETIC ACID GLACIAL GPR	2.5 L		LAB	LITRE		O	N				F	C			29.78
06074	ACETONE	B.P	liq.	CPD	litre		D	R N				F	C			6.48
13288	ACETONE ANALAR			LAB	LITRE		O	N				F	C			25.66
05079	ACETYLCYSTEINE SOLUTION	4ML			EACH		D	H N				F	C			0.00
04137	ACETYLCYSTINE	200MG/ML	INJ		VIAL	4ML	D	N				F				5.46
08003	ACETYLSALICYLIC ACID	300MG	TAB	PO	TAB	1000 TAB	D	F N				F				0.02
08157	ACETYLSALICYLIC ACID	600mg	tab	PO	tab		D	F N				F	C			0.05
08004	ACETYLSALICYLIC ACID SOLUBLE	75 mg	tab	PO	tab		D	F V				F	C			0.01
13579	ACID PHOSPHATASE REAGENT			LAB	EACH		O	N				F	C			12.29
06033	ACRIFLAVINE	0.1 %	lotio	TOP	litre		D	F N				F	C			0.56
06076	ACRIFLAVINE	B.P	emul.	TOP	LITRE		D	F N				F	C			7.67
07001	ACRIFLAVINE	B.P	pow.	CPD	tin	100 gm	D	R N				F	C			35.56
12156	ACRYLIC MATERIAL FOR TEMP. CROWN			DEN	each		O	N				F	C			382.48
12131	ACRYLIC TRIMMERS			DEN	each		O	N				F	C			30.76
13170	ACTIN			LAB	EACH		O	N				F	C			24.73
04133	ACTINOMYCIN	500 MCG	INJ	INJ	VIAL	3 ML	D	H N				F	C			39.67
13142	ACUTIP PASTUER PIPET			LAB	EACH		O	N				F	C			88.12
12387	ADAPTIC REGULAR KIT	#2754			EACH		O	N				F				203.34
13246	ADAPTOR			LAB	EACH		O	N				F	C			29.13
07085	ADEPS LANAE HYDROUS				KG		D	R N				F	C			26.28
13510	AEROBIC VENTING UNITS			LAB	EACH		O	N				F	C			0.00
12185	aerosite protective lense			DEN	EACH		O	N				F	C			6.15
13963	AFSC HEMO CONTROL	1ML			EACH		O	N				F				0.00
13325	AIDS ELISA TEST			LAB	TEST		O	N				F	C			8.76

LIST OF ITEMS AVAILABLE (SORTED BY NAME) - 29-Oct-1994

Query: Include all records where (MASTER->STOCK is greater than "0")

CMS CODE	DESCRIPTION	LEVEL OF USE	CURRENT STOCK	EARLIEST EXP. DATE	STOCK LEVEL	AVG MONT. CONS.	AVG UNIT COST
08002	ACETAZOLAMIDE 250 MG TAB (PO)	H	1500 TAB		NOT USED	0	0.0687
06074	ACETONE B.P LIQ. (CPD)	R	10 LITRE		NOT USED	0	6.4800
04137	ACETYLCYSTINE 200MG/ML INJ		20 VIAL	Mar-1994 EXPIRED	NOT USED	0	5.4598
08003	ACETYLSALICYLIC ACID 300MG TAB (PO)	F	1029000 TAB	Aug-1996	177.1	5810	0.0209
08157	ACETYLSALICYLIC ACID 600MG TAB (PO)	F	12000 TAB	Apr-1996	NOT USED	0	0.0469
08004	ACETYLSALICYLIC ACID SOLUBLE 75 MG TAB (PO)	F	14000 TAB		NOT USED	0	0.0135
07001	ACRIFLAVINE B.P POW. (CPD)	R	92 TIN		NOT USED	0	35.5579
04133	ACTINOMYCIN 500 MCG INJ (INJ)	H	9 VIAL		NOT USED	0	39.6652
06036	ALCOHOL 95 % LIQ. (TOP)	H	861 LITRE		430.3	2	3.5386
06035	ALCOHOL ETHYL 70 % LIQ. (TOP)	F	10 LITRE		NOT USED	0	2.2100
08006	ALLOPURINOL 100 MG TAB (PO)	F	1000 TAB	Aug-1996	NOT USED	0	0.0498
08158	ALLOPURINOL 300 MG TAB (PO)	F	1100 TAB	Apr-1995	NOT USED	0	0.0948
07070	ALUMINIUM HYDROXIDE B.P POW. (CPD)	R	25 KG		NOT USED	0	8.8122
07053	AMARANTH B.P POW. (CPD)	R	790 KG		NOT USED	0	50.0000
04058	AMINOPHYLLINE 25 MG/ML AMP (INJ)	F	1256 AMP	May-1995	NOT USED	0	0.9611
07077	AMINOPHYLLINE B.P POW. (CPD)	R	250 KG		NOT USED	0	195.0000
08007	AMINOPHYLLINE 100 MG TAB (PO)	F	6000 TAB	May-1994 EXPIRED	NOT USED	0	0.0170
08008	AMITRYPTILINE 25 MG TAB (PO)	F	40000 TAB	Dec-1998	13.8	2905	0.0122
07002	AMMONIUM BICARBONATE B.P POW. (CPD)	R	45 TIN		0.0	0	8.6479
07056	AMMONIUM CHL.99-100% FINE B.P POW. (CPD)	R	10 TIN		NOT USED	0	6.4845
01011	AMOXICILLIN 250 MG TAB (PO)	F	24500 TAB	May-1996	8.4	2905	0.1281
01039	AMOXICILLIN 500MG TAB (PO)	F	13000 TAB	Nov-1996	29.2	445	0.2436
01042	AMOXICILLIN 25MG/ML SUSP (PO)	F	926 BOTT	Dec-1997	46.3	20	2.8360
01012	AMPICILLIN 500 MG AMP (INJ)	F	315 AMP	Jun-1996	22.5	14	1.1193
05002	ANISE OIL B.P LIQ. (CPD)	R	1 BOTT		NOT USED	0	29.1060
05021	ANTACID BP MIXT. (PO)	F	4 LITRE		NOT USED	0	4.8300
09025	ANTI-D IMMUNOGLOBULIN 250 U VIAL (INJ)	H	11 VIAL	Aug-1995	NOT USED	0	117.8175
05003	ARACHIS OIL B.P LIQ. (CPD)	R	340 BOTT		NOT USED	0	7.8691
07003	ASCORBIC ACID B.P POW. (CPD)	R	101 TIN		NOT USED	0	22.4796
08009	ASCORBIC ACID 50 MG TAB (PO)	F	53200 TAB		29.4	1807	0.0073
06034	ASERBINE B.P LOTIO (TOP)	F	3 LITRE		NOT USED	0	3.0861
08156	ATENOLOL 100 MG TAB (PO)	H	7000 TAB	Dec-1996	7.0	853	0.1187
06092	ATROPINE SULFATE 1 % DROP (OPHT)	F	59 DROPP	Jun-1996	NOT USED	0	2.1661
04003	ATROPINE SULPHATE 0.6 MG/ML AMP (INJ)	F	1733 AMP	Oct-1995	NOT USED	0	4.0081
08010	AZATHIOPRINE 50 MG TAB (PO)	H	400 TAB	Nov-1998	NOT USED	0	1.4723
06106	BACITRACIN ZINC OINT (TOP)	H	6400 GM		NOT USED	0	0.0053
04098	BALANCE SALT SOLUTION B.P INJ (INJ)	H	76 VIAL		NOT USED	0	13.2789
07082	BARIUM SULPHATE B.P POW	R	50 EACH		NOT USED	0	10.6852
09001	BCG VACCINE M.D VIAL (INJ)	F	255 VIAL	Sep-1995	8.0	32	1.1477
06140	BECLOMETHASONE INHALER 5MCG/DOSE INHAL (INH)		48 EACH	May-1995	NOT USED	0	21.1837
05004	BELLADONA TINCTURE B.P LIQ. (CPD)	R	13 LITRE		NOT USED	0	17.6700
08012	BENDROFLUAZIDE 5 MG TAB (PO)	F	52500 TAB	Jun-1998	8.2	6399	0.0122
08182	BENDROFLUAZIDE 2.5 MG TAB (PO)	F	51500 500	Aug-1998	120.6	427	0.0104
08013	BENZHEXOL HCL 2 MG TAB (PO)	F	1500 TAB		NOT USED	0	0.0124
08139	BENZHEXOL HCL 5 MG TAB (PO)	F	500 TAB	Feb-1997	NOT USED	0	0.0155
07004	BENZOIC ACID B.P POW. (CPD)	R	11 TIN		NOT USED	0	14.5088

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STOCK DETAIL BY BATCH (SORTED BY NAME)

29-Oct-1994

Query: Include all records where (INVSTOCK->QTYONHAND is greater than "0")

CMS CODE	DESCRIPTION	ISSUE STOCK / UNIT	UNIT COST	BATCH VALUE	PACK SIZE	EXP.DATE	SUPPLIER	
16106	2898 (ETHILON) 9/0 SUT (SUR) 12 SUT./BOX	20 BOX x 364.59		7,291.79	1 BOX	Jul-1996	BRY/DIR	Last Lead Time=234 Days From BRY/DIR
	Total Stock	20 BOX	Stock Value	7,291.79	AVG Use/Month	0 BOX	Stock Level Not Used	Pot. Stock Level Suggested Order 0 BOX
13898	4 MOLAR KCI FILL SOLUTION 477428-0G0 (LAB) /EACH	1 EACH x 124.23		124.23	1 EACH		BIO/DIR	Last Lead Time=16 Days From BIO/DIR
	Total Stock	1 EACH	Stock Value	124.23	AVG Use/Month	0 EACH	Stock Level Not Used	Pot. Stock Level Suggested Order 0 EACH
13494	4-DIMETHYLAMINOBENZALDEHYDE SOL 500ML (LAB) /BOTT	1 BOTT x 0.18		0.18	1 BOTT		SST/DIR	Last Lead Time=28 Days From SST/DIR
	Total Stock	1 BOTT	Stock Value	0.18	AVG Use/Month	0 BOTT	Stock Level Not Used	Pot. Stock Level Suggested Order 0 BOTT
13569	4G SUDAN BLACK (LAB) 100 G/TIN	1 TIN x 91.26		91.26	1 TIN		BDH/DIR	Last Lead Time=147 Days From BDH/DIR
	Total Stock	1 TIN	Stock Value	91.26	AVG Use/Month	0 TIN	Stock Level Not Used	Pot. Stock Level Suggested Order 0 TIN
16091	766B (SILK) 3/0 SUT (SUR) 12 SUT./BOX	5 BOX x 5.17		25.84	1 BOX		ETH/DIR	Last Lead Time=180 Days From AMD
	Total Stock	5 BOX	Stock Value	25.84	AVG Use/Month	0 BOX	Stock Level Not Used	Pot. Stock Level Suggested Order 0 BOX
13036	ABN SERUM 5 ML (LAB) /EACH	79 EACH x 28.93		2,285.51	1 EACH		AMD/DIR	Last Lead Time=180 Days From AMD
	Total Stock	79 EACH	Stock Value	2,285.51	AVG Use/Month	0 EACH	Stock Level Not Used	Pot. Stock Level Suggested Order 0 EACH
13670	ABRASIVE POWDER COARSE ( #M7436-1) (LAB) /EACH	12 EACH x 29.52		354.19	6/PK		SST/DIR	Last Lead Time=16 Days From SST/DIR
	Total Stock	12 EACH	Stock Value	354.19	AVG Use/Month	0 EACH	Stock Level Not Used	Pot. Stock Level Suggested Order 0 EACH
13050	ABRASIVE POWDER FINE ( #M7436-2) (LAB) /BOTT	12 BOTT x 462.46		5,549.53	1 BOTT		SST/DIR	Last Lead Time=33 Days From SST/DIR
	Total Stock	12 BOTT	Stock Value	5,549.53	AVG Use/Month	0 BOTT	Stock Level Not Used	Pot. Stock Level Suggested Order 0 BOTT
13701	ABSORBENT PADS (LAB) /EACH	8 EACH x 2.86		22.92	25/PKG		SST/DIR	Last Lead Time=70 Days From SST/DIR
	Total Stock	8 EACH	Stock Value	22.92	AVG Use/Month	0 EACH	Stock Level Not Used	Pot. Stock Level Suggested Order 0 EACH

STOCK DETAIL BY BATCH (SORTED BY CODE)

29-Oct-1994

Query: Include all records where (INVSTOCK->QTYONHAND is greater than "0")

CMS CODE	DESCRIPTION	ISSUE STOCK / UNIT	UNIT COST	BATCH VALUE	PACK SIZE	EXP.DATE	SUPPLIER	
01002	CHLORAMPHENICOL	25MG/ML SUSP (PO) /BOTT						Last Lead Time=138 Days From AJI/DIR
		31 BOTT x 7.34		227.62	1 BOTT	Sep-1997	PHA/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	31 BOTT	Stock Value	227.62	0 BOTT		Not Used	0 BOTT
01003	CHLORAMPHENICOL	250 MG TAB (PO) /TAB						Last Lead Time=36 Days From NVP/
		900 TAB x 0.12		107.59	100 CAP	Nov-1995	NVP/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	900 TAB	Stock Value	107.59	0 TAB		Not Used	0 TAB
01004	CHLORAMPHENICOL	1 G INJ /VIAL						Last Lead Time=33 Days From COL/
		110 VIAL x 2.44		268.08	100 VIAL	Nov-1996	COL/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	110 VIAL	Stock Value	268.08	0 VIAL		Not Used	0 VIAL
01005	ERYTHROMYCIN	250 MG TAB (PO) /TAB						Last Lead Time=61 Days From AJI/DIR
		490 TAB x 0.15		73.49	500 TAB	Apr-1995	PHA/	
		27000 TAB x 0.15		4,049.19	500 TAB	Jul-1995	PHA/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	27490 TAB	Stock Value	4,122.68	1012 TAB		27.2 Month(s)	29.6 0 TAB
01007	GENTAMYCIN	80MG/2ML AMP 2 ML/AMP						Last Lead Time=33 Days From PHA/
		1772 AMP x 0.50		877.55	100 AMP	Jan-1997	PHA/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	1772 AMP	Stock Value	877.55	23 AMP		77.0 Month(s)	77.0 0 AMP
01009	STREPTOMYCIN SULPHATE	1 G INJ (INJ) /VIAL						Last Lead Time=64 Days From COL/
		75 vial x 1.21		90.82	50 VIAL	Mar-1996	COL/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	75 vial	Stock Value	90.82	0 vial		Not Used	0 vial
01010	TETRACYCLINE HCL	250 MG CAP (PO) /CAP						Last Lead Time=62 Days From CAR/
		2000 CAP x 0.05		91.60	1000 TAB	Jul-1995	NVP/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	2000 CAP	Stock Value	91.60	0 CAP		Not Used	0 CAP
01011	AMOXICILLIN	250 MG TAB (PO) /TAB						Last Lead Time=36 Days From NVP/
		24500 tab x 0.13		3,138.45	1000 CAP	May-1996	NVP/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	24500 tab	Stock Value	3,138.45	2905 tab		8.4 Month(s)	8.4 0 tab
01012	AMPICILLIN	500 MG AMP (INJ) /Am <sup>p</sup>						Last Lead Time=54 Days From SAN/
		315 AMP x 1.06		334.63	100 VIAL	Jun-1996	SAN/	
		=====		=====	AVG Use/Month		Stock Level	Pot. Stock Level Suggested Order
	Total Stock	315 AMP	Stock Value	334.63	14 AMP		22.5 Month(s)	22.5 0 AMP

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LIST OF ITEMS TO EXPIRE OR WITH NO EXPIRY DATE (SORTED BY CODE) - 29/10/94

Query: Include all records where (INVSTOCK->QTYONHAND is greater than "0") and where (INVSTOCK->EXPIRY is less than or equal to TODAY)

01034	CYTARABINE 100MG VIAL (INJ) /VIAL	5 vial	Jul-1991 PHA/DIR EXPIRED
		=====	
	TOTAL TO EXPIRE	5 vial	
01040	TIGARCILLIN 3G INJ (INJ) 50 ML/AMP	20 AMP	Nov-1992 PAM/ EXPIRED
		=====	
	TOTAL TO EXPIRE	20 AMP	
01044	DOXYCYCLINE CAPSULE 100MG CAP (PO) /CAP	200 CAP	Sep-1994 COL/ EXPIRED
		=====	
	TOTAL TO EXPIRE	200 CAP	
02005	MORPHINE SULPHATE BP POW (CPD) 100 GM/TIN	50 TIN	COL/DIR NO DATE
		50 TIN	Nov-1993 COL/DIR EXPIRED
		=====	
	TOTAL TO EXPIRE	100 TIN	
02012	MORPHINE MIXTURE 0.1 % MIXT. (PO) 1000 ML/LITRE	3 litre	COS/DIR NO DATE
		=====	
	TOTAL TO EXPIRE	3 litre	
03007	DEXTROSE IN WATER 10% (INJ) 250ML/VIAL	64 VIAL	ETZ/DIR NO DATE
		=====	
	TOTAL TO EXPIRE	64 VIAL	
03009	DEXTROSE IN WATER 5% (INJ) 250ML/VIAL	126 VIAL	Apr-1993 ETZ/DIR EXPIRED
		=====	
	TOTAL TO EXPIRE	126 VIAL	
03013	DEXTROSE/SOD. CHLORIDE 5/0.225% IV (IV) 500ML/VIAL	100 VIAL	BRY/ NO DATE
		=====	
	TOTAL TO EXPIRE	100 VIAL	
03014	CHLORURE DE SODIUM 0.9% INJ (INJ) 3000ML/VIAL	886 VIAL	Aug-1994 ETZ/DIR EXPIRED
		=====	
	TOTAL TO EXPIRE	886 VIAL	

LIST OF ITEMS OUT OF STOCK (SORTED BY CODE) - 29-Oct-1994

Query: Include all records where (MASTER->TOTSTOCK is equal to "0")

CMS CODE	DESCRIPTION	# OF DAYS		UNIT	AVERAGE MONTHLY CONSUMPTION	LAST SUPPLIER	LAST SHIPMENT
		OUT OF STOCK	STOCK/ISSUE				
01001	AMPHOTERICIN B 250 MG TAB (PO)	0	TAB	0	TAB	CPM	
01013	AMPICILLIN 25 MG/ML SUSP (PO)	0	BOTT	0	BOTT	APO/	
01019	PENICILLIN V 250 MG TAB (TAB)	0	TAB	445	TAB	SAN/	
01023	AMPHOTERICIN B 50 MG VIAL (INJ)	0	VIAL	0	vial	N.A	
01025	GRISEOFULVIN 500 MG TAB (PO)	0	TAB	0	tab	BRY/	
01029	PENICILLIN G. BENZATHINE 1.2 MU INJ (INJ)	0	AMP	0	AMP		
01033	DAUNORUBICIN 20MG VIAL (INJ)	0	VIAL	0	vial	SFL	
01035	CEPHALEXIN 25MG/ML SUSP (PO)	0	BOTT	0	BOTT	SAN/	
01046	CEFTAZIDINE VIAL	0	VIAL	0	VIAL		
02002	COCAINE HCL BP POW (CPD)	0	VIAL	0	VIAL	CRW	
02003	MORPHINE SULPHATE 10 MG/ML AMP (INJ)	0	AMP	0	AMP	PHA/	
02004	MORPHINE SULPHATE 15 MG/ML AMP (INJ)	0	AMP	0	AMP	ANT/PHA	
02006	PETHIDINE 50MG TAB (PO)	0	TAB	0	TAB		
02010	DF 118 30 MG TAB (PO)	0	TAB	0	tab		
03001	DEXTROSE 20% AMP (INJ)	0	AMP	0	AMP	COL	
03003	DEXTROSE/SOD. CHLORIDE 5/0/9% IV ( IV)	0	VIAL	0	VIAL		
03008	MANNITOL IN WATER 20 % VIAL (INJ)	0	VIAL	0	VIAL	BRY/	
03010	SODIUM CHLORIDE 0.9 % INJ (INJ)	0	VIAL	0	vial	CHR/DIR	
03011	SODIUM CHLORIDE 5 % INJ (INJ)	0	VIAL	0	vial	BRY/	
03012	DEXTRAN/DEXTROSE 10-5% VIAL (INJ)	0	VIAL	0	vial	COL	
04031	HYDROXYPROGESTERONE HEXANATE 250 MG/ML AMP (INJ)	0	AMP	0	AMP	PHS	
04038	MECHLORETHAMINE HCL 0.5 MG/ML AMP (INJ)	0	AMP	0	AMP	N.A	
04039	METHOTREXATE SODIUM 2.5 MG/ML AMP (INJ)	0	AMP	0	AMP	IDA	
04046	PARALDEHYDE 50 MG/ML INJ (INJ)	0	AMP	0	AMP	JOL/DIR	
04048	PHENOBARBITONE 200MG/ML INJ ( INJ)	0	VIAL	0	VIAL	BRY/DIR	
04053	PROMETHAZINE 25 MG/ML INJ (INJ)	0	AMP	0	AMP	IDA/DIR	
04061	THIOPENTONE SODIUM 0.5 G/VIAL VIAL (INJ)	0	VIAL	0	vial	IMP	
04067	PARENTROVITE IM B.P. PAIR (INJ)	0	PAIR	0	pair	COL/	
04070	ACEDAPSONE 150 MG/ML AMP (INJ)	0	AMP	0	AMP	CPC	
04072	METARAMINOL BITARTRATE 10 MG/ML AMP (INJ)	0	AMP	0	AMP	COL	
04078	HYDROXYPROGESTERONE HEXANATE 500 MG/ML AMP (INJ)	0	AMP	0	AMP	PHS	
04084	VERAPAMIL HCL 2.5 MG/ML INJ (INJ)	0	AMP	0	AMP	N.A	
04086	CALCIUM CHLORIDE 10 % AMP (INJ)	0	AMP	0	AMP	COL	
04087	CALCIUM CHLORIDE 20 % AMP (INJ)	0	AMP	0	AMP	COL	
04088	DEXTRAN, IROM 50 MG/ML AMP (INJ)	0	AMP	0	AMP	PHA/DIR	
04091	METHOTREXATE 2.5 MG/ML AMP (INJ)	0	AMP	0	AMP	CPM	
04101	L-ASPARGINASE 10000U/VI INJ (INJ)	0	VIAL	0	vial	LAM/DIR	
04102	TRIAMCINOLONE ACETONIDE 40 MG/ML AMP (INJ)	0	AMP	0	AMP	PAM/	
04108	LIDOCAINE W EPINEPHRINE 2% INJ (INJ)	0	VIAL	0	VIAL	PAM/	
04116	ATRACURIUM 10MG/ML AMP (INJ)	0	AMP	0	AMP	BWE/	
04118	VALLERGAN 6MG/ML AMP (INJ)	0	AMP	0	AMP	STO/DIR	
04128	EPHEDRINE 30MG (INJ)	0	AMP	0	AMP	PHA/DIR	
04129	PROPRANOLOL INJ 1MG/ML (INJ)	0	AMP	0	AMP	BRY/DIR	
04130	CAPREOMYCIN 1G INJ (INJ)	0	VIAL	0	VIAL	AMD/DIR	
04131	BETHANECOL CHLORIDE 5MG/ML INJ (INJ)	0	VIAL	0	VIAL	PHA/DIR	

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INVEC-2 Customer Level Report  
Validation File  
C:\TEMP\CUSTLEVE.DBF  
Printed: 10/29/94 07:14

Query: Include all records

Code	Description
2	District Health Centre
3	Medical Laboratory
4	Dental Services
5	Psychiatric Unit
6	Compounding Section
7	Miscellaneous
1	P.M.H

Records printed: 7

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INVEC-2 Storage Locations Report  
Validation File  
C:\TEMP\STORLOC.DBF  
Printed: 10/29/94 07:14

Query: Include all records

Code	Name
001	ANTIBIOTICS
002	COMPOUNDING FINISH
003	COMPOUNDING RAW MAT.
004	CONTROLLED DRUGS
005	DENTAL SUPPLIES
006	ENT & SYRUPS
007	FRIDGE #1
008	FRIDGE #2
009	FRIDGE #3
010	FRIDGE #4
011	INJ FRIDGE
012	INJECTIONS
013	IV FLUIDS
014	LAB COLD ROOM
015	LAB FRIDGE #1
016	LAB FRIDGE #2
017	LAB REAGENTS
018	LABORATORY SUPPLIES
019	MEDICAL SUPPLIES #1
020	MEDICAL SUPPLIES #2
021	MEDICAL SUPPLIES #3
022	MEDICAL SUPPLIES #4
023	SUTURES
024	TABLETS & CAPSULES

Records printed: 24

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VARIANCE REPORT (SORTED BY CODE)- 29/10/94

Query: Include all records

INVCODE	DATE	ACCOUNT	INVOICE	ACTION	QUANTITY	TIME
CHLORAMPHENICOL 25MG/ML SUSP (PO) /BOTT						
01002	29/07/94			1	3	09:25:53
01002	29/07/94			1	-13	09:26:49
CHLORAMPHENICOL 250 MG TAB (PO) /TAB						
01003	29/07/94			5	800	09:27:34
01003	29/07/94			1	-400	09:28:05
01003	29/07/94			1	-1000	09:28:21
CHLORAMPHENICOL 1 G INJ /VIAL						
01004	29/07/94			1	-195	09:28:59
01004	29/07/94			1	-5	09:29:17
ERYTHROMYCIN 250 MG TAB (PO) /TAB						
01005	29/07/94			1	-25000	09:35:26
01005	29/07/94			5	29000	09:35:43
GENTAMYCIN 80MG/2ML AMP 2 ML/AMP						
01007	29/07/94			5	782	09:38:31
01007	29/07/94			1	-2000	09:38:47
01007	29/07/94			1	-490	09:39:01
01007	29/07/94			1	-94	09:39:10
TETRACYCLINE HCL 250 MG CAP (PO) /CAP						
01010	29/07/94			1	-4000	10:02:57
01010	29/07/94			1	-1000	10:03:09
AMOXICILLIN 250 MG TAB (PO) /TAB						
01011	29/07/94			5	5500	08:57:23
01011	29/07/94			3	-300	08:58:35
01011	29/07/94			1	-7500	09:02:27
01011	29/07/94			1	-200	09:04:03
AMPICILLIN 500 MG AMP (INJ) /AMP						
01012	29/07/94			1	-2650	09:08:23
01012	29/07/94			1	-2000	09:14:54
01012	29/07/94			1	-2000	09:15:21
01012	29/07/94			1	-21700	09:15:36
01012	29/07/94			1	-2346	09:15:48
PENICILLIN G BENZATHINE 2.4 MU VIAL (PO) /VIAL						
01014	29/07/94			5	110	09:47:53
01014	29/07/94			1	-791	09:53:26
01014	29/07/94			1	-391	09:53:43

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Query: Include all records

CODE	NAME ADDRESS	PHONE	FAX	TELEX	CONTACT(S)
ABB/DI	ABBOTT PUERTO RICO INC.	809-750-5454 P.O BOX 4706	809-257-4429		MS JOANNE MELENDEZ CAROLINA PUERTO RICO 00984-4706
ABB/DI	ABBOTT DIAGNOSTIC	22ND STREET & RT. 41 BLDG. K2			MS CYNDI FURO NORTH CHICAGO, IL 60064
ACS/DI	A.C. SHILLINGFORD & CO. LTD P.O. BOX 123	82481 - 5 ROSEAU			DOMINICA.
ACY/	AMERICAN CYANAMID COMPANY P.O. BOX 29227	809 752 0379 65 INFANTRY STA., RIO PIEDRAS			ELVIN ORTIZ GALARZA P.R.
ADI/DI	373 BLYTHEVILLE AVENUE	407-860-1578 DELTON, FLORIDA 32725, USA	407-860-2223		
AJI/DI	AUSTIN JAMES INTERNATIONAL LTD OLIVER HOUSE	(0903)815500 77-79 HIGH STREET, STEYNING,	0903 816244	877719	AJI G ROGER BRIDGE WEST SUSSEX BN44 3RE ENGLAND PHILLIP HOARE
ALC/	ALCON PHARMACEUTICALS LTD. G.P.O. BOX 3791	809 792 3524 SAN JUAN, P.R. 00936			MR. F.R. ALONSO P.R.
ALS/DI	A.L.S. COMPUTER SYSTEMS, INC 121 N. BEACON STREET	617-254-0003 BRIGHTON, MA 02135	617-783-1423		U.S.A
AMD/DI	AN-MED INTERNATIONAL 3383 S.W. 11TH AVENUE	305 462-3901 FT. LAUDERDALE, FLA 33315	305-764-5272	441712	MR. DON ANDERSEN U.S.A. MR. BRUCE ANDERSEN
AMS/DI	AMES COMPANY				
ANM/	AN-MED INTERNATIONAL 3383 S.W. 11TH AVENUE	FT. LAUDERDALE			FLORIDA 33315 U.S.A
ANT/CO	ANTIGEN/COLLINS P.O.BOX 203	429 3507 28 BROAD ST., BRIDGETOWN			ABOVE PETER F.H. BOURNE BARBADOS
ANT/PH	ANTIGEN OVERSEAS LTD/PHARMACY WHITEPARK ROAD	427-5083 BRIDGETOWN			J RODNEY EMTAGE BARBADOS
APO/	APOTEX INC. EXPORT DEPT., 150 SIGNET DRIVE	416 749 9300 WESTON, ONTARIO M9L 1T9			MR. MICHAEL ASH CANADA
APO/DI	APOTEX INC EXPORT DEPARTMENT,	416-749-9300 150 SIGNET DRIVE			MR. MICHAEL ASH WESTON, ONTARIO, M9L 1T9 CANADA.

## SYSTEM SETUP

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## 12.0 SYSTEM SETUP

### 12.1 System Constants

This feature is used to customize your system program environment to run in your country. Options selected here will affect how INVEC-2 performs. Much consideration is needed when selecting options in this section and should only be done by the MS manager. Some of this information only needs to be specified once (such as the country name or date format), while other settings may be changed to reflect changes in MS procedures. These settings, usually called default settings, in many cases can be overridden by other information given elsewhere in the program. To customize your system, or make changes to the current default settings, select *System Setup* from the Main Menu. The following is a description of the options presented in the System Constants window.

**NOTE: ALL THE PARAMETERS IN THE SYSTEM SETUP WILL NOT BE EFFECTIVE UNTIL YOU EXIT AND RE-ENTER THE PROGRAM.**

SYSTEM CONSTANTS	
Password <input type="checkbox"/> N	Date Format • B
Country •	Currency Code • EC\$
Name of Institution • CENTRAL MEDICAL STORES	
Branch Code • 0	CENTRAL MEDICAL STORES
Costing Method • AUG	Auto-Update Unit Price • Y
Markup on Purchase % • 15	Include Budget • N
Markup on Sales/Type A • 15	Markup on Sales/Type B • 0
/Type C • 0	/Type D • 0
ABC A Category % • 70	ABC B Category % • 20
Use Issue Unit Pricing • Y	Include PO Handling • Y
Include Issues Handling • Y	Issues Parameters • Info.
Include Tender Module • Y	# Tender Forecast Units • 3
Month End Update • 11/09/94	Year End Update • 14/01/94
Reports Libraries • Info.	
Backup •	
Mailing Address • Info.	Reorder Factors • Info.
Shipping Address • Info.	Memory Usage • Info.

Do you want the Password Feature of program

Figure 12.1 System Constants

#### Password

Indicate whether you wish to use the password feature of the program by typing *Y* or *N*. The password feature, when activated, allows you to control which users in your store can gain access to the system. If you have a large

staff at your MS, we recommend that you use this feature. One of INVEC-2's powerful features is that it can track which users made certain transactions. If passwords are not used, the system cannot track who made the changes, and in the event of a mistake, it will be difficult to tell where the mistake was made. Another consideration for using passwords is the security feature added to the system. This allows users to assigned different levels of access. Passwords can be established by selecting the *Maintenance Menu*, then selecting *User List File*. Passwords must be entered in all capital letters when logging into the system. See Chapter 13 for more details.

**Date Format** When you press <ENTER> at this field, a browse window appears from which you can select the date format you wish to use. You have five choices for displaying and entering information on dates:

- B-British dd/mm/yy
- A-American mm-dd-yy
- I-Italian dd-mm-yy
- F-French dd/mm/yy
- N-ANSI yy.mm.dd

Make sure everyone in your facility understands the correct setup and uses the same format.

**Country** Enter the name of your country. This information will appear on all your reports.

**Currency Code** Enter the code for the currency used in your country (e.g. \$). INVEC-2 will convert the prices of items purchased into your local currency. This field is linked to the Rates of Exchange validation file, thus a browse is available. See Section 7.22 (Rates of Exchange) for information on setting exchange rates for foreign currency.

**Name of Institution** Enter the name used for your MS. This information will appear on all generated reports.

**Branch Code** Type the code for the appropriate MS Branch. This code can be selected from a browse window.

**Costing Method** Select the method used for computing prices. Supervisor Edit is needed to change the method. An option window is available listing the two methods from which you can choose (*AVG* - weighted average and *LIFO* - Last In First Out). See Appendix C for a description of each term.

- Update Unit Price** Use this field to indicate whether you want INVEC-2 to automatically recalculate the issue unit price each time the product is received. This will cause the unit cost field, in the Stock database to change based on the price of the new items received. Enter *Y* or *N*, as appropriate. Supervisor Edit must be used to enter this information.
- Markup on Purchase** If you order through a procurement agency, enter the percentage of markup used by the agency in this field. For example, if the agency adds 10% to the cost of your orders, you would enter 10% here. Enter *0* if you do not purchase items through such an agency.
- Include Budget** This option allows you to specify whether you want to use budgeting information. Issues Handling must be used to activate this option.
- Markup on Sales** Enter the percent markup on all issues to health facilities. You may set up to four types of sales markup (A-D). When setting up the Facilities master database file, you may specify which type of markup should be applied to all issues to the facility. INVEC-2 will automatically add this percentage when calculating totals on sales orders to the health facilities.
- ABC A/B Category %** Enter the percent limit value you wish designated for A and B items. You can then specify which categories (*A*, *B*, or *C*) stock items fall under and INVEC-2 will categorize all items consumed into the categories according to the value of their annual usage.
- Use Issue Unit Pricing** Indicate by entering *Y* or *N* whether you wish to use issue unit pricing. INVEC-2 normally divides the pack price by the number of units per pack to obtain the unit pricing.
- Include PO Handling** Type *Y* at this field if you intend to use the Purchase Order module. Otherwise, type *N*. Keep in mind that one of the many features of INVEC-2 is its ability to dynamically update database files based on information gathered from PO's that have been processed. If you enter *N* here, then you will have to update all files in the system each time a shipment for a PO is received.
- Include Issues Handling** Type *Y* at this field if you intend to use the Sales Order module. Otherwise, type *N*. Sales order processing is another one of the excellent features of INVEC-2. If you will be receiving orders from various facilities, INVEC-2 can track the entire process more easily than it can be done on paper. Using this feature can cut down on your order processing time.

<b>Issues Parameters</b>	When selected, this option displays an additional page used to set specific options if the Sales Order module is used. See Section 12.2 for more details.
<b>Include Tender Module</b>	Type <i>Y</i> at this field if you wish to include the Tender module. Otherwise, type <i>N</i> . Using the Tender module allows you to track the entire bidding process from beginning to end. If you do not place items on tender, then you do not need to use this option.
<b># Tender Forecast Units</b>	At this field, indicate the number of store branches for which you want to accept tender forecasts. You have the capability to accept forecasts for up to 10 units. This is helpful if you have to manage several branch stores.
<b>Month End Update</b>	Displays the date the last month-end update was performed. This process involves calculating monthly consumption and other month-to-date figures. If the date is not within the current month, INVEC-2 will display an option window at the beginning of each session requesting to perform end-of-month updates. Choose <i>Yes</i> to have the calculations performed, or <i>No</i> to continue using INVEC-2. Only the Supervisor may edit the date.
<b>Year End Update</b>	Displays the date the last year-end update was performed. This process involves calculating annual consumption and other year-to-date figures. If the date is not within the current year, INVEC-2 will display an option window at the beginning of each session requesting to perform end-of-year updates. Choose <i>Yes</i> to have the calculations performed, or <i>No</i> to continue using INVEC-2. Only the Supervisor may edit the date.
<b>Reports Libraries</b>	This field, when accessed, displays an additional page containing the names of the Transaction and Tender report libraries. INVEC-2 uses this information to name and later reference the groups of reports associated with the specific library.
<b>Backup</b>	This field displays the list of file types which INVEC-2 should backup. If you plan to use the INVEC-2 backup feature, you should enter the following file types: *.db* *.rpl *.exe *.ovl *.pop rr*.*. The file types entered here will be backed up using the backup feature under the Maintenance option.
<b>Mailing Address</b>	This field, when accessed, displays an additional page used to enter the mailing address of your institution. This information can sometimes be different from the shipping address, so it is recommended that you enter both. This entry can contain up to five lines of information.
<b>Shipping Address</b>	This field, when accessed, displays an additional page used to enter the shipping address of your institution. This entry can contain up to five lines of information and will be printed on all purchase orders. One possible format for this information is:

Attn: Title Of Person  
 Name of Facility  
 Street Address  
 City, Country, Postal Code

**Reorder Factors** This field, when accessed, displays an additional page used to set reorder standards. See Section 12.3 for more details.

**Memory Usage** This field, when accessed, displays an additional page containing information about the memory resources currently available. See Section 12.4 for details.

### 12.2 Issue Parameters

This option allows you to set up the Issues module environment. Options chosen here will affect how issues are processed at a later date. Although these options may be changed, it is recommended that selections made here be changed only in extreme cases. Otherwise, you will have inconsistencies in how issues are processed. The following is a discussion of each parameter.

SYSTEM CONSTANTS	
Password • N	Date Format • B
Country •	Currency Code • EC\$
Name	
Branc	
<b>Issues Module Parameters</b>	
Costi	Initialise Requisition No. From Order No. <input type="checkbox"/> N
Marku	Use of Decimals in Quantities Disallowed • N
Marku	
ABC A	Authorization of Requested Quantities Required • Y
Use 1	Authorization of Quantities During Order Entry • N
Inclu	Auto-Generate Issue # • N Method •
Inclu	Next Issue # • Process
Month	Auto-Generate IU # • N Method •
Repor	Next IU # • Process
Backu	
Maili	Is Printing of Pick Lists Required • N
Shipp	Use Collection Slip for Attractive Items • N
	Next Collection Slip # • Process

Type Y if you want Req. No. to be initialised from Sales Order No.

Figure 12.2 Issues Module Parameters

- Initialize Requisition No. from Order No.** Choose *Yes* or *NO*. If *Yes* is chosen here, the system will generate requisition numbers referencing the sales order number. For example, if the original sales order number was 2404, then the requisition number for this sales order would be 2404-R1.
- Use of Decimals in Quantities Disallowed** Choose *Yes* if you want the system to only use whole issue unit numbers.
- Authorization of Requested Quantities Required** If *Yes* is chosen here, the field Quantities Authorized in the Item Details screen of the Issues module must be completed before the issue voucher can be processed by INVEC-2.
- Authorization of Quantities During Order Entry** If *Yes* is chosen here, sales order items may be authorized during the initial data entry process.
- Auto-Generate Issues #** This option is used to determine if you want INVEC-2 to generate your order reference numbers automatically. If you choose *Yes*, the method must be specified. This is done via an option window listing the choices: *Sequential* or *Facility Code Prefixed*.
- If *Sequential* is chosen as the method, then the Next Issue # field must be completed.
- If *Facility Code Prefixed* is chosen, INVEC-2 will automatically generate order numbers in sequential order based on the facility code. For example, if you had a facility whose code was 3606 and the facility sent in an order, the first issue ref # would be 3606-00001.
- Auto-Generate IV #** Use this option if your MS uses internal voucher numbers and you want INVEC-2 to generate the numbers for you. Internal voucher numbers are usually used in MS that have several branches. It provides a way of tracking which branch stores are getting orders from facilities. If you choose *Yes*, then a method will need to be chosen. An option window is available listing the choices: *Sequential* or *Branch Code Prefix*.
- If *Sequential* is chosen as the method, then the Next IV # field must be completed.

If *Branch Code Prefix* is chosen, INVEC-2 will automatically generate IV numbers in sequential order based on the branch code.

**Is Printing of Pick Lists Required**

Choose whether you require a pick list to be printed. If *Yes* is chosen, the system will require that a pick list is printed for all sales orders. This means option #3 in the Sales Order Options window cannot be skipped and quantities will not be confirmed until a pick list is printed.

**Use Collection Slip for Attractive Items**

This option can only be activated if printing pick lists is required. Choosing *Yes* will cause the system to print security items on a separate collection slip when pick lists are printed. In addition, the system will automatically generate the next collection slip number.

**12.3 Reorder Factors**

This option allows you to set standards which INVEC-2 needs in order to calculate reorder quantities for drugs and medical supplies. The following is a description of each factor. All responses should be in *months*, unless specified otherwise.

P C N B C M M A U I I M R M S	Forecasting Months:	A. Option (1-12) Months	3	Number of months to consider when calculating the average monthly consumption	
		B. Option	6		
		C. Option	9		
		D. Option	12		
		Procurement Period:	A. Option (1-12) Months	1	Number of months between two orders for a specific stock item
			B. Option	2	
			C. Option	4	
			D. Option	6	
		Minimum Stock (Months)		3	Min. Stock Level to be kept at anytime
		Projected Lead Time (Days)		60	Period expected for supplier to deliver
		Facility Min. Stock (Months)		2	Min. Stock Level to keep by facility

Figure 12.3 Reorder Factors

---

<b>Forecasting Months</b>	The number of months to consider when calculating the average monthly consumption. You are able to establish four different time increments (Options A-D). These time increments must be displayed by months (i.e. enter the number 3 to specify a 3 month time period) specified by 1-12. These default forecasting periods tell INVEC-2 the number of months of previous data you want to use for forecasting item orders.
<b>Procurement Period</b>	The number of months to elapse between two orders for a specific stock item. INVEC-2 allows you to establish four different time increments (Options A-D). When you enter items into your inventory, you will specify the procurement period for that item. For example, if you order items on two schedules: twice a year (a procurement period of 6 months) and four times a year (a procurement period of 3 months) assign a value of 6 months to A and 3 months to B. When you enter items into your inventory, assign the value of A or B to the item depending on the ordering schedule. To change the procurement period, you can either change the default settings using System Constants or modify the procurement period for each individual item in the Product Information screen.
<b>Minimum Stock</b>	This is the default value for the minimum stock and is expressed in months. INVEC-2 uses this number to calculate the minimum amount of stock for each specific item.
<b>Projected Lead Time</b>	This is the default value for non-contract suppliers. This value will be overridden if a lead time is specified for a supplier. Most contracted suppliers specify an average lead time in days.
<b>Facility Min. Stock</b>	This is the default value for the minimum stock level to be kept for each facility. This value is defined in months and can be overridden for specific facilities.

## 12.4 Memory Usage

When selected, this option displays a page describing the types of memory available for use on your machine. These options are hardware specific and should be set during installation of the system. Choosing the right option is important because it can affect the way INVEC-2 runs on your system. There are three options available from which you can choose which type of Random Access Memory your system has available to use. Enter *Y* or *N* to indicate which particular memory type you wish to use. Check with your hardware provider if you are not sure about what you have on your machine.

**EMS - Expanded Memory Specification.** This option requires that you have special device drivers loaded on your system. If you use this option, you must also have a memory manager program running on your machine.

**XMS - Extended Memory Specification.** This option should be used if you have more than 1024 bytes of RAM on your machine and you are not using EMS. If you choose this option, INVEC-2 will use the additional memory, which can improve the load and response time of the application and certain files.

**UMB - Upper Memory Blocks.** These are small pockets of free memory in your machine. These blocks reside in a reserved memory area of your machine not normally used to store applications. Using this option may improve performance on your system, however you could have other device conflicts.

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## 13.0 MAINTENANCE

The System Utilities menu contains options that allow you to customize your system environment. Unlike the System Constants many of these options do not affect your INVEC-2 program environment itself, but can be used to enhance your working environment. The following is a discussion of all available options in the System Utilities menu.

### 13.1 Backup Files

This option is used to backup all files specified in the BACKUP field of the System Setup option. The system uses the PKZIP program to compress the files, and copy them on to a floppy disk. Simply specify in which drive (A or B) the backup diskette is located, and INVEC-2 will backup your files on to the disk.

### 13.2 Restore Backup Files

Selecting this option will cause INVEC-2 to uncompress, and copy all files on the backup diskette (created using the Backup Files option) on to the computer's hard drive. Simply specify in which drive (A or B) the backup diskette is located, and the system will copy the files on to the hard drive.

### 13.3 Month End Procedure

This option will cause INVEC-2 to perform all month-to-date calculations. All fields containing month-to-date figures will be updated. Once the process is completed, the current date will be entered in the Month End Update field in the System Setup screen.

### 13.4 Year End Procedure

This option will cause INVEC-2 to perform all year-to-date calculations. All fields containing year-to-date figures will be updated. Once this process is completed, the current date will be entered in the Year End Update field in the System Setup screen.

### 13.5 Reindex Files

Use this option to have INVEC-2 reset the System Index files. INVEC-2 uses Index files to sort items in a database. Occasionally, as you add and remove files from the system, the Index files may become outdated and you may not be able to find new files in the system. Select this option to have the system files reindexed. This feature should be selected whenever the system has been interrupted as in the case in a power failure.

Additionally, this process should be performed on a regular basis (weekly at a minimum), and whenever there has been a lot of transactions performed, in a short period of time.

**Pack and Reindex all Files** Press <ENTER> here to have all System files reindexed; or you may choose a specific file to reindex from the list in the option window. Once you have made your selection, press <ESC> to begin the process. Depending on the size of your files, it may take up to several minutes to complete the process. Once INVEC-2 has completed the reindex process, the program will return to the Maintenance Menu.

### 13.6 Updates Files

This option updates the Master Stock file, the quantities on hold based on all the pending issues, and quantities on order based on all pending POs. Finally it updates your current stock on hand and stock level. There are no other screens associated with this option. Selecting this option causes a small window to be displayed specifying Update Master File. Select this window and INVEC-2 will start the updating process. Once the process is completed, the system will return to the Update Master File window. Press <ESC> to return to the Maintenance Menu.

### 13.7 Color Setup

Color Setup allows you to change the program color schemes for your working environment which will be discussed in more detail below. Each option displays a foreground and background color. Use the left and right arrows to select your foreground colors, and the up and down arrows to select your background color.

**Graphics** This option will determine the border and line draw colors of your screen. Select the *Graphics* field to change the current color scheme.

**Data Fields** This option allows you to set background and foreground colors for Data fields displayed on the screen, but are not currently being edited.

**Enhanced** The Enhanced option allows you to set your colors for fields that are currently selected.

**Screen Text** Changing this field affects the way your field definitions are displayed. Any text on your screen not found within a data field will be affected by changes made on this option.

**Exploding Windows** Exploding Windows start from a central position and expand outward until the entire window is displayed. Selecting *No* for this option will simply cause each window to instantly appear on the screen. This feature is a cosmetic feature simply based on preferences.

The system defaults for color setup are:

Graphics:	Cyan on Black
Data Fields:	Bright Cyan on Black
Enhanced:	Yellow on Blue
Screen Text:	Bright Red on Black

**NOTE: ONCE YOU HAVE CHANGED THE COLOR SETUP, IT WILL NOT BE EFFECTIVE UNTIL YOU EXIT THE PROGRAM, AND RE-START IT.**

### 13.8 User List File

When this option is selected, a browse window is displayed containing a list of defined User Names and the corresponding full name. Selecting a user from this list will display the Authorized Users List page which provides detailed information about the user and his or her security access privileges.

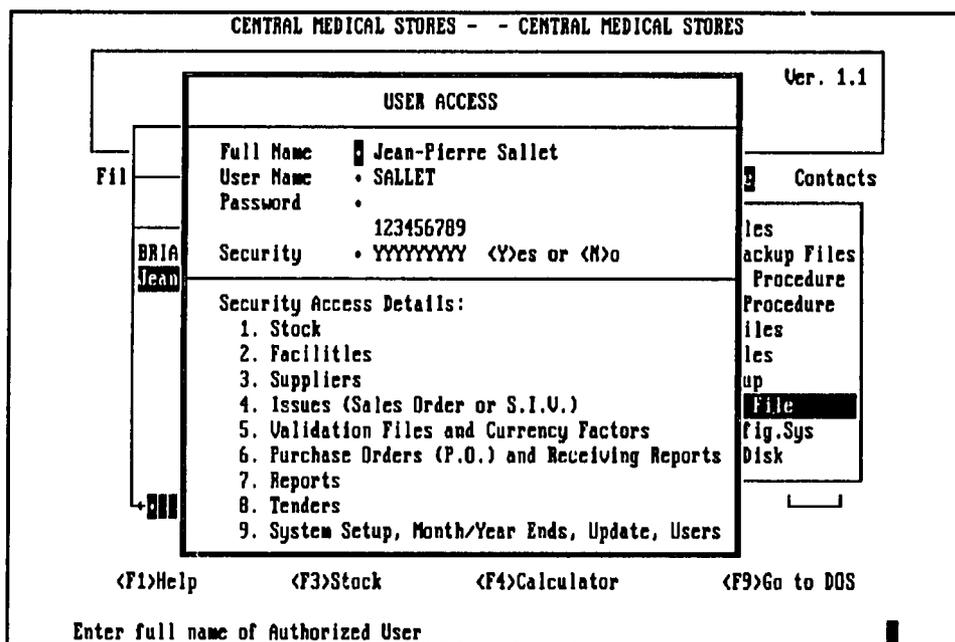


Figure 13.1 User List File

The authorized users list, available to the System Supervisor and those authorized by the Supervisor, allows you to set the user's password, as well as his or her security access to various files within the INVEC-2 system. If using the Password option, users must enter their passwords in all capital letters during the login process.

The Security field contains nine characters, each corresponding to the list of security access details listed below the field. For example, a security field with the string "YYYYYYYNYN" would indicate that the user has the privilege to access all options except System Setup, Month/Year Ends, Updates and User List File. The files listed in option 9 should be restricted to the system supervisor.

### 13.9 Check Config.Sys

This option simply checks your PC's system configuration file (CONFIG.SYS) to make sure the correct Files= statement is entered. The file should contain a minimum entry of 75 (Files=75) in order for INVEC-2 to run effectively. If the Config.Sys file does not contain the correct number, you will be prompted by INVEC-2 to either make the changes yourself, or allow INVEC-2 to do it. If it does contain the correct number, the system will return to the Maintenance Menu. If changes have been made to the file, you must restart your computer for the changes to take effect.

### 13.10 Memory and Disk

This option informs you of the total available space in memory and on your hard disk. Selecting this option allows you to access the Memory and Hard Disk Statistics page. The following information is displayed.

<b>Total Available Character Space</b>	This number indicates the amount of free random-access memory (RAM) currently available on your system. This information lets you know if there is enough memory available to run the application. See page ii on System Requirements for the minimum values.
<b>Total Contiguous Space</b>	The largest block of free RAM available on the system.
<b>Total Disk Space Available</b>	This number indicates how much free disk space is available on your hard disk. As your master files become larger, this number will become smaller. You should check the available disk space regularly and be prepared to purge old files, should you begin to run out of hard disk space.

## SYSTEM MANAGEMENT AND TROUBLESHOOTING

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## 14.0 SYSTEM MANAGEMENT AND TROUBLESHOOTING

This section covers the different procedures for managing, protecting and troubleshooting your INVEC-2 system. These procedures can be divided into 3 categories:

1. Maintaining up-to-date information;
2. Precautions to guard against data loss due to system failure; and
3. Recovering from system or INVEC-2 program failures.

The primary purpose of this chapter is to provide solutions for commonly encountered problems, and troubleshooting advice for possible problems that may occur when using INVEC-2. The following is a discussion of each of the above listed categories.

### 14.1 Maintaining Up-To-Date Data in INVEC-2

Most of the information entered into INVEC-2 is used immediately to update all files. For example, when you activate a receiving report, INVEC-2 updates all stock and supplier databases to reflect the arrival of drugs or medical supplies. Similarly, when requisitions are activated, issues of drugs or medical supplies to health facilities will be registered, and stock levels and facility information will be adjusted accordingly.

However, some INVEC-2 variables are not updated immediately. Some calculations require a great deal of processing time and would slow down normal operations if they were computed each time data were entered into the system. Other calculations only need to be done at the end of a particular time period such as monthly updates or yearly updates. Finally, certain updating procedures involve correcting errors in data entered into INVEC-2 and will require the assistance of the MS manager or supervisor.

#### 1. Monthly and Yearly Updates

##### Monthly Updates

At the beginning of each month, INVEC-2 will ask you to update the files. If there are pending transactions from the previous month to be entered, complete those first, activate them if necessary, and process any payments received, then choose *Yes*. If you choose *No*, the system will prompt you with the same message each time you start the program.

When INVEC-2 updates the files, all month-to-date (MTD) data fields will be reset to 0. Any screens displaying a 12 month period will be updated to include the data from the previous month.

**Yearly Updates**

This step should be performed at the end of the financial year. INVEC-2 will ask you to update the files on the next day that the system is started following the end of the financial year. Again, if there are pending transactions from the previous year to be entered, complete those first, activate them if necessary, and complete all processes required by the specific transaction, then choose *Yes*. This option causes INVEC-2 to update all year-to-date (YTD) data fields, as well as the information displayed on the Medical Stores Summary screen (Reports menu). If you choose *No*, the system will prompt you with the same message each time you start the program.

**2. Maintenance Options**

The Maintenance menu contains the *Updates* and *Reindex Files* options (see Chapter 13), which may be performed at any time. These options should be used any time the system has been interrupted (power outage, hardware failure) and has been restarted, in the event that calculations were not completed, or data files might have become corrupted. Both processes are time consuming, but are essential to maintain up-to-date information in the system.

**3. Correcting INVEC-2 Data in Supervisor Mode**

Maintaining accurate INVEC-2 data records will sometimes involve correcting information that was entered incorrectly or entering basic data to begin a new period (such as budgeting information for the medical store).

Some data fields, such as those generated by INVEC-2, cannot be modified in the User Mode, and require supervisory access to be changed. For example, during the initial setup of INVEC-2, data that in the future will be automatically generated by INVEC-2 must be entered (such as the issue unit cost), so that you can be provided with certain future information. The Supervisor Mode allows you to make these adjustments. Only those individuals with knowledge of the special Supervisor's password may make any such adjustments.

**14.2 Precautions: Backing Up INVEC-2 Data Files**

When working with INVEC-2 (and any other software application), it is absolutely essential that the data files are backed up on a regular basis. This is the only way you can insure against data loss in the event of a power failure or hardware/software problem.

Backup procedures should be established at the same time the INVEC-2 system is installed. Depending on the work load at your medical store, data files should be backed up, at the very least, at the end of every week. If your facility has a heavy work load, then **DAILY BACKUPS** should be performed. The frequency of your backups will determine how much

data you may lose in the event of a problem. If you perform daily backups, then in the event of a system failure, you will only lose a day's work. On the other hand, if you only perform weekly backups, then you stand to lose a week's worth of work. Considering that a backup should not take more than 5 to 10 minutes to execute, you be the judge!

Data should be backed up on some type of removable media, such as floppy disks or tape cartridges. Once the backup has been performed, store the media in a safe place to prevent any damage to your data. There are several ways in which you may backup your data. INVEC-2 comes with a backup option on the Maintenance menu. Below are two other options you may use, depending on your facility needs. See Section 12.1 for the list of files that must be backed up regularly.

### 1. Third Party Software Packages

There are many commercially available software packages which will perform backups. Some packages can be setup to automatically start the procedure on a certain day or at a certain time. These packages are usually easy to use and can provide you with various options, such as only performing a backup on data that has changed since the last backup. PC Tools and Norton Utilities are among some of the most popular brands.

### 2. Using the DOS BACKUP Command

The DOS (Disk Operating System) you are using usually has a backup utility installed with it. This utility can be used to backup the entire C drive or only certain directories. Below is an example of the command to be used to backup the INVEC-2 directory only.

```
BACKUP C:\INVEC2\*. * A:
```

The above command will cause the system to prompt you to enter a disk in drive A. If any additional disks are needed, you will be prompted by the system. Be sure to label additional disks with the correct sequence number.

To restore the files using DOS utilities, type the following command at the C:> prompt.

```
RESTORE A: C:\INVEC2
```

The Restore program will ask you for the disks in the proper sequential order. **Any data currently in the directory will be overwritten.**

### 14.3 Recovering From System or Program Failures

#### System Failures

If there is a power failure while you are working in INVEC-2, you must re-index the INVEC-2 files before doing more work on the system. Use the Reindex Files option under the Maintenance menu. After you have indexed your files, you should check your data to make sure that none has been lost. In the event of a severe system failure (such as a hard disk failure), after restoring the hardware to working condition, restore your data files from your last backup. This is why it is extremely important to maintain up-to-date data files, and backup the files on a regular basis!

#### INVEC-2 Program Failures

The INVEC-2 program has been tested extensively prior to your installation. However, as with any computer program, problems may still occur. If you have any problems, follow the steps described below. **DO NOT TRY TO CHANGE ANY OF THE FILES. IF THE FOLLOWING PROCEDURES DO NOT WORK, GET IN TOUCH WITH THE MSH SUPPORT CONTACT.** Write down all information about the problem, including exactly what you were doing when the problem occurred and all computer responses. Note any error messages which may appear on the screen. If possible, print out any error messages that appear on the screen.

1. If the screen freezes and you cannot move your cursor (a simple way to detect this is if your computer beeps if you press any key for 15 seconds), re-start the computer by pressing the <Ctrl> <ALT> and <DEL> keys at the same time. If the system still does not respond, push the reset button or turn your computer off and then back on again. After the system has successfully restarted, try to access INVEC-2 again.
2. If you are having trouble accessing data or calling up information, re-index the files using the option under the Maintenance menu. Try to access INVEC-2 again.
3. If the problem persists after you have indexed the files or restored your files from backup disks, contact the MSH INVEC-2 support person.

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Option *N* should be selected when you have no need to preview the report before printing.

Once you have completed the Print Job Request Form and have accepted your changes, R&R will begin generating the report based on the options chosen.

### 11.3 Tender Reports

The Tender Report option allows you to generate several reports which can be used to monitor the tender procedures. Selecting this option displays an additional menu presenting all available reports to be generated for the tender procedure. The following is a description of each report available.

**Tender Document** - This option allows you to generate the document which will be submitted to the various suppliers bidding on a specific tender. The document provides all detailed information about the tender including the item codes and descriptions listed in the tender, as well as packaging, delivery requirements, and pricing information.

**Tender Checklist (by supplier)** - This report generates a list of all bids received from suppliers. Information in this report includes the supplier's minimum package, pack size, and price quotes for the various delivery modes, as well as currency information. This report is most helpful when awarding the bids to specific suppliers.

**Comparison List (by item)** - This report generates a list of items included in the tender. For each item listed, supplier quotations are provided allowing you to compare bids on an item-by-item basis. This is most helpful if you intend to award items on the tender to different suppliers.

**Tender Acceptance List** - This final report generates the list of items awarded to each supplier. Once awarded, this report may be used to confirm the award and to verify quotations sent by the supplier.

**Generating Tender Reports** - To generate tender reports, simply select the tender code (browse window available) for the document you wish to have printed and choose your output destination. If you selected to have your report sent to the screen, see Section 3.6 for details on using the R&R Screen Display Commands.

**No. of Copies** Enter the number of copies of the report you would like the system to print. This means that once the report is generated, the system will print the specified number of copies of the entire report.

**Begin With Page** Choose the page number you want the system to start printing. For example, if you generated a report with 25 pages, but the information you specifically wanted started on page 5, then enter page 5 in this field. In addition, if the report contains more pages than you wish to print, use the END Page field to specify the last page number to print.

**Use A Query?** This option allows you to customize the report to your own specifications and criteria, if necessary, in addition to the standard criteria. For example, if you wish to generate an out of stock report, but you only want that information for the items in your database that are considered medical supplies, you would choose to enter the interactive query mode, and specify "DMO='M'". See Appendix B for details on creating additional queries.

The option window gives you two choices, allowing you to indicate whether you want to use the criteria established with the *Standard Report (S)*, or build your own query using the *Interactive Query Interface (I)*. The Interactive interface requires a good working knowledge of R&R Report Writer (see Appendix B for R&R query commands). Once you've selected the desired criteria, INVEC-2 will begin to generate the report.

**Preview** The Preview option window allows you to send a sample of the report to the screen, before generating the actual report. It might prove beneficial to preview the report before sending it to the printer. This would allow you to verify that all the information is correct before printing. Depending on the size of your database files, and the specific report requested, these reports can become extremely long. Previewing would certainly save time and paper in the event you would have to make changes to complete the report.

Option *P* causes the report to be displayed in a graphic mode. This mode displays the report in a picture or snapshot format. After viewing the report in this mode, press the <ESC> key and choose either *G* to have the report generated and printed, or *C* to return to the reports menu.

Option *D* causes the report to be displayed in the standard R&R interactive view. This view displays the report in the same mode as if choosing to send the report to your computer screen. See Section 3.6 for details on the R&R screen commands. Once you have completed the preview, choose *G* to generate the report or *C* to cancel and return to the reports menu.

## APPENDIX A - TUTORIAL

This chapter is designed to act as a tutorial to the INVEC-2 program. The following are step-by-step instructions on performing specific functions in INVEC-2. As you complete each step, it is important that you read each screen thoroughly, and enter the information in the correct field. If you need an explanation of what is required in a specific field, refer to the reference section of this manual (Chapters 4-10) to obtain clarification. Use the *NOTES* portion to list any information pertaining to your own procedures.

### General Advice And Information

When you want to practice with INVEC-2, from the C:> type CD TRAINING and then at the C:\TRAINING> type INVEC2. When you want to enter real information into INVEC-2, type CD INVEC2 from the C:> prompt and then INVEC2 from the C:\INVEC2> prompt.

Every day when you start INVEC-2, make it a habit to reindex the files. If something unexpected happens when using INVEC-2, reindex the files.

**BACKUP YOUR DATA IN INVEC-2 EVERY DAY!!!** You may use the backup procedure established for you for this purpose.

Establish a routine to process your S.I.V.s and POs in INVEC-2 and make it a priority to get accurate information into the computer as soon as possible.

Make a separate file folder for each facility and each supplier with whom you deal and put the paperwork pertaining to each in the proper file.

If you have any problems or questions, call one of the people listed in the Contacts menu in INVEC-2.

## Adding An Item To The Stock Database

1. Access Files from the Main Menu.
2. Select *Stock* and Press <Ins>.

Enter the following information in the specified field, and press <ENTER> after each entry.

3. Enter a unique code for the item.
4. Choose its category from the option window: *Drug, Medical supply, or Other.*
5. Enter the generic name of the item and a supplementary name, if applicable.
6. Enter the strength or size for the item.
7. Enter the form and route of the item. (Pressing <ENTER> or the left arrow (←) on either of these will give access to a list of choices for the item.)
8. Enter the issue unit/size of the item. Pressing <ENTER> or the down arrow (↓) on either of these will give access to a list of choices for the item.)
9. Enter the preset minimum and maximum stock level in issue units.
10. Enter the forecast period and procurement period of the item.
11. Accept your entries (This is done by choosing *Accept* from the Action option window.)

Once steps 1-11 are completed, INVEC-2 will exit the product information screen, and return to the Stock Details screen.

### *THE FOLLOWING STEPS MAY BE COMPLETED AT A LATER TIME*

12. To add or delete the quantity of the item, access *stock details* and fill in the information, including the quantity on hand.
13. For the reason for stock adjustment, press <ENTER> for access to a list of choices.
14. Fill in the item's location; pressing <ENTER> will give a list of choices.
15. Accept your entries (Option window).
16. On the main screen of the item, choose *Alternative Items* and fill in any alternatives to the

items in the event that your current item is not available.

17. In Supplementary Information, add the information that you have and use, including any FOREX requirements.
18. If you use it, fill in the Facility Forecasts from the main screen of the item.

**NOTE: SOME OF THE FIELDS ON THE MAIN SCREEN OF THE ITEM ARE NOT EDITABLE BECAUSE THEY ARE AUTOMATICALLY UPDATED BY INVEC-2. SEE APPENDIX C FOR AN EXPLANATION OF THESE FIELDS.**

*NOTES:*

## Adding A Facility To The Facilities Database

1. Access *Files* from the Main Menu.
2. Access *Facilities* and press <Ins>.

Enter the following information in the specified fields, and press <ENTER> after each entry.

3. Enter a unique code for the facility.
4. Enter the contact information (name, address, phone & fax) for the facility.
5. Enter the correct code corresponding to the percent markup to be charged to the facility.
6. Choose the account type from the option window: *Member, Group, or Single*. If *Member* is chosen, the *Account Holder* field must be completed.
7. Browse windows for GMS branch and customer level are available by pressing <ENTER> in the blank for each one.
8. Enter the population figures. These are not required, but they are useful for calculations and reports on level of use, etc.
9. Enter the province, district, and responsible authority; pressing <ENTER> will access a browse window listing all choices for each. If your area is not divided into provinces or districts, be sure to enter a code of 00 in the validation file, and choose that option here.
10. Accept your entries (Option window).

Once steps 1-10 are completed, INVEC-2 will exit the Facility Information screen, and return to the Facility Details screen.

The Budget/Financial screen may be completed at a later date, and the two remaining form windows (Monthly History, and Current Stock) are completed by INVEC-2 automatically based on transactions performed elsewhere in the system.

*NOTES:*

## Adding A Supplier To The Suppliers Database

1. Access *Files* from the Main Menu.
2. Access *Suppliers* and press <Ins>.

Enter the following information in the specified field, and press <ENTER> after each entry.

3. Enter a unique code for the supplier.
4. Fill in as much information about the supplier as you know. Enter the suppliers: Name, Mailing Address, Country, Phone, Fax, Telex, and Contacts.
5. Indicate whether the supplier will be providing Tender items. Remember, if the supplier will be providing tender and non tender items you may need to create two records, one for each type.
6. Enter the Suppliers currency. A browse window linked to the Rates of Exchange file is available. If the suppliers currency is not listed in the file, INVEC-2 will allow you to add it here.
7. Enter payment terms if known.
8. Enter *L* for Local or *F* for foreign. Is this a local or foreign supplier? An entry must be made here, in order to continue.
9. Indicate whether the supplier is also a manufacturer, by entering Y or N.
10. Enter the Average, Latest, and Stated lead times if known.
11. Accept your entries by choosing *Accept* from the Action Option Window.

Once steps 1-11 are completed, INVEC-2 will exit the Suppliers Information screen, and return to the Suppliers Details window.

The Purchase and Payments fields may be completed at a later date, and the remaining form window (History) will be completed by INVEC-2 automatically based on transactions performed elsewhere in the system.

*NOTES:*

## **Adding Items To The Validation Files**

1. Access *Files* from the Main Menu.
2. Access *Validation Files*.
3. Select an item from the list of files.
4. Add or delete items in each file by pressing <Ins> or <Del>, respectively, so that the information in each category matches your system. Remember: The primary purpose of using validation files, is to provide consistency when entering data in the system. Be sure to use codes and descriptions that best fit your medical store terminology.

### **NOTES:**

## Adding Rates of Exchange

1. Under Files, choose *Rates of Exchange*.
2. Press <Ins> to add a rate of exchange.
3. Fill in the proper information, making sure that you are converting the money properly.

**REMEMBER:** You must add your own currency with a value of 1.0000 to the database, so that INVEC-2 will have a base rate to convert to/from.

*NOTES:*

## Adding A Store Issue Voucher (S.I.V.)

Be sure to follow all procedures previously established for your office.

1. Choose *Transactions* from the Main Menu.
2. Choose *Issues*, press <Ins> to add an S.I.V.
3. Fill in the facility by typing in its code or pressing the <ENTER> or down arrow (↓) to access a list of choices.
4. The order reference number is required, as is the person by whom the order was prepared.
5. Fill in the date received and accept your entries by choosing *Accept* from the Action Option window.

*At this point, the computer will automatically go to the S.I.V. Item Details screen.*

6. Fill in the requisition number. This is the number on the form received from the facility, and is required to complete this issue.
7. Fill in the Code of the item being ordered; pressing <ENTER> or the down arrow (↓) will give a list of choices.
8. Fill in the facility stock level, if you were given this information.
9. Enter the amount of the item requested by the facility, and accept your entries by choosing *Accept* from the Action Option window.

At this point, INVEC-2 will record the information, and clear the screen allowing you to enter another item ordered by the facility. Repeat steps 6-9, until all items are entered, then press <ESC> after you have completed the last item.

Re-access the S.I.V. and select *Options* to follow your usual procedure. You may:

1. Print an Allocation Form - After reviewing the form to make certain all quantities are correct, it should be given to the MS manager for approval. Once approved, return to the Item Details screen of the S.I.V. and enter the quantities authorized.

2. **Authorize Quantities** - This option processes the issue voucher (puts items "on hold" in the inventory) and enters the current date in the date processed field. The issue voucher will not be processed until you have completed the quantities authorized field for each item ordered.
3. **Print a Pick List and Collection Slip** if this option was selected in System Setup. Use this option to verify the actual quantities collected from the MS supply. The slip should be signed by the MS staff person, who filled the order.
4. **Confirm Shipping Quantities** - this process allows you to verify the actual quantities shipped; after completing this step, enter the current date in the date shipped field.
5. **Print a copy of the Store Issue Voucher** if you wish a delivery notice to be shipped along with the items ordered.
6. **Activate the Store Issue Voucher** (subtracts items from inventory). This option should only be chosen after you have completed all necessary store issue procedures.
7. **Print Requisitions** - you may also print a sales order requisition list.

We recommend that you use all of these options, incorporating them into your present routine.

*NOTES:*

## Adding A Purchase Order (PO)

Follow any and all procedures previously established for your office.

1. Access *Transactions* from the Main Menu.
2. Choose *Purchase Order* and press <Ins> to add a new purchase order.
3. Enter a unique number for the PO.
4. Enter the supplier; pressing <ENTER> or the down arrow (↓) will access a browse window linked to your Supplier Master File.
5. Fill in the blanks with your information. INVEC-2 completes the ordered field with the current date, if it is different, change it now.
6. Choose CIF or FOB from the option window, to indicate the supplier cost method.
7. Choose whether the items being ordered are tender or non tender items. If the items are on tender status, you will be prompted to enter the tender code. Pressing <Enter> in the tender code field will activate a browse window linked to the tender module.
8. Fill in the currency, pressing <ENTER> or the down arrow (↓) will give a list of choices.

*At this point, the computer will automatically go to the PO detail screen.*

9. Add the items that you are ordering. To fill in the items, press <ENTER> or the down arrow to access a browse window linked to your Stock Master File. Choose the items you wish to order. Note, if this is a tender PO, the item list will be generated from those entered on the tender code chosen in step 7.
10. Fill in the minimum order of this item from this supplier, the quantity must be greater than zero. Be careful when specifying pack size. A good rule of thumb is that the first number will generally be smaller than the second number, i.e., 1 X 1000 Tabs.
11. Fill in the details: the manufacturer, etc.
12. Fill in the cost, if known, for sea, air, and local; and the mode of shipment of this item. If you only fill in the price for one mode of shipment, that must be the mode that you choose for this item. Expected prices should be entered for the minimum order required.
13. Fill in the number of packs you wish to order; it must be greater than zero.

INVEC-2 automatically enters the Expected Price of Min. Order, if you entered a value earlier for expected prices, and then calculates the expected unit price.

14. Accept your entries (choose *Accept* from the Option window).

*The computer will automatically provide another blank form for the next item you wish to order.*

15. When you are done entering items, press <ESC> until you return to the Main Menu.

16. You can re-access the PO to make changes to it until you activate it. You activate it by choosing *Options* and then *Activate*. This is done when the PO is sent out to a supplier, or when the supplier confirms that it will be sending the items.

17. When you receive the items, you re-access the PO by choosing *Transactions* from the Main Menu, and then *Purchase Orders*. Select the number of the PO on which you received items, and choose *Receiving Reports*.

*We recommend that you assign a Receiving Report number that is a combination of the PO number and which reception number this is on this PO. That is, PO Number + R + a number. For example, 7169R1 would be receipt number 1 on PO number 7169.*

18. Enter the receiving report #, the invoice number (from the supplier), the AWB/BOL reference number, and the initials of the individuals who unpacked and verified the items received. Complete all currency, charges and any discount and tax information that apply or appear on the invoice. Complete all freight, insurance, and other charge information if available. Accept your entries by choosing *Accept* from the Action Option window.

*The computer will automatically go to receiving items.*

19. Enter the information on the items you received. Verify that what you ordered was exactly what you received. If any of the items were damaged, or not shipped, be sure to enter that information where appropriate. Finally enter all pricing information from the suppliers invoice.

20. Accept your entries (Option window).

21. When you are sure of your information, place the items in stock and update the system by activating the receiving report. This is done by going to the PO, then to *Receiving Reports*, then to the specific receiving report, then to *Activate Receiving Report*, and accepting the activation.

20. To register payments on a purchase order, go to the PO, choose *Payments* and fill in the

information. You must fill in the receiving report number and who made the payment.

21. Accept your entries (Option window).

**NOTE: IT IS POSSIBLE TO RECEIVE PARTIAL SHIPMENTS ON A PO; YOU SIMPLY HAVE TO CREATE MORE THAN ONE RECEIVING REPORT.**

## R&R INTERACTIVE QUERY

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## APPENDIX B - R&R INTERACTIVE QUERY

The R&R Interactive Query Mode is only available when you choose I - <I>nteractive Query from the *Want a Special Query?* option window while making your INVEC-2 reports specification choices. By defining a set of rules called a query, you can specify that only certain records will be included in a report. The query you define is used to generate a report containing only those records that meet the query criteria. The query chosen must be defined each time you wish to run a special report.

This section explains how to use the Interactive Query mode to select the composite records that will be included in a report. With this command, you can define a set of selection rules called a query. When you generate the report, R&R will include only those records that meet the selection criteria. For example, the sample query below consists of two selection rules telling R&R to select the records for all tagged items in the Stock database with a 0 stock level.

Include all records where (MASTER->CHKD is equal to "\*") and where (MASTER->STOCKLEVEL is equal to "0")

The first section of this appendix explains the structure of queries. The next two sections cover the Query commands:

- Edit, and
- Reset.

The final section illustrates the use of queries by offering examples of query techniques.

### Query Structure

#### Selection Rules

Each query consists of one or more selection rules, and each selection rule consists of three elements:

- A field from the composite of record; Some reports are generated from several records found in several databases, a composite record includes all fields in all databases which are used to compile the report.
- A comparison operator such as *equal to*; and

- A comparison value, which can be a field, value, list of values, or range to which the first field is being compared.

To build a rule, you must select or enter elements using the browse menus explained in the next section. For the first element, you select a field. For the second element, you select one of the comparison operators listed in the text box below. For the third element, you specify a comparison value.

### Fields

You begin to build a query rule by selecting a field from the browse menu that displays. After you've chosen to use the Interactive mode while generating your report. This menu contains all the fields from the databases used in your report. It also contains many calculated and total fields created in R&R. See the section in this appendix on query techniques for more information on calculated and total field queries.

Comparison Operators

Below is a list of the comparison operators provided by R&R. Note that these comparisons are case insensitive.

<u>Operator</u>	<u>Field Is</u>
equal to	Equal to entered value or selected field's value.
not equal to	Not equal to entered value or selected field's value.
greater than	Greater than entered value or selected field's value.
greater than or equal to	Greater than or equal to entered value or selected field's value.
less than	Less than entered value or selected field's value.
less than or equal to	Less than or equal to entered value or selected field's value.
in the range	Between two entered values or equal to either.
not in the range	Not between two entered values and equal to neither.
in the list	Equal to one of the listed values (up to 10 values).
not in the list	Not equal to any of the listed values (up to 10 values).

### Comparison Values

The final step in creating a query rule is to enter or select a comparison value. Depending on the field and operator you have previously selected, the value can be:

- A field of the same data type as the first field you selected;
- A constant value such as a number or character string;
- If you have selected *equal to*, *not equal to*, *in the list*, or *not in the list*, a character string that defines a pattern using \* and/or ? as wildcard characters (see the section in this appendix on query techniques);
- A list of constant values, any of which can be a character string including wildcards (see query techniques); and
- A pair of constant values that define a range.

### Connectors

Selection rules can be joined with the connectors *and* or *or*. Joining two or more selection rules with *and* means that records must meet the criteria established by all selection rules in order to be included in the report. Joining selection rules with *or* means that records must meet the criteria for at least one of the selection rules in order to be included in the report.

When R&R processes a query, connectors are evaluated left to right. You can change this order of evaluation by using parentheses as described below.

### Parentheses

You can use parentheses to indicate the order for evaluating connectors in a query. The connectors within parentheses are evaluated first, from the innermost level of parentheses outward, and from left to right within any set of parentheses. Without parentheses, connectors are evaluated left to right.

For example, in the following query, *or* is evaluated before *and*:

Include all records where (FORM is equal to "TAB") and where ((ISSUE\_UNIT is equal to "BOTT") or where (STOCKLEVEL is equal "0"))

The result is that the report lists only those items that are in the form of tablets and are issued in units of bottles or the current stock level is 0.

If the parentheses were eliminated from this query, the resulting report would be different. The report would list all items that are in the form of tablets.

## Query Commands

### Selecting Choices from Menus

Select choices from menus by pointing to them and press <ENTER> or the right arrow <→>. Press <ESC> or the left arrow <←> to return to the previous menu or the query text.

After you have made your selections from the first three menus, a selection rule will display on the screen, just below the Control Panel, and the Connector menu will display. Select *and* or *or* to join another selection rule; select *done* to complete the query. Selecting *done* will return you to the Query menu.

### Entering a Data-Entry Choice

To enter or change a constant in the data-entry choice field in the third menu, point to the data-entry choice. Then either type a new value and press <ENTER>, or press <F2> to edit the current value. To enter a blank value, if the field is empty just press <ENTER>. To change an existing value to a blank value, press <F2>, <ESC>, and <ENTER>.

Note that character constants, which can be up to 50 characters long, should not be enclosed in quotes. For example, enter CA instead of "CA" to match a two-character field containing CA. You can enter characters in upper or lower case.

Note that when you have selected an equality comparison (*equal to, not equal to, in the list, not in the list*), you must enter the exact value you wish to match. For example, TAB matches TAB, not Tablets. For approximate matching, use wildcards as described in the section on query techniques later in this appendix.

### Entering Values in a List

If you are entering a list of data-entry choices, the rules above apply, but several additional keys are active. You can press <ENTER> or <↓> to enter a value and move down in the list. Pressing <↑> will enter a value and move you up in the list. To delete a list entry, point to it and press <Del>. A list can contain up to ten entries. To enter a blank value, you must press <F2> before you press <ENTER>, since pressing <ENTER> by itself ends the list.

### Entering Values to Define a Range

To enter two values that define a range, enter the first value, press <ENTER> to move to the next line, enter the second value, and press <ENTER> again. Neither value can be blank.

### Joining Another Selection Rule

To add another selection rule to one you have already created, select *and* or *or* from the Connector menu and continue to define another selection rule.

### Inserting Parentheses

Parentheses can be inserted in the appropriate positions as you build your query. You can type a left parenthesis while selecting a field from the first menu and a right parenthesis while selecting a connector from the Connector menu. In addition, parentheses can be inserted in an existing query by pointing to the appropriate place and typing them.

### Completing a Query

When you have defined all the selection rules you want to use in a query, select *done* from the Connector menu. You will be returned to the Query menu, where you can select *Go* to complete the interactive mode process, and have INVEC-2 generate your report.

### Editing a Query

When a completed query is displayed on the screen, you can edit it by selecting *Edit* from the Query menu. Point to the selection rule, connector, or parenthesis you want to change by using the keys listed below.

<u>Key</u>	<u>Points to</u>
→	Next rule, connector, or parenthesis to the right
←	Next rule, connector, or parenthesis to the left
Home	First rule or parenthesis
End	Last rule, connector, or parenthesis

After you have pointed to part of a query, you can insert, append, or delete selection rules, connectors, and parentheses. To display the query menus described above, you can press <F2> or press <ENTER>. Select or enter values as the appropriate windows display.

### Inserting in a Query

To insert a new selection rule and connector before the one you have highlighted, press <Ins> and select the appropriate choices from the menus that display. Before you have made your choices, R&R displays (..) to represent a blank selection rule and .. to represent a blank connector. For example:

Include all records where (..) (STOCKLEVEL is equal to "0")

To insert a parenthesis, point to the place you want to insert it and type (or). Do not press <Ins>.

If you do not complete both the new selection rule and its connector, R&R deletes the blank parts when you press <ESC>. This feature prevents you from saving an incomplete query.

### Appending a Selection Rule

To add a selection rule at the end of a query, press <End> followed by <→>. Then select a connector from the Connector menu. Continue the query by defining the next selection rule.

### Deleting Parts of a Query

To delete part of a query, point to it and press <Del> to delete the highlighted part or <BKSP> to delete the previous part. R&R displays (..) in place of a deleted rule and .. in place of a deleted connector. Whenever you have deleted a rule and an adjacent connector, R&R removes both blank parts from the display.

## Query Techniques

### Summary

In addition to selecting records that match specified database field values, R&R queries can select records that match character or date patterns, total field values, and calculated field values. The sections below explain these query techniques.

### **Pattern-Matching**

#### Wildcard Characters

A pattern-matching query selects all records where the value in the selected character or date field matches (or doesn't match) a pattern you enter using special characters called wildcard characters. For example, to select all records where the value in the STOCK CODE field starts with the 1, you can create the query "Include all records where (INVCODE is equal to "1\*")". The asterisk (\*) in this query is a wildcard character that stands for any group of characters, like the asterisk in the DOS command DIR H\*.DBF.

Below is a list of the wildcard characters used to define patterns in R&R queries.

<u>Character</u>	<u>Meaning</u>
?	In a character or memo query, matches any single character in the same position in the field.
*	In a character or memo query, matches any group of characters (including no characters). In a data query, matches any value in that part of the data (e.g. 1/*/90)
@	In a date query, matches any value that corresponds to that part of the system data (e.g. */@/90).

**NOTE: WILDCARDS CANNOT BE USED WITH NUMERIC OR LOGICAL FIELDS.**

Using Wildcards in Character Field Queries

If the comparison you have selected is an equality comparison (*equal to*, *not equal to*, *in the list*, or *not in the list*), you can use the wildcard characters \* and ? to select records with character values that match the pattern you have entered. Several examples are given below:

<u>To Include All Records</u>	<u>Enter</u>
Starting with xyz	xyz*
Ending with xyz	*xyz
Starting with, ending with, or containing xyz	*xyz*
Consisting of the letter x followed by any character followed by the letter z	x?z
Containing the letter x followed by any character followed by the letter z	*x?z*

Using Wildcards in Date Queries

You can use the \* and/or the @ wildcard character to enter special date selection rules. Use \* in place of any part of the date, as in 12/\*/90 meaning "any day in December 1990". Use @ to signify a part of the current DOS date at time of printing, as in @/15/90 meaning "the 15th of this month in 1990". It is useful to think of @ as *this* month, day, or year and \* as *any* month, day, or year.

Example:

1. To select any date in 1990, enter \*/\*/90
2. To select any date in June of any year, enter 06/\*\*
3. To select the first day of any month, enter \*/01/\*
4. To print a report for all items ordered this month, you would use the following selection rule:

(DATEORD is equal to "@/\*/\*")

This rule would include in the report only those items in which the order date field had a value of this month, any day, and any year.

5. To print a report of all new customers that you have signed up for the month, you would use the following selection rule:

(Signup is equal to "@/\*/@")

This rule would include in the report only those records in which the Signup field had a value of this month, any day, this year.

6. To print a report of all customers who signed up in a selected year, you would use the following selection rule:

(Signup is equal to "\*/\*/1990")

This rule would include in the report only those records in which the Signup field had a value of any month, any day, in 1990.

#### Using Wildcards in Memo Field Queries

R&R also allows you to use wildcard characters with query equality comparisons (*equal*, *not equal*, *in the list*, and *not in the list*) to search for and select records based on text in a memo field. However, the \* character must be the first and/or last character of the selection value.

For example, to include records that contain text starting with the word "Medical" in the Stock database memo field, enter the selection rule:

(DMO is equal to "Medical\*")

Note that memo field queries are based only on the text of the memo field itself, not on any values contained in embedded data fields.

#### Querying for Wildcard Characters

You can use the backslash (\) escape character with query equality comparisons (*equal*, *not equal*, *in the list*, and *not in the list*) to select character strings that contain either the asterisk (\*) or question mark (?) wildcard characters. Entered before the wildcard character in the data entry field, the backslash tells R&R to treat the wildcard character literally (i.e., not as a pattern indicator).

For example, to match records that have a value in the Name field consisting of a question mark, create the following query:

Include all records where (Name is equal to "?")

**NOTE: SINCE THE BACKSLASH IS ALSO USED AS A SPECIAL CHARACTER IN QUERY RULES, YOU MUST SELECT CHARACTER STRINGS CONTAINING BACKSLASHES IN THE SAME WAY. FOR EXAMPLE, \\* WILL MATCH ANY STRING STARTING WITH A BACKSLASH.**

## Querying on Total Values

### Total Selection Rules

R&R allows you to select records based on total field values.

- Reports without pre-processed totals can include total-related queries only on grand running sums and counts.
- Reports with one or more pre-processed totals can include total-related queries only on pre-processed totals that reset on the highest level (most inclusive) group field for which a pre-processed total has been defined.

### Running vs. Pre-Processed Totals

In order to create effective total field queries, you need to understand the difference between running and pre-processed totals.

Any total field you create with the /Field Total Create command is by default a running total, a field whose value is calculated cumulatively as each record contributing to the total is read. While you can create queries using running counts and sums with a "Grand" reset level, these queries may be difficult to formulate since only those records that meet the query will contribute to the total. In addition, since R&R tests the current record against the query before computing the running total for that record, the query will be applied based on the total value as of the previous record. See the section below for an example of a running total query.

Many total fields you create can be modified with the /Field Total Options Processing command to make them pre-processed totals, fields whose final values are calculated before the records in the report are printed. Queries on pre-processed total fields are much easier to formulate, since all records that contribute to the total will be read before the query is applied.

The only restriction on such queries is that they can use only those pre-processed totals that reset at the highest (most inclusive) group level at which a pre-processed total is defined. For example, you cannot query on a pre-processed group total if your report contains a pre-processed grand total (your pre-processed grand total would be invalidated by excluding records based on the pre-processed group total). See the section below for examples of pre-processed total queries.

### Pre-Processed Total Queries

In reports that contain pre-processed totals, you can query on any pre-processed total that resets at the highest group level at which a pre-processed total has been defined. You cannot query on any running totals or on any other pre-processed totals in the report.

For example, in an invoice report in which each invoice total is a pre-processed, order number group total, you could create a query that selects only those invoices with totals of \$500 or more. In an order list grouped by customer number and containing a pre-processed, customer number group total, you could create a query that selects only those customers with 10 or more orders. Because of the way in which R&R accumulates pre-processed totals, none of the running totals in these reports would be available for querying. In addition, the queries on the pre-processed order and customer totals would be invalid if either report contained higher level pre-processed totals. An error message will notify you of invalid queries when you try to display or print such a report.

### Running Total Queries

In reports that contain no pre-processed totals, you can query on grand running sums and counts. However, be aware that the total for the current composite record will not have been calculated before the query is applied. Therefore, R&R's decision as to whether to include the record will be based on the total value as of the previous composite record.

For example, when you query on a running count, the count for the current composite record will not have been calculated before the query is applied. In order to use the query to select the first N records, you must specify that the count field value be less than N rather than less than or equal to N.

To select the first three records using the Counter running total field, which counts the Name field, specify the following query rule:

(Counter is less than "3")

Without the query, the report would include the following contributors, sorted by contribution in descending order:

<u>NAME</u>	<u>CONTRIBUTION</u>
Warren	150
Clark	125
Mortimer	120
Smith	100
Jones	50

With the query, the records selected for the report would be:

<u>NAME</u>	<u>CONTRIBUTION</u>	<u>COUNTER</u>
Warren	150	1
Clark	125	2
Mortimer	120	3 ← (value of COUNTER field for this record not calculated until after query is applied)

### Querying on Calculated Fields

#### Calculated Field Selection Rules

R&R allows you to select records based on calculated field values *except* those that:

- Use the Pageno( ) or Recno( ) function; or
- Use totals that cannot be queried on.

#### Comparing a Field to an Expression

You can compare a field to an expression by using a calculated field in a query. For example, to define a query that selects all records where the value in the Amount field equals the value of the expression Discount \* Rate, create a calculated field name DiscRate whose expression is Discount \* Rate. Then select DiscRate( ) as the value in the query, as follows:

Include all records where (Amount is equal to DiscRate( ))

## Creating A Sample INVEC-2 Query

Once you have accepted your choices in the INVEC-2 Reports Specification screen, the system will automatically take you the R&R query building screen. To define a query, select *Edit* from the menu options at the top of the screen. You may then begin to build your selection rules. In the following example, the standard report Stock - All Stock by Name, will be customized to only include those items that have been "tagged"

1. At the R&R query screen, choose *Edit*. A small window containing a list of all fields in the database of the report will be displayed. Select the field called *CHKD* and press <ENTER>.
2. The next window that will be displayed will contain a list of options which you may use to make your comparison. Choose *equal to* and press <ENTER>.
3. The third menu that will appear contains the list of available choices needed to complete your criteria. The first choice is a blank line, type the \* key and press <ENTER>.
4. To complete the query, choose *done* from the fourth menu. This will cause you to be returned to the main query menu.

Below is a copy of the screen you should see, once you have completed steps 1-4. Note the query statement just below the solid line. If your statement matches the one listed below, you have successfully completed the query.

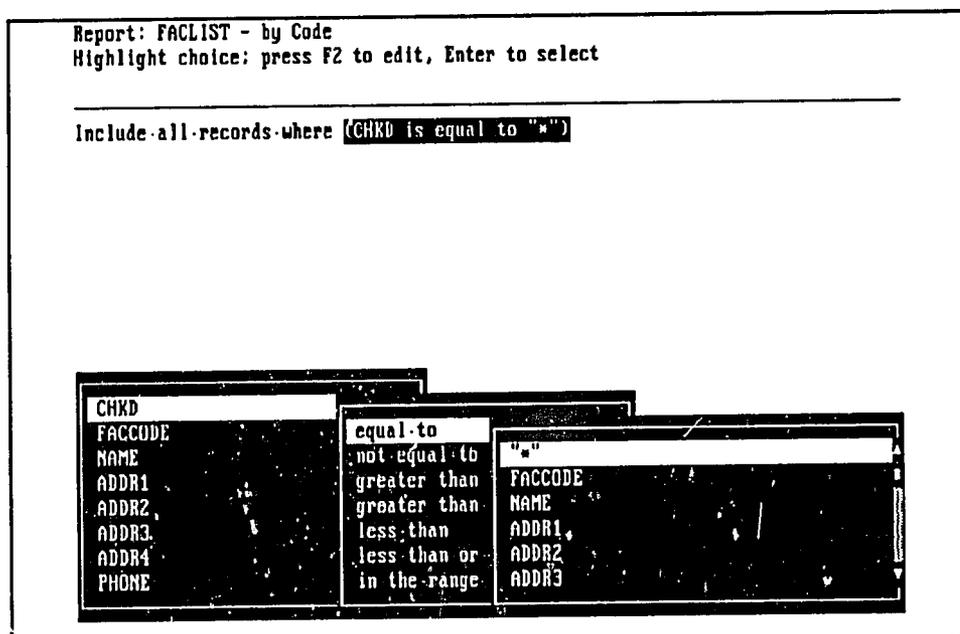


Figure B.1 R&R Interactive Query Screen

At this point, you may now generate your report by choosing *Go* from the main query menu. INVEC-2 will begin processing your query, and either display the results on your screen, or send it to your printer, depending on the options you selected in the INVEC-2 Reports Specification screen.

**HELPFUL HINT:**

As you move through the list of fields in the first browse window, R&R will provide a definition of each field, in the upper left hand corner of your interactive query screen, just below the report name.

## INVEC-2 CALCULATED FIELDS

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## APPENDIX C - INVEC-2 CALCULATED FIELDS

INVEC-2 is an advanced program, but like any computer program it does not respond well to ambiguity. INVEC-2 expects that all data entries will be done in a standard format following certain rules which will allow INVEC-2 to recognize and use the information and that all entries will be consistent over time. The program uses several concepts and terms which are specific to managing drug supply and it performs many calculations as it tracks MS operations. INVEC-2 generates information automatically which appears in specific data fields throughout the program.

The following section defines key INVEC-2 terms and concepts and INVEC-2 formulas and calculations. In order to process information on inventory levels, reorder points, and payments, INVEC-2 needs to have standardized 1) Units for Defining Quantities; 2) Methods for Evaluating and Monitoring Stock; and 3) Methods for Monitoring Costs and Expenditures.

### Units for Defining Quantity

**Issue Units** - This is a vital concept in INVEC-2, since this field defines what INVEC-2 is counting in the inventory records. If your INVEC-2 stock record says you have 50,000 in stock, it is a meaningless number without answering the question "50,000 of what?"

When 1 of any item is received or issued in INVEC-2, INVEC-2 understands that to mean 1 of the issue unit as defined in the Master File. For example, for tablets and capsules an entry of 1000 issue units means that you are shipping or receiving 1000 tablets. For liquid forms, 1000 may mean 1000 bottles or vials; for others it may mean 1000 liters.

This feature allows INVEC-2 to use one master file record to track an item which may be stocked in several different warehouse pack sizes. However, if you want to use the pack size as your issue unit, you would have to create a new record every time you receive a new pack size.

See Section 1.1.2 for additional information on using issue units. It is most important that you understand these units and that the standards be followed when new items are added to the Master File.

**Issue Unit Size** - Issue unit sizes are often stated in milligrams, grams, or kilograms for solid dosage form drugs; in milliliters or liters for liquids; and in number of pieces for items which are not readily compared by weight or volume. For example, a syrup which has an issue unit of "bottle" may have an issue unit size of 60ml or 100ml. Please note that for items where the form is "tablet," the issue unit is "tablet" and the issue unit size is one tablet. This information is used to compare prices between different pack sizes of the same drug. This information facilitates price comparisons between the same items with different pack sizes.

**Pack Size** - This is the number of issue units which are in the manufacturer's package. For tablets, the warehouse pack might be 100, 250, 500, or 1000 tablets. For injections, it could be 10, 25, or 100 amps or vials.

For liquids, the size might be 1 bottle or 5 liters; here it is important that you remember the issue unit involved. If the issue unit is 1 liter, the pack may be from 1 to 1000 liters, but it can never be 100ml.

If you see a record which has an issue unit of 1 liter and a pack size of 100ml, you can be sure that the average issue unit cost reported by INVEC-2 is incorrect. This record should be edited to conform with INVEC-2 rules. See Section 1.1.2 for further details.

**Minimum Order** - If a supplier requires that you order a minimum number of warehouse packs when placing a purchase order, this should be entered on the Stock Detail Form. For example, if your supplier requires that you purchase ampicillin 100ml suspension in packs of 12 bottles, your pack would be coded as 1 bottle and your purchase pack as 12. In most cases, there is no requirement for minimum orders and the entry will be 1 of the warehouse pack.

## Evaluation and Monitoring Stock

**Total Consumption** (in issue units) - Total consumption is equal to the quantity of issue units issued by the MS over a given period. This information is updated every time a transaction is activated. These values, as well as the monthly consumption for the last 12 months, are displayed in the History form window in the Stock - Product Information screen.

**Average Sale/Month** (in issue units) - Average monthly consumption is equal to the total consumption for a given period divided by the number of days the item was in stock during the same period. The average monthly consumption is updated every time you access Stock information for an item or when you globally update the reorder amount (see Chapter 13 on Maintenance).

$$\text{Avg Sale/Mth} = \text{Total Consumption} / [\text{FP} - (\text{Stock Out}/30.5)]$$

FP = Forecasting period

**Lead Time** (in days) - Lead time is the number of days between the date an item is ordered and the date the order is received. INVEC-2 uses three lead time variables:

**Contract Lead Time** - The lead time specified by the contractor for a tender item. Tender items can have both sea and air shipment contract lead items. The longest lead time (sea shipment) is used in lead time calculations.

**Last Lead Time** - The lead time for the last order of an item.

**Default Lead Time** - The lead time used by INVEC-2 when no contract or last lead time is available for an item.

The lead time used in INVEC-2 calculations is determined in the following manner:

- If an item is a tender item, the last lead time replaces the contract lead time if it is greater than the contract lead time. The contract lead time used is the longest lead time (sea shipments) when there are both air and sea lead times for a particular item.
- If the item is a non tender item, the last lead time replaces the default lead time if the last lead time was greater than the default and if the item is reordered from the same supplier.

**Minimum Stock** (in issue units) - Minimum stock is your safety stock expressed in issue units. Your current stock should not fall below this value. You determine your minimum stock by setting a default through the Setup option (see Chapter 12). Normally your minimum stock should be at least equal to the average lead time multiplied by the average monthly consumption.

$$\text{Min. Stock} = \text{Safety Factor} \times \text{Avg Sale/Month}$$

**Maximum Stock** (in issue units) - Maximum stock is the safety stock plus the number of issue units expected to be used within the procurement period. The value for maximum stock will depend on the procurement period for each drug. A default procurement period is assigned through the Setup option. The maximum stock is calculated according to the following formula:

$$\text{Minimum Stock} + (\text{Procurement Period} \times \text{Average Monthly Consumption}).$$

**On Hand** (in issue units) - On hand is the total number of issue units which INVEC-2 shows in stock for each item, including all batches from all suppliers.

**Quantity on Order** (in issue units) - Quantity on order is the total number of issue units that you have currently on order from all suppliers for each item.

**Quantity to Order** (in issue units) - Quantity to order will give you the number of issue units you need to order to bring back your stock level to the maximum stock level. It is calculated according to the following formula:

$$(\text{Lead Time} + \text{Procurement Period}) \times \text{Average Monthly Consumption} + \text{Minimum Stock} - (\text{Current Stock} + \text{Quantity on Order}).$$

**Stock Level (in months):** Stock level tells you how many months of stock you have in your inventory for each item. This value is equal to your current stock divided by the average monthly consumption.

$$\text{Stock Level} = \text{Current Stock} / \text{Avg Sale/month}$$

**Stock Out Days (in days)** - Every time an item goes out of stock, INVEC-2 keeps track of the number of days until the next shipment arrives. This information is used to calculate the average monthly consumption with more accuracy.

**Forecast (in issue units)** - The forecast for an item is the amount you are expected to order during the upcoming procurement cycle, taking into consideration current stock levels, quantity on order, quantity to expire, and estimated consumption based on current average monthly consumption. To calculate the annual forecast, you must establish both the Forecasting Period and the Procurement Period using the INVEC-2 Setup option.

**Procurement Period (in months)** - The number of months which elapse between two orders. For example, the procurement period is six months if you order drugs twice a year. INVEC-2 allows you to establish four different procurement periods using the Setup option. Each item on your inventory is then assigned a procurement period based on your ordering schedule. These default values can be modified on individual items or on all items if your ordering schedule needs to change.

**Forecast Period (in months)** - INVEC-2 gives you the choice of defining the number of previous months' data you want to use for forecasting drug orders. Forecasts will most often be made based on the last 12 months of data. However, INVEC-2 allows you to specify four different forecast periods using the INVEC-2 Setup option. Specifying a shorter forecast period would be appropriate when there are large variations in consumption of an item.

## Costing Methods

**CIF or FOB** - When you place an order, you are asked to specify whether the price is CIF (Cost, Insurance, Freight) or FOB (Free On Board). This choice is important since INVEC-2 calculates average costs differently for FOB and CIF.

**AVG-Weighted Average (in local currency)** - If you use this costing method, then INVEC-2 calculates the average unit cost by taking an average of the cost of all batches in stock. Each time you receive a new shipment through the Receiving Report process, the average issue unit cost for an item is recalculated to adjust for the new shipment. For example, if your current stock is 1000 issue units of an item which cost \$2.00 per issue unit and you receive a new shipment of 1000 issue units of the same item at a cost of \$3.00 per issue unit, your average issue unit cost for the item will change. Since you now have 2000 items in stock at a total cost of \$5000, your average cost will be \$2.50.

1000 units X \$2.00 = \$2,000.00	Average Unit Cost =
1000 units X \$3.00 = \$3,000.00	\$5,000.00/2000 units
2000 units            \$5,000.00	= \$2.50 per unit

THE AVERAGE ISSUE UNIT COST IS ALWAYS CALCULATED AS CIF; if the item was ordered FOB, insurance and freight costs are distributed to the average issue unit cost.

INVEC-2 tracks the average issue unit cost no matter how many different warehouse pack sizes you may have for a given item if you have correctly entered the Issue Unit and Warehouse Pack Size in the Master fields.

If you do not want to change the average issue unit cost, you can enter stock using the Stock Detail option, such as in the case of donations of drugs.

**LIFO- Last In First Out** (in local currency) - This is the issue unit cost for the last purchase of a specific item. This information is displayed on the Product Information screen in the Stock option. If the item price was FOB, this is specified on your screen AND THE LAST ISSUE UNIT COST IS DISPLAYED FOB. If the item price was CIF, this is specified on your screen AND THE LAST ISSUE UNIT COST IS DISPLAYED CIF. For example, if you received an order of I.V. Catheters at a unit cost of \$2.03, the Stock product information screen would indicate the unit cost as \$2.03.

**Warehouse Pack Prices** (in local currency) - When you make a purchase order or receive drugs through the receiving report, the price you enter is the price of the warehouse pack. INVEC-2 calculates the average issue unit cost from the warehouse pack price.

**Markup From Procurement Agency** (in percent) - This applies to orders processed through a procurement agency only. The markup is the percentage added to the supplier's invoice value. This is used to cover the functioning costs of the procurement office. The default value for this percentage is established using the Setup option (Chapter 12).

**Markup to Facilities** (in percentage) - This is a percentage of the requisition value which the MS adds on to the total value of orders placed by health facilities as a service charge. The default for this value is established using the Setup option (Chapter 12).

## PERFORMING SPECIAL FUNCTIONS

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## APPENDIX D - PERFORMING SPECIAL FUNCTIONS

This section is designed to provide insight when encountering special situations unique to the INVEC-2 program. The primary purpose of this section is to provide assistance in handling these situations that may arise while performing standard day-to-day procedures.

### Canceling a Purchase Order

In order to cancel a purchase order, any and all items must first be removed from the Item Details window. After the items have been deleted, the PO may then be deleted from the main PO: Purchase Order Header File. This step can only be done prior to activating the purchase order. Once the PO has been activated, it cannot be canceled or deleted from the system.

### Canceling a Sales Order/Issue

Sales orders can only be canceled prior to processing. All items must be deleted from the Item Details window and all Requisitions must be deleted from the Requisition file, first. Once all items have been removed, you may delete the requisition. Once the Sales Order has been processed, it cannot be deleted from the system.

### Changing Allocated Quantities

To change allocated quantities for a specific item, select the item from the Sales Order Item Details window, and edit the Quantity Authorized field to contain the correct number. Next choose the *Re-Process Item* option located at the lower left corner of the S.I.V. Item Details screen. This option will ask you to confirm your action to reprocess the sales order item. Choosing *Accept* will cause the allocated quantities to be changed. Please note that this can only be done after the sales order has been processed.

### Opening a Closed Tender

Not Possible! Care must be taken when completing processes in INVEC-2. Many automatic processes cannot be reversed once INVEC-2 has updated the system.

## Handling Donations

In the event that items are donated to your medical store, they should be added to stock in the following manner:

1. If the donated item is already listed in your Stock master file, select the item from the Stock master file main menu, and choose *Stock* from the Product Information window. Press <Ins> at the Stock Details File window, and complete the Inventory Stock Detail window. After entering Quantity on Hand, the system will ask you for a stock adjustment code. This field is linked to the validation file Adj. Reasons (pos.). Select *Donations* or enter the corresponding code. Enter the location of the items and accept your changes. The system will update all stock levels and note the changes in the Stock Adjustments History Files (Reports menu). This procedure will not cause the unit cost of the item to be updated.

If you wish to have INVEC-2 update the unit cost of the item, you should create a PO for the goods received and then create a receiving report according to the standard procedures.

2. If the donated item is not currently in your Stock master file, add the item to the stock database, and complete the Product Information screen. Proceed with the steps listed in 1. above.

## THERAPEUTIC CLASSIFICATIONS

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**APPENDIX E - THERAPEUTIC CLASSIFICATIONS****AHFS PHARMACOLOGIC CLASSIFICATIONS**

- 4:00 Antihistamine Drugs**
- 3:00 Anti-Infective Agents**
  - 8:04 Amebicides
  - 8:08 Anthelmintics
  - 8:12 Antibiotics
    - 8:12.02 Aminoglycosides
    - 8:12.04 Antifungal Antibiotics
    - 8:12.06 Cephalosporins
    - 8:12.07 Miscellaneous B-Lactam Antibiotics
    - 8:12.08 Chloramphenicol
    - 8:12.12 Macrolides
    - 8:12.16 Penicillins
    - 8:12.24 Tetracyclines
    - 8:12.28 Miscellaneous Antibiotics
  - 8:16 Antituberculosis Agents
  - 8:18 Antivirals
  - 8:20 Antimalarial Agents
  - 8:22 Quinolones
  - 8:24 Sulfonamides
  - 8:26 Sulfones
  - 8:28 Antitreponemal Agents\*
  - 8:32 Antitrichomonal Agents\*
  - 8:36 Urinary Anti-Infectives
  - 8:40 Miscellaneous Anti-Infectives
    - Anti-Infective Agents Available from CDC
- 10:00 Antineoplastic Agents**
  - ASHP TAB on Handling Cytotoxic and Hazardous Drugs
- 12:00 Autonomic Drugs**
  - 12:04 Parasympathomimetic (Cholinergic) Agents
  - 12:08 Anticholinergic Agents
    - 12:08.04 Antiparkinsonian Agents
    - 12:08.08 Antimuscarinics/Antispasmodics
  - 12:12 Sympathomimetic (Adrenergic) Agents
  - 12:16 Sympatholytic (Adrenergic Blocking) Agents
  - 12:20 Skeletal Muscle Relaxants
  - 12:92 Miscellaneous Autonomic Drugs
- 16:00 Blood Derivatives**
- 20:00 Blood Formation and Coagulation**
  - 20:04 Antianemia Drugs
    - 20:04.04 Iron Preparations
    - 20:04.08 Liver and Stomach Preparations\*
  - 20:12 Coagulants and Anticoagulants
    - 20:12.04 Anticoagulants
    - 20:12.08 Antiheparin Agents
    - 20:12.12 Coagulants
    - 20:12.16 Hemostatics
  - 20:16 Hematopoietic Agents
  - 20:24 Hemorrhologic Agents
  - 20:40 Thrombolytic Agents
- 24:00 Cardiovascular Drugs**
  - 24:04 Cardiac Drugs
  - 24:06 Antilipemic Agents
  - 24:08 Hypotensive Agents
  - 24:12 Vasodilating Agents
  - 24:16 Sclerosing Agents
- 28:00 Central Nervous System Agents**
  - 28:04 General Anesthetics\*
  - 28:08 Analgesics and Antipyretics
    - 28:08.04 Nonsteroidal Anti-Inflammatory Agents
    - 28:08.08 Opiate Agonists
    - 28:08.12 Opiate Partial Agonists
    - 28:08.92 Miscellaneous Analgesics and Antipyretics
  - 28:10 Opiate Antagonists
  - 28:12 Anticonvulsants
    - 28:12.04 Barbiturates
    - 28:12.08 Benzodiazepines
    - 28:12.12 Hydantoins
    - 28:12.16 Oxazolinediones
    - 28:12.20 Succinimides
    - 28:12.92 Miscellaneous Anticonvulsants
  - 28:16 Psychotherapeutic Agents
    - 28:16.04 Antidepressants
    - 28:16.08 Tranquilizers
    - 28:16.12 Miscellaneous Psychotherapeutic Agents\*
  - 28:20 Respiratory and Cerebral Stimulants
  - 28:24 Anxiolytics, Sedatives, and Hypnotics
    - 28:24.04 Barbiturates
    - 28:24.08 Benzodiazepines

- 28:24.92 Miscellaneous Anxiolytics, Sedatives,  
and Hypnotics
- 28:28 Antimanic Agents
- 32:00 Contraceptives\* (e.g., foams, devices)**
- 34:00 Dental Agents\***
- 36:00 Diagnostic Agents**
  - 36:04 Adrenocortical Insufficiency
  - 36:08 Amyloidosis\*
  - 36:12 Blood Volume\*
  - 36:16 Brucellosis\*
  - 36:18 Cardiac Function
  - 36:24 Circulation Time\*
  - 36:26 Diabetes Mellitus\*
  - 36:28 Diphtheria\*
  - 36:30 Drug Hypersensitivity
  - 36:32 Fungi
  - 36:34 Gallbladder Function
  - 36:36 Gastric Function
  - 36:38 Intestinal Absorption
  - 36:40 Kidney Function
  - 36:44 Liver Function
  - 36:48 Lymphogranuloma Venereum\*
  - 36:52 Mumps
  - 36:56 Myasthenia Gravis
  - 36:60 Thyroid Function
  - 36:61 Pancreatic Function
  - 36:62 Phenylketonuria\*
  - 36:64 Pheochromocytoma
  - 36:66 Pituitary Function
  - 36:68 Roentgenography
  - 36:72 Scarlet Fever\*
  - 36:76 Sweating\*
  - 36:80 Trichinosis\*
  - 36:84 Tuberculosis
  - 36:88 Urine and Feces Contents\*
    - 36:88.12 Ketones\*
    - 36:88.20 Occult Blood\*
    - 36:88.24 pH\*
    - 36:88.28 Protein\*
    - 36:88.40 Sugar\*
- 38:00 Disinfectants\* (for agents used on  
objects other than skin)**
- 40:00 Electrolytic, Caloric, and Water  
Balance**
  - 40:04 Acidifying Agents
  - 40:08 Alkalinizing Agents
  - 40:10 Ammonia Detoxicants
  - 40:12 Replacement Preparations
  - 40:16 Sodium-Removing Resins\*
  - 40:17 Calcium-Removing Resins
  - 40:18 Potassium-Removing Resins
  - 40:20 Caloric Agents
  - 40:24 Salt and Sugar Substitutes\*
  - 40:28 Diuretics
    - 40:28.10 Potassium-Sparing Diuretics
  - 40:36 Irrigating Solutions
  - 40:40 Uricosuric Agents
- 44:00 Enzymes**
- 48:00 Antitussives, Expectorants, and  
Mucolytic Agents**
  - 48:08 Antitussives
  - 48:16 Expectorants
  - 48:24 Mucolytic Agents
- 52:00 Eye, Ear, Nose, and Throat (EENT)  
Preparations**
  - 52:04 Anti-Infectives
    - 52:04.04 Antibiotics
    - 52:04.05 Antifungals\*
    - 52:04.06 Antivirals
    - 52:04.08 Sulfonamides
    - 52:04.12 Miscellaneous Anti-Infectives
  - 52:08 Anti-Inflammatory Agents
  - 52:10 Carbonic Anhydrase Inhibitors
  - 52:12 Contact Lens Solutions\*
  - 52:16 Local Anesthetics
  - 52:20 Miotics
  - 52:24 Mydriatics
  - 52:28 Mouthwashes and Gargles
  - 52:32 Vasoconstrictors
  - 52:36 Miscellaneous EENT Drugs
- 56:00 Gastrointestinal Drugs**
  - 56:04 Antacids and Adsorbents
  - 56:08 Antidiarrhea Agents
  - 56:10 Antiflatulents
  - 56:12 Cathartics and Laxatives
  - 56:14 Cholelitholytic Agents
  - 56:16 Digestants
  - 56:20 Emetics
  - 56:22 Antiemetics
  - 56:24 Lipotropic Agents\*
  - 56:40 Miscellaneous GI Drugs

- 60:00 Gold Compounds**
- 64:00 Heavy Metal Antagonists**
- 68:00 Hormones and Synthetic Substitutes**
  - 68:04 Adrenals
  - 68:08 Androgens
  - 68:12 Contraceptives
  - 68:16 Estrogens
  - 68:18 Gonadotropins
  - 68:20 Antidiabetic Agents
    - 68:20.08 Insulins
    - 68:20.20 Sulfonylureas
    - 68:20.92 Miscellaneous Antidiabetic Agents
  - 68:24 Parathyroid
  - 68:28 Pituitary
  - 68:32 Progestins
  - 68:34 Other Corpus Luteum Hormones\*
  - 68:36 Thyroid and Antithyroid Agents
    - 68:36.04 Thyroid Agents
    - 68:36.08 Antithyroid Agents
- 72:00 Local Anesthetics**
- 76:00 Oxytocics**
- 78:00 Radioactive Agents\***
- 80:00 Serums, Toxoids, and Vaccines**
  - 80:04 Serums
  - 80:08 Toxoids
  - 80:12 Vaccines
    - Immunobiologic Agents Available from CDC
- 84:00 Skin and Mucous Membrane Agents**
  - 84:04 Anti-Infectives
    - 84:04.04 Antibiotics
    - 84:04.06 Antivirals
    - 84:04.08 Antifungals
    - 84:04.12 Scabicides and Pediculicides
    - 84:04.16 Miscellaneous Local Anti-Infectives
  - 84:06 Anti-Inflammatory Agents
  - 84:08 Antipruritics and Local Anesthetics
  - 84:12 Astringents\*
  - 84:16 Cell Stimulants and Proliferants
  - 84:20 Detergents
  - 84:24 Emollients, Demulcents, and Protectants
    - 84:24.04 Basic Lotions and Liniments\*
    - 84:24.08 Basic Oils and Other Solvents\*
    - 84:24.12 Basic Ointments and Protectants
    - 84:24.16 Basic Powders and Demulcents\*
  - 84:28 Keratolytic Agents
  - 84:32 Keratoplastic Agents
  - 84:36 Miscellaneous Skin and Mucous Membrane Agents
  - 84:50 Depigmenting and Pigmenting Agents
    - 84:50.04 Depigmenting Agents
    - 84:50.06 Pigmenting Agents
  - 84:80 Sunscreen Agents
- 86:00 Smooth Muscle Relaxants**
  - 86:08 Gastrointestinal Smooth Muscle Relaxants\*
  - 86:12 Genitourinary Smooth Muscle Relaxants
  - 86:16 Respiratory Smooth Muscle Relaxants
- 88:00 Vitamins**
  - 88:04 Vitamin A
  - 88:08 Vitamin B Complex
  - 88:12 Vitamin C
  - 88:16 Vitamin D
  - 88:20 Vitamin E
  - 88:24 Vitamin K Activity
  - 88:28 Multivitamin Preparations
- 92:00 Unclassified Therapeutic Agents**
- 94:00 Devices\***
- 96:00 Pharmaceutical Aids\***

\* Category is currently not in use in the printed version of *AHFS Drug Information 94* ®

## WHO THERAPEUTIC CATEGORIES

1. Anaesthetics
  - 1.1. General anaesthetics and oxygen
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Source: **The Use of Essential Drugs, WHO Model List of Essential Drugs, TRS#796, 1990**

## GLOSSARY

## GLOSSARY

**ABC Value Analysis** - Method by which drugs are divided, according to their annual usage (unit cost times annual consumption), into Class A items (the 10 to 20 percent of the items which account for 70 to 80 percent of funds spent), Class B items (with intermediate usage rates), and Class C items (the vast majority of items with low individual usage, the total of which accounts for less than 25 percent of the funds spent). ABC analysis can be used to give priority to Class A items in procurement, inventory control, and port-handling.

**Active Ingredient** - That portion of a drug which produces the intended therapeutic effect.

**Annual Purchasing** - A periodic inventory control system in which drug requirements are determined and orders are placed once each year.

**ATC Class (Anatomical Therapeutic Chemical)** - An international code maintained by the World Health Organization (WHO).

**Back Order** - The order for a product which is currently out of stock. These back orders are eventually satisfied when a new supply of the product becomes available.

**Bin Card** - Card bearing record of receipts, issues, and balances held in the stores. The bin card is usually kept in the warehouse with the physical stock.

**Brandname** - The registered trademark name given to a specific drug product by its manufacturer.

**Budget** - A plan that includes an estimate of future costs and revenues arising from specific activities. These costs should be separated as operating costs or development costs.

**C.I.F. (Cost, Insurance, Freight)** - When a seller quotes C.I.F., the price of the cost of the goods, marine insurance, and all transportation charges to the named destination point are included.

**Cost** - Cost in drug supply systems is one of three types: drug costs, operating costs, and development costs.

**Currency** - A medium of fiscal exchange, including coins, bank notes, government notes, etc.

**Demand** - The desire to purchase a product accompanied by the means of payment. Also the requirement rate of any item in terms of the quantity needed per unit of time.

**Dosage Form** - The form of a completed pharmaceutical product as it is administered to a patient, for example a tablet, oral solution, capsule or injection.

**Exchange Rate** - The rate at which currency of one country is exchanged for the currency of another country.

**FOB (Free On Board)** - This type of shipment covers transport only as far as the port of departure. A pricing strategy in which the seller bears all the cost up to the point of placing the product onboard a commercial carrier at the point of the product's origin. The buyer bears or arranges for all costs from then on.

**Formulary** - A list of approved or recommended drugs compiled by an individual practitioner or a group of medical and scientific professionals for the purpose of a specific medical practice or supply system.

**Freight** - The rate charged for carrying goods. The word is also applied to the items to be carried, but the correct term for them is cargo.

**Functions** - In a drug supply system, the major functions are: selection, procurement, distribution, and use.

**GMP (Good Manufacturing Practices)** - Performance standards for pharmaceutical manufacturers established by the World Health Organization and many national governments; including criteria for personnel, facilities, equipment, materials, manufacturing operations, labeling, packaging, quality control, and in most cases, stability testing.

**Generic Name** - The official name of a drug, regardless of the manufacturer. The generic or "medical" name is generally the International Nonproprietary Name (INN) established by a body of the World Health Organization.

**Inventory** - The stock kept on hand at any point in order to protect against uncertainty, permit bulk purchasing, minimize waiting time, increase transportation efficiency, and buffer against seasonal fluctuations.

**Issue** - To distribute a specific amount of an item to an intermediary stocking facility or a clinical facility.

**Issue Unit** - The unit in which inventory is maintained. This quantity must be known whenever new issues are initiated.

**LIFO** - Last In First Out. A costing method used to determine unit pricing based on the last item purchased.

**Lead Time** - The time interval needed to complete the procurement cycle. It begins at the time the need for new stock is recognized and ends when that stock is received and available for issue.

**Level Of Use** - A classification of drugs according to the medical practitioners who use them and the clinical facilities at which they are used.

**Network** - A group of computers connected together in a small area for the purpose of sharing peripherals, applications, and files.

**Open Tender** - The formal procedure by which quotations for the supply of drugs under their medical (generic) names are invited from any manufacturer or representative on a worldwide basis, subject to the terms and conditions specified in the tender invitation.

**Pharmacist** - An individual who has received bachelor level training in pharmaceutical sciences, dispensing practices, industrial pharmacy, and other aspects of pharmacy.

**Procurement** - The process of acquiring supplies, including those obtained by purchase, donation, and manufacture.

**Quality Assurance** - The management activities required to assure that the drug which reaches the patient is safe, effective, and acceptable to the patient.

**RAM** - Random Access Memory. Memory which PCs use to store information. This type of memory is volatile, therefore it loses the information, once the computer loses power.

**Receiving Report** - A document indicating when items were received, from whom, the total quantity in the shipment, and the amount of damaged or lost stock.

**Report** - A document prepared periodically to summarize product consumption and expenditures; used to project future product needs, to revise budgets, and to assess product utilization.

**Server** - A computer used to share files and applications.

**Stock** - Stored goods on hand.

**Supplier** - Any individual or company who agrees to provide items, regardless of whether that party is the manufacturer.

**Tender** - The procedure by which competing bids are entered for a particular contract.

**Therapeutic Categories** - Divisions of drugs according to their clinical use. The categories often have a system for assigning numbers.

**Uninterruptable Power Supply (UPS)** - A device used to prevent power loss to a machine, in the event the main AC power fails. The UPS unit usually connected to a PC and has enough power to allow the PC to properly function for a specific period of time, after a general power outage. The primary purpose is to allow the system to be turned off properly without loss of data.

**VEN System** - A system of setting priorities for drug purchasing and stock keeping, in which drugs are divided according to their health impact into Vital drugs, Essential drugs, and Non-essential drugs.

**Weighted Average (AVG)** - Calculated by averaging the cost of all batches of an item that are in stock. Therefore each time a new shipment is received this amount must be recalculated.

**Workstation** - A computer which has the capability of accessing other machines. Also called a Client.

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