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Trip Report

El Salvador: Malaria Information System

July 16–20, 1990

by

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I. Executive Summary

In response to a request from USAID/San Salvador, the Vector Biology and Control (VBC) Project sent me to do a follow-up assessment of the Malaria Information System, complete the design plan to computerize the MIS (Management Information System), and make recommendations for future system needs. This activity took place from July 16 to July 20, 1990.

The current manual information system is capable of delivering timely information in the form of reports to the decision makers with adequate speed, but this requires a tremendous effort at every step of the information process. The computerization of this information system must build on previous efforts to help eliminate inconsistencies and redundancies, and provide better and more flexible reports and graphics.

A computerized MIS was developed in San Salvador, and completed in January. Its subcomponents are: epidemiology, spraying, entomology and supplies. All components are ready for data entry.

At the time of my departure, epidemiology data was being entered simultaneously on two computers, there was a battery of reports and graphs, and a data entry person had begun working under contract.

Key Recommendations:

- Complete and make the epidemiology subsystem operative.
- Train and allocate enough key-punchers for epidemiology data entry.
- Complete 1990 data entry (every smear).
- Train enough personnel in report-making, Harvard Graphics and Foxbase (database).
- Buy a hard disk drive, at least 80 Mb, for the 386sx computer, two math coprocessors, one 387sx and another 287 10 Mhz.

II. Introduction

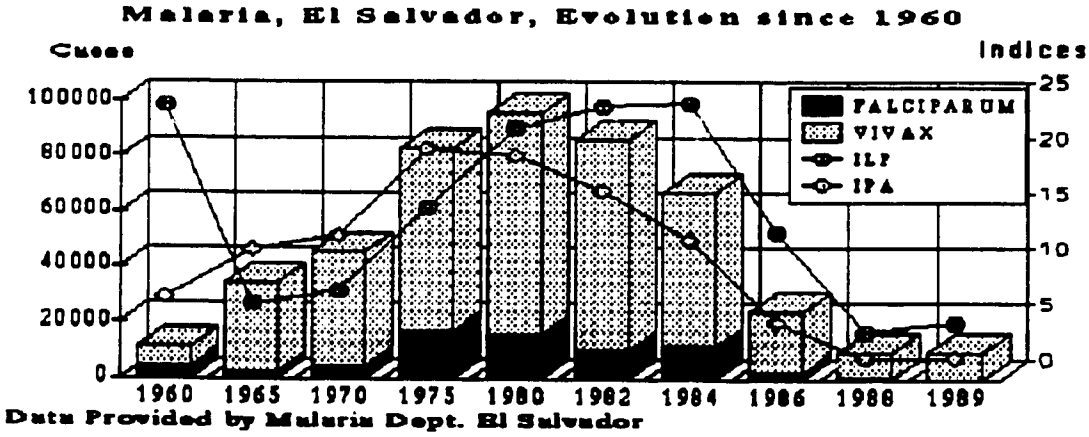
A. Background

1. Malaria Department

The malaria program in El Salvador has a recent history of success. In the 1980s most of the malaria programs in Central and South America suffered from many problems, and the circumstances in those countries are far from good. It could be said that malaria is out of control in almost everywhere in the subcontinent. However, in El Salvador since 1980 there has been a substantial and constant decline in the number of reported cases.

In 1970, El Salvador had 45,436 cases and an IPA of 12.8. Ten years later, El Salvador had 95,835 cases, of which 15,782 were caused by *P. falciparum*. The same year the Annual Parasitic index (IPA) was 20, and the country had the dubious distinction of producing almost half of the malaria cases from all of Central America.

Figure 1



In 1989, only 9,605 cases were reported, and only 40 were reportedly caused by *P. Falciparum*. IPA was 1.86 and the country was providing only seven percent of the total number of malaria cases reported in Central America (Figure 1).

This success was in part the result of a simple stratification strategy coupled with appropriate, timely decision making. An extraordinary effort from everyone involved in the process was necessary to make the strategy work.

The strategy required a division of the country by regions, one hyperendemic (from which more than 90 percent of the cases came), another mesoendemic and finally an endemic one. By now, the blood smears coming from hyperendemic regions are examined in the lab and the results sent to the central office in an average of eight days.

The medium-level managers at the regional level and the high-level managers at the central office can and certainly do use the information that comes every week to make decisions. There is no centralization of decision making. This manual system works rather smoothly. The only problem is that it is not flexible enough. *Ad hoc* queries are very difficult, though not impossible, to deal with.

B. Scope of work

To work with Mauricio Sauerbrey and the MOH staff to:

1. Analyze the computer-based information system currently being used by MOH for the malaria control program (with the modifications in place).

2. Make recommendations on:

   - which components to include or exclude;
   - training required by MOH staff;
   - further equipment needs.

3. Trip Objectives:

   - To install the system (every program) in the 386sx computer that Malaria has acquired.

   - To develop a report module containing reports that will identify hyperendemic localities.

   - To develop a graphics module with templates to do weekly, monthly and yearly graphics, by department and region.

- To evaluate the feasibility of having data entered in both computers concurrently.
- To do a follow-up to the process of developing a sound information system.
- To make recommendation for further development.

C. Chronology of the visit

I arrived in San Salvador Sunday, July 15, 1990. Monday, July 16, I had a meeting with MSCI staff. Later I talked with Dr. Mauricio Sauerbrey about the condition of the information system at Malaria and in the MOH.

On July 19, Dr. Sauerbrey and I met with the director of the program, Dr. Angel Guerra. We discussed what the malaria program needed from the computerized system. We agreed on which reports and graphs were more useful and should be developed first.

Wednesday and Thursday I wrote the code for the set of reports and graphics.

I discussed my preliminary report with Dr. Sauerbrey, Dr. Guerra and Ms. Sandy del Prado, APSISA Project Manager, Friday, July 19. I made a presentation, showing them different reports and graphs.

Persons who were present in at least one meeting:

USAID/APSISA:	Ms. Sandy del Prado
MSCI/VB&C:	Dr. Mauricio Sauerbrey
MSCI/Systems adivsor:	Ing. Gustavo Soriano
Director of Malaria Program:	Dr. Angel Guerra
Field Operations:	Sr. Jesus Guervara
Keypuncher:	Sr. Ramos

III. Findings

A. Analysis of current malaria information system

1. Approach used

Files:

Filenames are variable and depend on certain groups of initials and two numbers for the year.

	read	write		
			MOVSEM	Weekly transactions
			FICHA	Locality card
MAELOC	EPM100		SUMSEM	Acumul. from Wk/Mo/Year
Localities			CONTROL	System Control

Databases	Description
MOVSEM = MO1990	Accumulates every characteristic of the smears from a given year (weekly transactions)
FICHA = FL1990	Information about the number of cases by species and source from a given year (epidemiologic card by locality)
SUMSEM = SU1990,	Accumulates week after week different characteristics of the smears for reports (weekly sums)

MAELOC = MAELOC	Master database of localities, contains information about the population, number of houses, and last time that info was modified
CONTROL = CONTROL	Contains some current data about the week, such as dates and logical variables.

Programs	Description
Already in use	
EPM100.PRG	Data entry of individual smears
EMP200.PRG	Monthly and annual closing
EMP300.PRG	Reports
EMP400.PRG	Data entry of localities
EMP500.PRG	Data entry of the "tarjeta epidemiologica"
EMP600.PRG	Rebuilding of index files
Written in this visit	
EMP700.PRG	Report: Positivity by species, every week, from the whole country. This report is divided by regions and departments. Any given week can be chosen. Information from the last four weeks and the current year is given. See Annex B.
EMP710.PRG	Report: Positivity by species, from the whole country. The difference between this report and the former is that this one presents percentage of positive smears. Any given week can be chosen.

EMP800.PRG	Report: Positivity by species every week by region. Any given week can be chose. Information from the last four weeks and the current year is given by department.
EMP900.PRG	Report: Positivity by species, on a weekly basis, by department. Any given week can be chosen, and every locality from that department is shown, with information about the last week, the last four weeks and the current year.

Every report allows the user to choose printer options, screen listing and print to files, or any combination of the three.

These reports are already in the reports menu of the original program. To access them, the user has to go to the epidemiology menu and then to the reports menu.

Two new indexes have been added to the main database MO1990. Their names are HMO 1990.idx and LMO 1990idx. The indexing fields are *codloc, diagno* and *semana.* The difference is that the first index (H) uses only the first two characters in the field codloc. The new index files have been added to the data entry program, so they do not need to be reindexed until all the indexes need it.

The Program EMP300.prg has been modified so that the new reports can be accessed from within the main program as procedures.

EMP100.prg and EMP600.prg have been also modified (index files).

Graphics

Using Harvard Graphics, I built three templates, one for weekly information, another for monthly information, and the last for annual information. They are installed in the 386sx computer and use the output from the "print to file" option of the EPM800.PRG program.

The option "print to file" produces an ASCII character, which is exported to the subdirectory where Harvard Graphics is located. Note that the EPM800 report can be produced every week, so that every week, there could be enough information to make three graphs right away, using the three templates that reside in the hard disk.

The procedure in Harvard graphics is as follows: First one calls the template and later the ASCII file where the information from the current week was printed. The graph should be made instantly. After minor modifications, such as the week number, it is ready to print.

Obviously, this is not the only way graphs can be made. Once the users have taken a course and know how to work with the program, they will be able to make many graphs using raw data or computer data.

General procedure for using two computers for data entry

Data is entered in a file where every transaction is recorded (say every smear). There are database files where numbers are accumulated every time new data is entered. Every record in every file has to be unique and the units are always different for each database file.

Two computers can be used for data entry if the following requirements are met:

- Given programming restrictions, no data entry should be done in the same week by both computers. (It is also not practical).

- Both computers can be used to enter data, given that they open and close different weeks (they have to complete a given week).

- A good way to handle this is to use the 386sx computer for "real time" data entry (current week), and the 286 computer to enter the backlog (from week 8 to week 25).

- When the 286 computer has finished, the information should be merged using this simple procedure:

286 computer:

```
use mo1990
dele all for semana = > 7
pack
copy to a:mo1990.dbf && use a 1.2 Mb
(DSHD), if it is not enough, do a backup
with FASBACK PLUS.
```

386sx computer:

```
use mo1990 index HMO1990, IMO1990,
JMO1990, LMO1990.
Append from a:mo1990.dbf
reindex
```

The same procedure should be used for the file SU1990.dbf. The only complication could come from the long string where the results are kept. The way to go is to make three strings: one that keeps the information of the seven weeks, another for the first 26 weeks, and another for the sum of the first seven weeks and the weeks that follow the 27th to the moment when the merge takes place.

I recommend making backups of every file before the procedure takes place. After the merge, do a quick checkout to see if the strings are all right. If that is the case, then the 386sx can be used just for epidemiology and the 286 for entomology, spraying and entomology.

B. Problems the computerized system is facing

- o No formal training has been introduced, but the personnel who work with the computers are highly motivated.

- o Data entry had been extremely slow (four weeks worth of data entry in four months), mostly due to lack of support for data entry personnel and power failures that corrupted index files.

- o The new computer (386sx) does not have even the minimum requirements established by the consultant. The worst part is the tiny capacity of the hard drive (only 40 Mb).

C. Proposed solutions

- The informatics department has agreed to supervise the whole system and to teach at least two computer courses.

- A data entry person is going to be paid to work for three months to enter from week 8 to week 25.

- Both computers can be used for data entry, but when the backlog is finished, only one should be necessary to keep pace with the manual system.

- A module containing reports and graphs has been prepared so the managers can use the information to make decisions.

IV. Recommendations

A. Growth Projections:

Short term:

Every year the database (with all its files) is going to grow by 20 Mb. By 1991, the 40 Mb disk drive (from the new computer) is going to be completely full.

A new hard drive is needed. It should be an ESDI with at least 120 Mb and with less than 20 milliseconds access time. The older hard drive can be swapped to the 286 computer.

Math coprocessors for both computers are highly desirable because the software that runs the databases runs almost twice as fast with them in place (for certain processes)

Long term:

This most import recommendation in the long term is to do the data entry at the regional level, so they can make their own decisions at the operational level and the information is also available immediately for high-level managers in San Salvador. This would strengthen the decentralization process.

This recommendation implies buying new computers that should have at least this configuration: 386 processor running at 25 MHz, 150 Mb Hard Disk, 80387 math coprocessor and network ready.

As soon as there are several computers at the central office, a network should be considered. It is difficult to recommend a LAN. The recommendation may well change in the near future, but for now the best way to go is the Novell Netware 386.

B. Training required by Malaria Staff

For keypunchers from epidemiology (2), spraying (2) and supplies (2), a short course in database management, report making and graphs, one week, 10 hours. Two additional courses in database management (intermediate and advanced), one week 20 hours each. The goal is to train them adequately in data entry.

The courses can be given by the Informatics Department at the MOH, with help from APSISA, because they already have a training program for their personnel.

C. Required Hardware

- o A ESDI hard disk drive. Capacity 150 Mb. ESDI controller card.
- o A 80287 math co processor at 10 Mhz for the 286 computer and a 80387sx for the new 386sx computer.

D. Required Software

The DMBS Foxbase 386 for the 386 computers.

Annexes

A. Operations Manual for Reports and Graphics
B. Outputs of the Reports Battery
C. Listing of the Programs Code

MANUAL DE PROCEDIMIENTOS PARA EL USO DE LOS REPORTES Y GRÁFICOS

Reportes:

Entrar al sistema de la manera usual. En el menú Epidemiología, escoger REPORTES. Una vez dentro del submenú reportes escoger cualquiera de ellos.

Todos los reportes entrarán a una pantalla donde se preguntará hacia donde desea dirigir el reporte:

A la impresora S o N

A un archivo S o N — Si contesta S nombre del archivo, de tres letras (la extensión txt será automáticamente añadida)

A la pantalla S o N

Cualquiera de las tres opciones se puede escoger en combinación con las otras opciones.

A continuación en todos los reportes pedirá:

Semana: 1 a la 52 (no permite otra opción)

Región: 1 a 5 (en la serie 800)

Departamento: dos dígitos (en la serie 900)

Gráficos:

En el prompt del sistema operativo instruir los siguientes comandos:

C: > cd hg

C:\HG > hg (aparecerá el menú del programa Harvard Graphics)

Get/Save (moverse con el cursor y aplastar el enter)

Get Template (moverse con el cursor y aplastar enter)

C:\HG (Cambiar el directorio default)

Template	(Los templates aparecerán, escoger uno y aplastar la tecla enter)
ESC	(aplastar ESC tantas veces sea necesario hasta salir al menú principal)
Import/Export	(escoger y aplastar enter)
ASCII	(escoger y aplastar enter)
C:\HG	(cambiar el directorio si es necesario)
graf.txt	(escoger el archivo graf.txt y aplastar enter)
	(definir las columnas deseadas -semana, mes o año y aplastar F10)
ESC	(aplastar ESC hasta salir al menú principal)
F2	(para ver el gráfico)
Output	(para imprimir)

Listado del módulo de reportes escrito

```
PROCEDURE EPM300        && (modificado por Robertino Mera)
* Program...: EPM300.PRG
* Author....: Ing Jose Edgardo Palomo 27-10-89
* Notice....: Emision de Reportes
TITULO = "Emisión de Reportes"
MIT = INT((80 - LEN(TITULO))/2 )
DIMENSION M(40,30)
STORE 0 TO M
SELE A
USE CONTROL
KSEMANA=SEMANA
KANO=ANO
LANO=ANO-1
SUMSEM="SU"+STR(KANO,4)
ISUMSEM="I"+SUMSEM
JSUMSEM="J"+SUMSEM
SELE B
USE &SUMSEM INDEX &ISUMSEM,&JSUMSEM
SELE C
USE MAELOC INDEX IMAELOC
DO WHILE .T.
CHOICE = 6
CLEAR
@ 1,0 TO 20,79 DOUBLE
@ 5,10 to 18,70 double
@ 2,70 say DATE() PICTURE "@E"
@ 3,70 say TIME()
@ 2,MIP SAY  EMPRESA
@ 3,MIP SAY EMPRESA1
@ 5,MIT SAY  TITULO
@ 7,22 PROMPT "1. Informe Semanal de Casos"
@ 8,22 PROMPT "2. Informe Semanal del Pais"
@ 9,22 PROMPT "3. Informe Semanal del Pais: ILP"
@ 10,22 PROMPT "4. Informe Semanal por Regiones"
@ 11,22 PROMPT "5. Informe Semanal por Departamentos"
@ 12,22 say   "6."
@ 13,22 SAY   "7. "
@ 14,22 say   "8."
@ 15,22 say   "9."
@ 16,22 PROMPT "0.  Menu Anterior"
MENU TO CHOICE
DO CASE
  CASE CHOICE = 1
    do repo
  CASE CHOICE = 2
    do EPM700
  CASE CHOICE = 3
    do epm710
  CASE CHOICE = 4
    do epm800
  CASE CHOICE = 5
    do epm900
  OTHERWISE
    CLOSE ALL
    return
ENDCASE
ENDDO
*-----------------------------------
PROCEDURE REPO
```

```
STORE " " TO PANTALLA
store " " to pausa
store " " to fin
store " " to seguro
M=0
STORE 1 TO pagenum
STORE 0 TO TOT1
STORE 0 TO TOT2
STORE 0 TO TOT3
STORE 254 TO line
titrep="Informe de Casos, Semana : "+STR(KSEMANA,2)
STORE (128-LEN(TITREP))/2+1 TO T8
* —Open the datafile and print the report.
CLEAR
@ 1,0 TO 20,79 DOUBLE
@ 5,10 TO 18,70 DOUBLE
@ 2,MIP SAY empresa
@ 3,MIP SAY EMPRESA1
@ 4,MIT SAY  TITULO
@ 5,28 say "- L I S T A D O -"
@ 2,70 SAY DATE() PICTURE "@E"
@ 3,70 say TIME ()
STORE "I" TO SALIDA
store " " to seguro
DO while seguro < > "S" .and. seguro < > "N"
SEGURO= "S"
@ 10,15 SAY "Salida     I m p r e s a  "
@ 14,15 say "Esta seguro de emitir el reporte < S/N > : ";
      GET  Seguro picture "!"
READ
store upper(seguro) to seguro
ENDDO
IF  seguro = "N"
   RETURN
ENDIF
SELE B
SEEK STR(KSEMANA,2)
DO WHILE ( .NOT. EOF()) ( .AND. SEMANA < =KSEMANA )
  FIL=CLASE
  WCOL=1
  DO WHILE WCOL< =16
    M(FIL,WCOL)= M(FIL,WCOL)+VAL(SUBSTR(DATSEM,(WCOL-1)*5+1,5))
    WCOL=WCOL+1
  ENDDO
  IF FIL < =14
  FIL1=19+REGION
  WCOL=1
  DO WHILE WCOL< =16
    M(FIL1,WCOL)= M(FIL1,WCOL)+VAL(SUBSTR(DATSEM,(WCOL-1)*5+1,5))
    M(25, WCOL)= M(25 ,WCOL)+VAL(SUBSTR(DATSEM,(WCOL-1)*5+1,5))
    M(26, WCOL)= M(26 ,WCOL)+VAL(SUBSTR(DATMES,(WCOL-1)*5+1,5))
    M(27, WCOL)= M(27 ,WCOL)+VAL(SUBSTR(DATANO,(WCOL-1)*5+1,5))
    WCOL=WCOL+1
  ENDDO
  ENDIF
  IF FIL < =14
  FIL1=30+REGION
  WCOL=1
  DO WHILE WCOL< =12
    M(FIL1,WCOL)= M(FIL1,WCOL)+VAL(SUBSTR(DATSEM,80+(WCOL-1)*5+1,5))
    M(36, WCOL)= M(36 ,WCOL)+VAL(SUBSTR(DATSEM,80+(WCOL-1)*5+1,5))
    WCOL=WCOL+1
```

```
      ENDDO
      ENDIF
      SKIP
    ENDDO
    SUMSEM = "SU" + STR(LANO,4)
    IF FILE(SUMSEM)
      ISUMSEM = "I" + SUMSEM
      JSUMSEM = "J" + SUMSEM
      SELE D
      USE &SUMSEM INDEX &ISUMSEM,&JSUMSEM
      DO WHILE ( .NOT. EOF()) ( .AND. SEMANA < = KSEMANA )
        FIL = CLASE
        IF FIL < = 14
          WCOL = 1
          DO WHILE WCOL < = 16
            M(28, WCOL) = M(28 ,WCOL) + VAL(SUBSTR(DATSEM,(WCOL-1)*5 + 1,5))
            M(29, WCOL) = M(29 ,WCOL) + VAL(SUBSTR(DATMES,(WCOL-1)*5 + 1,5))
            M(30, WCOL) = M(30 ,WCOL) + VAL(SUBSTR(DATANO,(WCOL-1)*5 + 1,5))
            WCOL = WCOL + 1
          ENDDO
        ENDIF
      ENDDO
    ENDIF
    FIL = 1
    DO WHILE FIL < = 36
      WCOL = 1
      DO WHILE WCOL < = 4
        COL = (WCOL-1)*4 + 1
        WZ = 1
        DO WHILE WZ < = 3
          M(FIL,COL) = M(FIL,COL) + M(FIL,COL + WZ)
          WZ = WZ + 1
        ENDDO
        WCOL = WCOL + 1
      ENDDO
      FIL = FIL + 1
    ENDDO
    DO CASE
      CASE SALIDA = "P"
        STORE 21 TO pagelen
        STORE "S" TO PANTALLA
      CASE SALIDA = "I"
        SET device TO PRINT
        STORE 63 TO pagelen
      OTHERWISE
        CLOSE DATA
        RETURN
    ENDCASE
    STORE "S" TO PRIPAG
    FIL = 1
    SELE C
    DO WHILE FIL < = 36
      IF line > pagelen
        IF SALIDA < > "P"
          SET PRINT ON
          ? CHR (15)
          IF PRIPAG = "S"
            STORE "N" TO PRIPAG
          ELSE
            LINE = 0
            EJECT
          ENDIF
```

```
      ENDIF
      @ 1,2 SAY "PAG. "
      @ 1,7 SAY STR(pagenum,3)
      @ 1,T8-5 SAY EMPRESA
      @ 2,T8-5 SAY EMPRESA1
      @ 2,119 SAY DATE() PICTURE "@E"
      @ 3,T8  say TITREP
      @ 3,119 SAY TIME()
      @ 5,1  SAY "Agrupación  ....Colaborador Voluntario..."
      @ 5,43 SAY ".......Busqueda Activa......"
      @ 5,72 SAY ".....Servicio Medico..... .....Encuestas Especiales..."
      @ 6,1  SAY "            Lam.Exa. Vivax  Falci. Asoc. "
      @ 6,43 SAY "Lam.Exa. Vivax  Falci. Asoc."
      @ 6,72 SAY "Lam.Exa. Vivax  Falci. Asoc. Lam.Exa. Vivax  Falci. Asoc."
      @ 6,1  SAY "____________ _____ _____ _____ _____"
      @ 6,43 SAY "_____ _____ _____ _____"
      @ 6,72 SAY "_____ _____ _____ _____ _____ _____ _____ _____"
      STORE 7 TO LINE
      STORE  pagenum+1 TO pagenum
    ENDIF
* —Print detail line.
    DO CASE
     CASE FIL =1
       @ LINE,1 SAY "DPTOS.     "
       LINE = LINE+1
     CASE FIL =15
       LINE = LINE +1
       @ LINE,1 SAY "PRIORIDAD  "
       LINE = LINE +1
     CASE FIL =20
       LINE = LINE +1
       @ LINE,1 SAY "REGIONES"
       LINE = LINE + 1
     CASE FIL = 25
      LINE=LINE+1
    @ LINE ,1  SAY "Agrupación  ....Colaborador Voluntario..."
    @ LINE ,43 SAY ".......Busqueda Activa......"
    @ LINE ,72 SAY ".....Servicio Medico..... .....Encuestas Especiales..."
      LINE = LINE+1
    @ LINE,1 SAY STR(KANO,4)
    @ LINE,13 SAY            "Lam.Exa. Vivax  Falci. Asoc. "
    @ LINE,43 SAY "Lam.Exa. Vivax  Falci. Asoc."
    @ LINE,72 SAY "Lam.Exa. Vivax  Falci. Asoc. Lam.Exa. Vivax  Falci. Asoc."
    @ LINE,1  SAY "____________ _____ _____ _____ _____"
    @ LINE,43 SAY "_____ _____ _____ _____"
    @ LINE,72 SAY "_____ _____ _____ _____ _____ _____ _____ _____"
      LINE = LINE +1
     CASE FIL = 28
      LINE=LINE+1
    @ LINE ,1  SAY "Agrupación  ....Colaborador Voluntario..."
    @ LINE ,43 SAY ".......Busqueda Activa......"
    @ LINE ,72 SAY ".....Servicio Medico..... .....Encuestas Especiales..."
      LINE - LINE+1
    @ LINE,1 SAY STR(LANO,4)
    @ LINE,13 SAY            "Lam.Exa. Vivax  Falci. Asoc. "
    @ LINE,43 SAY "Lam.Exa. Vivax  Falci. Asoc."
    @ LINE,72 SAY "Lam.Exa. Vivax  Falci. Asoc. Lam.Exa. Vivax  Falci. Asoc."
    @ LINE,1  SAY "____________ _____ _____ _____ _____"
    @ LINE,43 SAY "_____ _____ _____ _____"
    @ LINE,72 SAY "_____ _____ _____ _____ _____ _____ _____ _____"
      LINE = LINE +1
     CASE FIL = 31
```

```
    LINE = LINE+1
  @ LINE, 1  SAY "Mes de Toma: Muestras d e l  M e s..."
  @ LINE, 43 SAY ".Muestras del Mes Anterior.."
  @ LINE ,72 SAY ".Muestra.de hace 2 ó + Meses"
    LINE=LINE+1
  @ LINE,13 SAY            "Lam.Exa. Vivax  Falci. Asoc. "
  @ LINE,43 SAY "Lam.Exa. Vivax  Falci. Asoc."
  @ LINE,72 SAY "Lam.Exa. Vivax  Falci. Asoc."
  @ LINE,1  SAY "_____ _____ _____ _____ _____"
  @ LINE,43 SAY "_____ _____ _____ _____"
  @ LINE,72 SAY "_____ _____ _____ _____"
    LINE = LINE +1
  ENDCASE
  NOMGRU=" "
  IF FIL  <=9
    KFIL  ="0"+STR(FIL  ,1)+"      "
    SEEK SUBSTR(KFIL  ,1,8)
    IF FOUND()
      NOMGRU=SUBSTR(NOMLOC,1,12)
    ENDIF
  ENDIF
  IF FIL  >9 .AND. FIL   <=14
    KFIL  =STR(FIL  ,2)+"      "
    SEEK SUBSTR(KFIL  ,1,8)
    IF FOUND()
      NOMGRU=SUBSTR(NOMLOC,1,12)
    ENDIF
  ENDIF
  IF FIL   >14 .AND. FIL <=19
    NOMGRU="        ->"+STR(INT(FIL-14),1)
  ENDIF
  IF FIL>19 .AND. FIL<=36
    DO CASE
      CASE FIL = 20 .OR. FIL =31
          NOMGRU = "Occidental"
      CASE FIL = 21 .OR. FIL =32
          NOMGRU = "Central"
      CASE FIL = 22 .OR. FIL = 33
          NOMGRU = "Metropolitana"
      CASE FIL = 23 .OR. FIL =34
          NOMGRU = "Paracentral"
      CASE FIL = 24 .OR. FIL = 35
          NOMGRU = "Oriental"
      CASE FIL = 25 .OR. FIL =28
          NOMGRU = "Semana    "
      CASE FIL = 26 .OR. FIL =29
          NOMGRU = "M e s   "
      CASE FIL = 27 .OR. FIL =30
          NOMGRU = "A n o   "
      CASE FIL = 36
          NOMGRU = "T o t a l "
    ENDCASE
ENDIF
@ LINE,1    SAY NOMGRU
@ line, 14 SAY M(FIL,1) PICTURE "999,999"
@ line, 22 SAY M(FIL,2) PICTURE "99,999"
@ line, 29 SAY M(FIL,3) PICTURE "99,999"
@ line, 36 SAY M(FIL,4) PICTURE "99,999"
@ line, 43 SAY M(FIL,5) PICTURE "999,999"
@ line, 51 SAY M(FIL,6) PICTURE "99,999"
@ line, 58 SAY M(FIL,7) PICTURE "99,999"
@ line, 65 SAY M(FIL,8) PICTURE "99,999"
```

```
    @ line, 72 SAY M(FIL,9) PICTURE "999,999"
    @ line, 80 SAY M(FIL,10) PICTURE "99,999"
    @ line, 87 SAY M(FIL,11) PICTURE "99,999"
    @ line, 94 SAY M(FIL,12) PICTURE "99,999"
  IF FIL <=30
    @ line,101 SAY M(FIL,13) PICTURE "999,999"
    @ line,109 SAY M(FIL,14) PICTURE "99,999"
    @ line,116 SAY M(FIL,15) PICTURE "99,999"
    @ line,123 SAY M(FIL,16) PICTURE "99,999"
  ENDIF
    STORE line+1 TO line
    FIL=FIL+1
 ENDDO
 EJECT
 ? CHR(18)
 SET DEVICE TO SCREEN
 SET PRINT OFF
 RETURN

 PROCEDURE EPM700
 *** PROGRAM : EPM700.PRG
 *** Developer: Robertino Mera
 *** Index used : substr(codloc,1,2)+str(diagno,1)+str(semana,2)
 SET ECHO OFF
 SET TALK OFF
 SET BELL OFF
 SET STAT OFF
 SET ESCA ON
 SET CENT OFF
 SET EXAC OFF
 SET CONF OFF
 SET DATE BRIT
 CLOSE DATABASES
 SET MARGIN TO 1
 SEM = 00
 MES = 00
 MINEC = 0
 MIN = '00'
 PACO = 1
 LICO = 0
 TOSV=0
 TOSF=0
 TOST=0
 TOSP=0
 TOMV=0
 TOMF=0
 TOMT=0
 TOMP=0
 TOAV=0
 TOAF=0
 TOAT=0
 TOAP=0
 TTOSV=0
 TTOSF=0
 TTOST=0
 TTOSP=0
 TTOMV=0
 TTOMF=0
 TTOMT=0
 TTOMP=0
 TTOAV=0
 TTOAF=0
```

```
TTOAT=0
TTOAP=0
LISTO = .T.
USE MO1990 INDEX LMO1990
SELE 2
USE MAELOC INDEX IMAELOC
SELE 1
ILE = UPPER(' ')
TITLE  = '          DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR'
CLEAR
@ 5,5 TO 24,75 DOUBLE
@ 9,6 TO 9,74
@ 7,7 SAY [ESTE ES UN REPORTE DE ENDEMICIDAD POR REGION y DEPARTAMENTO]
@ 12,10 SAY 'A DONDE DESEA DIRIGIR EL REPORTE ?'
@ 14,10 SAY 'A la pantalla ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'N'
   SET CONSOLE OFF
ENDIF
@ 16,10 SAY 'A un archivo  ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'S'
 NAM = '      '
 @ 18,10 SAY 'Coloque el nombre del archivo.'
 @ 18,60 GET NAM PICTURE "!!!"
 READ
 NAM = NAM+'.TXT'
 SET ALTER TO &NAM
 SET ALTER ON
ENDIF
@ 20,10 SAY 'A la impresora ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'S'
   SET PRINT ON
ENDIF
CLEAR
@ 8,5 TO 18,75
@ 14,10 SAY 'INDIQUE LA SEMANA DESEADA'
@ 16,10 GET SEM PICTURE '99' RANGE 1,52
READ
PDAY = STR(DAY(DATE()),IIF(DAY(DATE())<10,1,2))
TDAY = CMONTH(DATE()) + " "+PDAY+", "+STR(YEAR(DATE()),4)
?SPACE(5),TDAY
?SPACE(65)+ 'PAGINA #: '+LTRIM(STR(PACO))
?
?TITLE
?
?'SEMANA: '+STR(SEM,2)
?
MINEC = 1
DO WHILE .T.
IF MINEC>5
 EXIT
ENDIF
DO CASE
CASE MINEC = 1
 DEP = 'Occidental'
 MIN = '01'
 MAX = '04'
CASE MINEC = 2
 DEP = 'Central'
 MIN = '04'
```

```
    MAX = '06'
   CASE MINEC = 3
    DEP = 'Metropolitana'
    MIN = '06'
    MAX = '07'
   CASE MINEC = 4
    DEP = 'Paracentral'
    MIN = '07'
    MAX = '11'
   CASE MINEC = 5
    DEP = 'Oriental'
    MIN = '11'
    MAX = '15'
   OTHERWISE
    return
  ENDCASE
  SELE 2
  SEEK MIN
  ?'REGION:  '+DEP
  ?
  ?
  ?'DEPARTAMENTO'+SPACE(8)+'ESTA SEMANA'+SPACE(8)
  ??'ULTIMAS 4 SEMANAS'+SPACE(5)+'ACUMULADO ANUAL'
  ?SPACE(15)+' FAL '+' VIV '+' POS '+  ' LAM '
  ??SPACE(2)+' FAL '+' VIV '+' POS '+  ' LAM '
  ??SPACE(2)+' FAL '+' VIV '+' POS '+  ' LAM '
  ?
  ?
  LICO = 8
   TOSV=0
   TOSF=0
   TOST=0
   TOSP=0
   TOMV=0
   TOMF=0
   TOMT=0
   TOMP=0
   TOAV=0
   TOAF=0
   TOAT=0
   TOAP=0
 DO WHILE val(MIN) < val(MAX)
  SELE 1
  SEEK MIN
  IF EOF()
   EXIT
  ENDIF
  SEMT=0
  SEMP=0
  ANOT=0
  ANOP=0
  MEST=0
  MESP=0
  ?SUBSTR(B->NOMLOC,1,14)
  SEEK MIN+'1'
  IF .NOT. EOF()
   MES = SEM-3
   IF MES <1
    MES = 1
   ENDIF
   COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA<MES TO ANON
   COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA<SEM TO MESN
```

```
    COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA=SEM TO SEMN
    SEEK MIN+'2'
    COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA<MES TO ANOV
    COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA<SEM TO MESV
    COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA=SEM TO SEMV
    SEEK MIN+'3'
    COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=3 .AND. SEMANA<MES TO ANOF
    COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=3 .AND. SEMANA<SEM TO MESF
    COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=3 .AND. SEMANA=SEM TO SEMF
    ANON=ANON+MESN+SEMN
    MESN=MESN+SEMN
    ANOV=ANOV+MESV+SEMV
    MESV=MESV+SEMV
    ANOF=ANOF+MESF+SEMF
    MESF=MESF+SEMF
  ***Other sums
    ANOT=ANOF+ANOV
    ANOP=ANON+ANOT
    MEST = MESV+MESF
    MESP = MEST+MESN
    SEMT = SEMV+SEMF
    SEMP = SEMT+SEMN
    ??STR(SEMF,4)+STR(SEMV,5)+STR(SEMT,5)+STR(SEMP,5)
    ??STR(MESF,6)+STR(MESV,5)+STR(MEST,5)+STR(MESP,6)
    ??STR(ANOF,5)+STR(ANOV,6)+STR(ANOT,6)+STR(ANOP,7)
    IF LICO >50
      EJECT
      LICO = 0
    ENDIF
    LICO = LICO+2
    TOSV=TOSV+SEMV
    TOSF=TOSF+SEMF
    TOST=TOST+SEMT
    TOSP=TOSP+SEMP
    TOMV=TOMV+MESV
    TOMF=TOMF+MESF
    TOMT=TOMT+MEST
    TOMP=TOMP+MESP
    TOAV=TOAV+ANOV
    TOAF=TOAF+ANOF
    TOAT=TOAT+ANOT
    TOAP=TOAP+ANOP
  ENDIF
  IF val(MIN) < 9
    MIN = '0'+STR(VAL(MIN)+1,1)
  ELSE
    MIN = STR(VAL(MIN)+1,2)
  ENDIF
  SELE 2
  SEEK MIN
ENDDO
MINEC=MINEC+1
?
?'TOTAL REGIONAL'+STR(TOSF,4)+STR(TOSV,5)+STR(TOST,5)+STR(TOSP,5)
??STR(TOMF,6)+STR(TOMV,5)+STR(TOMT,5)+STR(TOMP,6)
??STR(TOAF,5)+STR(TOAV,6)+STR(TOAT,6)+STR(TOAP,7)
?'————————————————————————————————————————'
?
?
TTOSV=TTOSV+TOSV
TTOSF=TTOSF+TOSF
TTOST=TTOST+TOST
```

```
  TTOSP=TTOSP+TOSP
  TTOMV=TTOMV+TOMV
  TTOMF=TTOMF+TOMF
  TTOMT=TTOMT+TOMT
  TTOMP=TTOMP+TOMP
  TTOAV=TTOAV+TOAV
  TTOAF=TTOAF+TOAF
  TTOAT=TTOAT+TOAT
  TTOAP=TTOAP+TOAP
ENDDO
?
?'TOTAL PAIS    '+STR(TTOSF,4)+STR(TTOSV,5)+STR(TTOST,5)+STR(TTOSP,5)
??STR(TTOMF,6)+STR(TTOMV,5)+STR(TTOMT,5)+STR(TTOMP,6)
??STR(TTOAF,5)+STR(TTOAV,6)+STR(TTOAT,6)+STR(TTOAP,7)
?'————————————————————————————————————————'
?
?
SET PRIN OFF
WAIT 'Presione cualquier tecla para continuar...
CLEAR GETS
CLOSE ALTER
EJECT
RETURN

PROCEDURE EPM710
*** PROGRAM : EPM710.PRG
*** Developer: Robertino Mera
*** Index used: substr(codloc,1,2)+str(diagno,1)+str(semana,2)
SET ECHO OFF
SET TALK OFF
SET BELL OFF
SET STAT OFF
SET ESCA ON
SET CENT OFF
SET EXAC OFF
SET CONF OFF
SET DATE BRIT
CLOSE DATABASES
SET MARGIN TO 1
SEM = 00
MES = 00
MINEC = 0
MIN = '00'
PACO = 1
LICO = 0
TOSV=0
TOSF=0
TOST=0
TOSP=0
TOMV=0
TOMF=0
TOMT=0
TOMP=0
TOAV=0
TOAF=0
TOAT=0
TOAP=0
LISTO = .T.
USE MO1990 INDEX LMO1990
SELE 2
USE MAELOC INDEX IMAELOC
SELE 1
```

```
 ILE = UPPER(' ')
 TITLE  = '          DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR'
 CLEAR
 @ 5,5 TO 24,75 DOUBLE
 @ 9,6 TO 9,74
 @ 7,7 SAY [ESTE ES UN REPORTE DE ENDEMICIDAD POR REGION y DEPARTAMENTO]
 @ 12,10 SAY 'A DONDE DESEA DIRIGIR EL REPORTE ?'
 @ 14,10 SAY 'A la pantalla ? S/N: ' GET ILE PICTURE "!"
 READ
 IF UPPER(ILE) = 'N'
   SET CONSOLE OFF
 ENDIF
 @ 16,10 SAY 'A un archivo  ? S/N: ' GET ILE PICTURE "!"
 READ
 IF UPPER(ILE) = 'S'
  NAM = '      '
  @ 18,10 SAY 'Coloque el nombre del archivo.'
  @ 18,60 GET NAM PICTURE "!!!"
  READ
  NAM = NAM+'.TXT'
  SET ALTER TO &NAM
  SET ALTER ON
 ENDIF
 @ 20,10 SAY 'A la impresora ? S/N: ' GET ILE PICTURE "!"
 READ
 IF UPPER(ILE) = 'S'
    SET PRINT ON
 ENDIF
 CLEAR
 @ 8,5 TO 18,75
 @ 14,10 SAY 'INDIQUE LA SEMANA DESEADA'
 @ 16,10 GET SEM PICTURE '99' RANGE 1,52
 READ
 PDAY = STR(DAY(DATE()),IIF(DAY(DATE())<10,1,2))
 TDAY = CMONTH(DATE()) + " "+PDAY+", "+STR(YEAR(DATE()),4)
 ?SPACE(5),TDAY
 ?SPACE(65)+ 'PAGINA #: '+LTRIM(STR(PACO))
 ?
 ?TITLE
 ?
 ?'SEMANA: '+STR(SEM,2)
 ?
 MINEC = 1
 DO WHILE .T.
 IF MINEC>5
  EXIT
 ENDIF
 DO CASE
  CASE MINEC = 1
   DEP = 'Occidental'
   MIN = '01'
   MAX = '04'
  CASE MINEC = 2
   DEP = 'Central'
   MIN = '04'
   MAX = '06'
  CASE MINEC = 3
   DEP = 'Metropolitana'
   MIN = '06'
   MAX = '07'
  CASE MINEC = 4
   DEP = 'Paracentral'
```

```
   MIN = '07'
   MAX = '11'
  CASE MINEC = 5
   DEP = 'Oriental'
   MIN = '11'
   MAX = '15'
  OTHERWISE
   return
 ENDCASE
 SELE 2
 SEEK MIN
 ?'REGION:  '+DEP
 ?
 ?
 ?'DEPARTAMENTO'+SPACE(8)+'ESTA SEMANA'+SPACE(8)
 ??'ULTIMAS 4 SEMANAS'+SPACE(5)+'ACUMULADO ANUAL'
 ?SPACE(15)+' FAL '+' VIV '+' ILP '+ ' LAM '
 ??SPACE(2)+' FAL '+' VIV '+' ILP '+ ' LAM '
 ??SPACE(2)+' FAL '+' VIV '+' ILP '+ '  LAM '
 ?
 ?
 LICO = 8
  TOSV=0
  TOSF=0
  TOST=0
  TOSP=0
  TOSI=0
  TOMV=0
  TOMF=0
  TOMT=0
  TOMP=0
  TOMI=0
  TOAV=0
  TOAF=0
  TOAT=0
  TOAP=0
  TOAI=0
DO WHILE val(MIN) < val(MAX)
 SELE 1
 SEEK MIN
 IF EOF()
  EXIT
 ENDIF
 SEMT=0
 SEMP=0
 ANOT=0
 ANOP=0
 MEST=0
 MESP=0
 ?SUBSTR(B->NOMLOC,1,14)
 SEEK MIN+'1'
 IF .NOT. EOF()
  MES = SEM-3
  IF MES <1
   MES = 1
  ENDIF
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA<MES TO ANON
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA<SEM TO MESN
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA=SEM TO SEMN
  SEEK MIN+'2'
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA<MES TO ANOV
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA<SEM TO MESV
```

```
SET PRIN OFF
WAIT 'Presione cualquier tecla para continuar...
CLEAR GETS
CLOSE ALTER
EJECT
RETURN

PROCEDURE EPM800
*** Program : EPM800.PRG
*** Developer : Robertino Mera
*** Index used : str(codloc,6)+str(diagno,2)+str(semana,2)
SET ECHO OFF
SET TALK OFF
SET BELL OFF
SET STAT OFF
SET ESCA ON
SET CENT OFF
SET EXAC OFF
SET CONF OFF
SET DATE BRIT
CLOSE DATABASES
SET MARGIN TO 1
SEM = 00
MES = 00
MINEC = 0
MIN = '00'
PACO = 1
LICO = 0
TOSV=0
TOSF=0
TOST=0
TOSP=0
TOMV=0
TOMF=0
TOMT=0
TOMP=0
TOAV=0
TOAF=0
TOAT=0
TOAP=0
LISTO = .T.
USE MO1990 INDEX LMO1990
SELE 2
USE MAELOC INDEX IMAELOC
SELE 1
ILE = UPPER(' ')
TITLE = '        DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR'
CLEAR
@ 5,5 TO 24,75 DOUBLE
@ 9,6 TO 9,74
@ 7,7 SAY [ESTE ES UN REPORTE DE ENDEMICIDAD POR REGION y DEPARTAMENTO]
@ 12,10 SAY 'A DONDE DESEA DIRIGIR EL REPORTE ?'
@ 14,10 SAY 'A la pantalla ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'N'
  SET CONSOLE OFF
ENDIF
@ 16,10 SAY 'A un archivo  ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'S'
 NAM = '      '
 @ 18,10 SAY 'Coloque el nombre del archivo.'
```

```
  @ 18,60 GET NAM PICTURE "!!!"
  READ
  NAM = NAM+'.TXT'
  SET ALTER TO &NAM
  SET ALTER ON
 ENDIF
 @ 20,10 SAY 'A la impresora ? S/N: ' GET ILE PICTURE "!"
 READ
 IF UPPER(ILE) = 'S'
    SET PRINT ON
 ENDIF
 CLEAR
 @ 5,5 TO 18,75
 @ 10,10 SAY 'INDIQUE EL CODIGO DE LA REGION DESEADA'
 @ 12,10 GET MINEC PICTURE '9'
 @ 14,10 SAY 'INDIQUE LA SEMANA DESEADA'
 @ 16,10 GET SEM PICTURE '99' RANGE 1,52
 READ
 PDAY = STR(DAY(DATE()),IIF(DAY(DATE())<10,1,2))
 TDAY = CMONTH(DATE()) + " "+PDAY+", "+STR(YEAR(DATE()),4)
 ?SPACE(5),TDAY
 ?SPACE(65)+ 'PAGINA #: '+LTRIM(STR(PACO))
 ?
 ?TITLE
 ?
 ?'SEMANA: '+STR(SEM,2)
 ?
 DO CASE
  CASE MINEC = 1
   DEP = 'Occidental'
   MIN = '01'
   MAX = '04'
  CASE MINEC = 2
   DEP = 'Central'
   MIN = '04'
   MAX = '06'
  CASE MINEC = 3
   DEP = 'Metropolitana'
   MIN = '06'
   MAX = '07'
  CASE MINEC = 4
   DEP = 'Paracentral'
   MIN = '07'
   MAX = '11'
  CASE MINEC = 5
   DEP = 'Oriental'
   MIN = '11'
   MAX = '15'
  OTHERWISE
   return
 ENDCASE
 SELE 2
 SEEK MIN
 ?'REGION:  '+DEP
 ?
 ?
 ?'DEPARTAMENTO'+SPACE(8)+'ESTA SEMANA'+SPACE(8)
 ??'ULTIMAS 4 SEMANAS'+SPACE(5)+'ACUMULADO ANUAL'
 ?SPACE(15)+' FAL '+' VIV '+' POS '+ ' LAM '
 ??SPACE(2)+' FAL '+' VIV '+' POS '+ ' LAM '
 ??SPACE(2)+' FAL '+' VIV '+' POS '+ '  LAM '
 ?
```

```
?
LICO = 8
DO WHILE val(MIN) < val(MAX)
 SELE 1
 SEEK MIN
 IF EOF()
  LOOP
 ENDIF
 SEMT=0
 SEMP=0
 ANOT=0
 ANOP=0
 MEST=0
 MESP=0
 ?SUBSTR(B->NOMLOC,1,15)
 SEEK MIN+'1'
 IF .NOT. EOF()
  MES = SEM-3
  IF MES <1
   MES = 1
  ENDIF
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA<MES TO ANON
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA<SEM TO MESN
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=1 .AND. SEMANA=SEM TO SEMN
  SEEK MIN+'2'
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA<MES TO ANOV
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA<SEM TO MESV
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=2 .AND. SEMANA=SEM TO SEMV
  SEEK MIN+'3'
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=3 .AND. SEMANA<MES TO ANOF
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=3 .AND. SEMANA<SEM TO MESF
  COUNT WHILE SUBSTR(CODLOC,1,2)=MIN .AND. DIAGNO=3 .AND. SEMANA=SEM TO SEMF
  ANON=ANON+MESN+SEMN
  MESN=MESN+SEMN
  ANOV=ANOV+MESV+SEMV
  MESV=MESV+SEMV
  ANOF=ANOF+MESF+SEMF
  MESF=MESF+SEMF
***Other sums
  ANOT=ANOF+ANOV
  ANOP=ANON+ANOT
  MEST = MESV+MESF
  MESP = MEST+MESN
  SEMT = SEMV+SEMF
  SEMP = SEMT+SEMN
  ??STR(SEMF,4)+STR(SEMV,5)+STR(SEMT,5)+STR(SEMP,5)
  ??STR(MESF,7)+STR(MESV,5)+STR(MEST,5)+STR(MESP,5)
  ??STR(ANOF,5)+STR(ANOV,6)+STR(ANOT,6)+STR(ANOP,7)
  IF LICO >50
    EJECT
    LICO = 0
  ENDIF
  LICO = LICO+2
  TOSV=TOSV+SEMV
  TOSF=TOSF+SEMF
  TOST=TOST+SEMT
  TOSP=TOSP+SEMP
  TOMV=TOMV+MESV
  TOMF=TOMF+MESF
  TOMT=TOMT+MEST
  TOMP=TOMP+MESP
  TOAV=TOAV+ANOV
```

```
    TOAF=TOAF+ANOF
    TOAT=TOAT+ANOT
    TOAP=TOAP+ANOP
   ENDIF
   IF val(MIN) < 9
    MIN = '0'+STR(VAL(MIN)+1,1)
   ELSE
    MIN = STR(VAL(MIN)+1,2)
   ENDIF
    SELE 2
    SEEK MIN
  ENDDO
  ?
  ?'TOTAL REGIONAL '+STR(TOSF,4)+STR(TOSV,5)+STR(TOST,5)+STR(TOSP,5)
  ??STR(TOMF,7)+STR(TOMV,5)+STR(TOMT,5)+STR(TOMP,5)
  ??STR(TOAF,5)+STR(TOAV,6)+STR(TOAT,6)+STR(TOAP,7)
  ?'————————————————————————————————————————'
  ?
  SET PRIN OFF
  WAIT 'Presione cualquier tecla para continuar... '
  CLEAR GETS
  CLOSE ALTER
  EJECT
  RETURN

  PROCEDURE EPM900
  *** PROGRAM : EPM900.PRG
  *** Developer:  Robertino Mera
  *** Index used:  See below
  SET ECHO OFF
  SET TALK OFF
  SET BELL OFF
  SET STAT OFF
  SET ESCA ON
  SET CENT OFF
  SET EXAC OFF
  SET CONF OFF
  SET DATE BRIT
  CLOSE DATABASES
  SET MARGIN TO 1
  SEM = 00
  MES = 00
  MINEC = 0
  MIN = '00'
  PACO = 1
  LICO = 0
  TOSV=0
  TOSF=0
  TOST=0
  TOSP=0
  TOMV=0
  TOMF=0
  TOMT=0
  TOMP=0
  TOAV=0
  TOAF=0
  TOAT=0
  TOAP=0
  LISTO = .T.
  *** El indice usado tiene la siguiente estructura: codloc+diagno+semana
  USE MO1990 INDEX HMO1990
  SELE 2
```

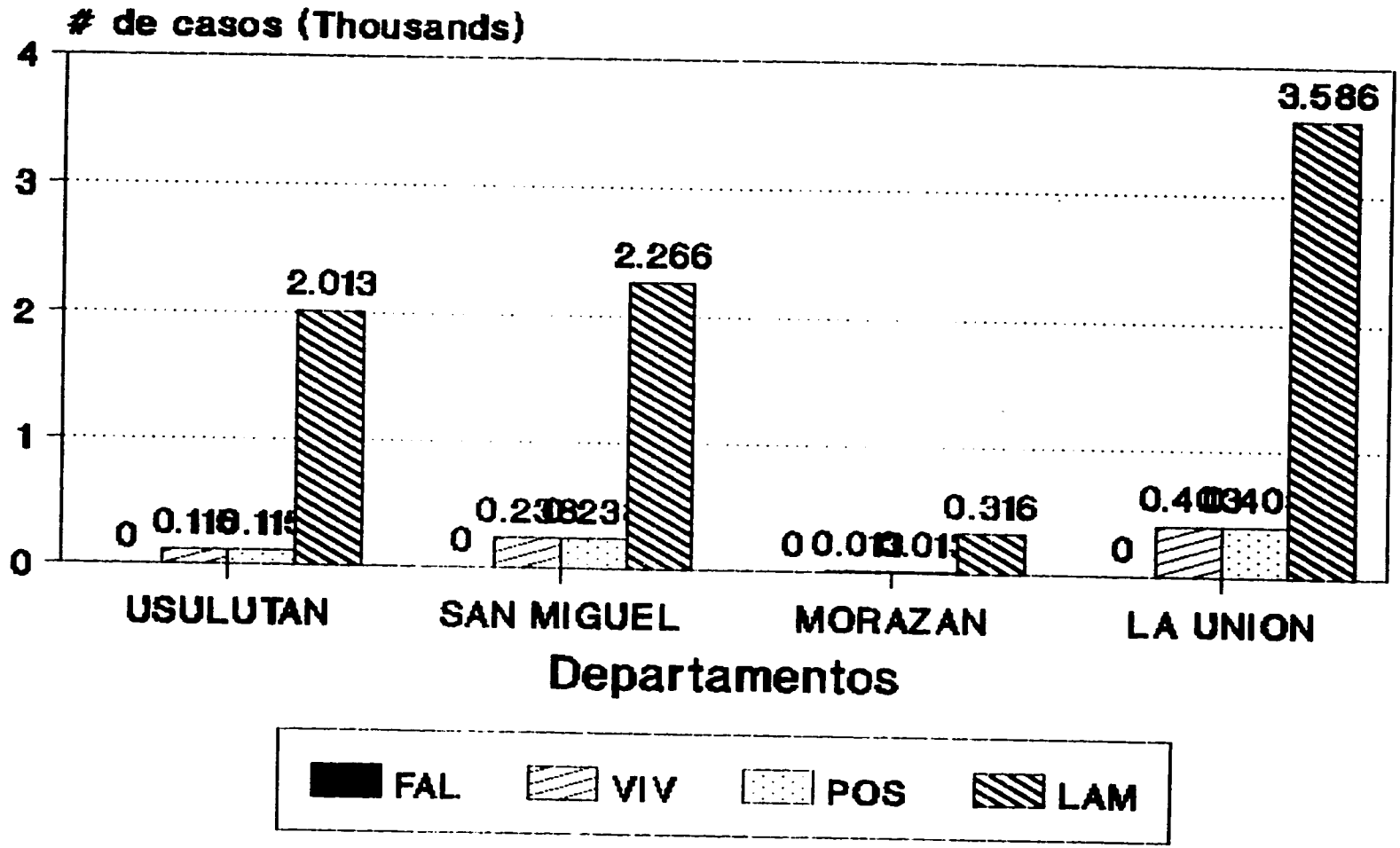
```
USE MAELOC INDEX IMAELOC
SELE 1
ILE = UPPER(' ')
TITLE  = '          DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR'
CLEAR
@ 5,5 TO 24,75 DOUBLE
@ 9,6 TO 9,74
@ 7,7 SAY [ESTE ES UN REPORTE DE ENDEMICIDAD POR DEPARTAMENTO Y LOCALIDAD]
@ 12,10 SAY 'A DONDE DESEA DIRIG:R EL REPORTE ?'
@ 14,10 SAY 'A la pantalla ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'N'
  SET CONSOLE OFF
ENDIF
@ 16,10 SAY 'A un archivo  ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'S'
 NAM = '      '
 @ 18,10 SAY 'Coloque el nombre del archivo.'
 @ 18,60 GET NAM PICTURE "!!!"
 READ
 NAM = NAM+'.TXT'
 SET ALTER TO &NAM
 SET ALTER ON
ENDIF
@ 20,10 SAY 'A la impresora ? S/N: ' GET ILE PICTURE "!"
READ
IF UPPER(ILE) = 'S'
   SET PRINT ON
ENDIF
CLEAR
@ 5,5 TO 18,75
@ 10,10 SAY 'INDIQUE EL CODIGO DEL DEPARTAMENTO DESEADO :' GET MIN PICTURE '99'
@ 14,10 SAY 'INDIQUE LA SEMANA DESEADA: ' GET SEM PICTURE '99' RANGE 1,52
READ
PDAY = STR(DAY(DATE()),IIF(DAY(DATE()) < 10,1,2))
TDAY = CMONTH(DATE()) + " "+PDAY+", "+STR(YEAR(DATE()),4)
?SPACE(5),TDAY
?SPACE(65)+ 'PAGINA #: '+LTRIM(STR(PACO))
?
?TITLE
?
?'SEMANA: '+STR(SEM,2)
?
SELE 2
SEEK MIN
NOM=B->NOMLOC
?'DEPARTAMENTO:  '+NOMLOC
?
?
?'LOCALIDAD   '+SPACE(8)+'ESTA SEMANA'+SPACE(8)
??'ULTIMAS 4 SEMANAS'+SPACE(5)+'ACUMULADO ANUAL'
?SPACE(15)+' FAL '+' VIV '+' POS '+ ' LAM '
??SPACE(2)+' FAL '+' VIV '+' POS '+ ' LAM '
??SPACE(2)+' FAL '+' VIV '+' POS '+ '  LAM '
?
?
LICO = 14
SKIP
DO WHILE SUBSTR(CODLOC,1,2)=MIN
 SELE 1
 SEMT=0
```

```
 SEMP=0
 ANOT=0
 ANOP=0
 MEST=0
 MESP=0
 SEEK B->CODLOC+'1'
 IF .NOT. EOF()
  MES = SEM-3
  IF MES <1
   MES = 1
  ENDIF
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=1 .AND. SEMANA < MES TO ANON
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=1 .AND. SEMANA < SEM TO MESN
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=1 .AND. SEMANA = SEM TO SEMN
  SEEK B->CODLOC+'2'
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=2 .AND. SEMANA < MES TO ANOV
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=2 .AND. SEMANA < SEM TO MESV
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=2 .AND. SEMANA = SEM TO SEMV
  SEEK B->CODLOC+'3'
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=3 .AND. SEMANA < MES TO ANOF
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=3 .AND. SEMANA < SEM TO MESF
  COUNT WHILE CODLOC=B->CODLOC .AND. DIAGNO=3 .AND. SEMANA = SEM TO SEMF
  ANON=ANON+MESN+SEMN
  MESN=MESN+SEMN
  ANOV=ANOV+MESV+SEMV
  MESV=MESV+SEMV
  ANOF=ANOF+MESF+SEMF
  MESF=MESF+SEMF
*** Computing variables
 ANOT=ANOF+ANOV
 ANOP=ANON+ANOT
 MEST=MESV+MESF
 MESP=MEST+MESN
 SEMT=SEMV+SEMF
 SEMP=SEMT+SEMN
 ?SUBSTR(B->NOMLOC,1,15)
 ??STR(SEMF,4)+STR(SEMV,5)+STR(SEMT,5)+STR(SEMP,5)
 ??STR(MESF,7)+STR(MESV,5)+STR(MEST,5)+STR(MESP,5)
 ??STR(ANOF,5)+STR(ANOV,6)+STR(ANOT,6)+STR(ANOP,7)
 ?
 LICO = LICO + 2
 IF LICO >60
  EJECT
  PACO = PACO+1
  ?SPACE(5),TDAY
  ?SPACE(65)+ 'PAGINA #: '+LTRIM(STR(PACO))
  ?
  ?TITLE
  ?
  ?'SEMANA: '+STR(SEM,2)
  ?
  ?'DEPARTAMENTO:  '+NOM
  ?
  ?
  ?'LOCALIDAD   '+SPACE(8)+'ESTA SEMANA'+SPACE(8)
  ??'ULTIMAS 4 SEMANAS'+SPACE(5)+'ACUMULADO ANUAL'
  ?SPACE(15)+' FAL '+' VIV '+' POS '+ ' LAM '
  ??SPACE(2)+' FAL '+' VIV '+' POS '+ ' LAM '
  ??SPACE(2)+' FAL '+' VIV '+' POS '+ ' LAM '
  ?
  ?
  LICO = 14
```

```
  ENDIF
  TOSV=TOSV+SEMV
  TOSF=TOSF+SEMF
  TOST=TOST+SEMT
  TOSP=TOSP+SEMP
  TOMV=TOMV+MESV
  TOMF=TOMF+MESF
  TOMT=TOMT+MEST
  TOMP=TOMP+MESP
  TOAV=TOAV+ANOV
  TOAF=TOAF+ANOF
  TOAT=TOAT+ANOT
  TOAP=TOAP+ANOP
 ENDIF
 SELE 2
 SKIP
ENDDO
?
?'TOTAL DEPART.  '+STR(TOSF,4)+STR(TOSV,5)+STR(TOST,5)+STR(TOSP,5)
??STR(TOMF,7)+STR(TOMV,5)+STR(TOMT,5)+STR(TOMP,5)
??STR(TOAF,5)+STR(TOAV,6)+STR(TOAT,6)+STR(TOAP,7)
?'————————————————————————————————————————'
?
SET PRIN OFF
WAIT 'Presione cualquier tecla para continuar...  '
CLEAR GETS
CLOSE ALTER
EJECT
RETURN
```

Casos de Malaria por Departamento

Region Oriental



Acumulado hasta la Semana 6

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DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR

EMANA: 6

EGION: Occidental

PARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM
NTA ANA	0	6	8	75	0	43	6	772	1	118	9	1397
NACHAPAN	0	15	8	182	0	64	9	694	0	141	11	1274
NSONATE	0	11	8	132	0	56	7	779	0	111	8	1311
TAL REGIONAL	0	32	8	389	0	163	7	2245	1	370	9	3982

ION: Central

PARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM
LIBERTAD	0	6	3	179	0	21	2	981	0	52	3	1673
LATENANGO	0	1	0	536	0	13	0	2782	0	22	1	3450
AL REGIONAL	0	7	1	715	0	34	1	3763	0	74	1	5123

ION: Metropolitana

PARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM
SALVADOR	0	6	3	204	2	41	2	1747	3	81	3	2550
AL REGIONAL	0	6	3	204	2	41	2	1747	3	81	3	2550

ON: Paracentral

RTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM
SATLAN	0	2	5	47	0	3	2	164	0	7	3	263
PAZ	0	5	3	167	0	22	2	1315	0	60	3	1915
AZAS	0	0	0	10	0	8	2	326	0	9	2	383
VICENTE	0	0	0	32	0	5	3	162	0	16	4	365
AL REGIONAL	0	7	3	254	0	38	2	1967	0	92	3	2926

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EGION: Oriental

EPARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM	FAL	VIV	ILP	LAM
ULUTAN	0	6	4	149	0	53	4	1358	0	115	6	2013
N MIGUEL	0	6	4	169	0	84	6	1305	0	238	11	2266
RAZAN	0	0*****		0	0	13	4	316	0	13	4	316
UNION	0	20	7	286	0	219	10	2114	0	403	11	3586
AL REGIONAL	0	32	5	604	0	369	7	5093	0	769	9	8181

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DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR

SEMANA: 6

REGION: Occidental

DEPARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	L
SANTA ANA	0	6	6	75	0	43	43	772	1	118	119	1[illegible]
AHUACHAPAN	0	15	15	182	0	64	64	694	0	141	141	1[illegible]
SONSONATE	0	11	11	132	0	56	56	779	0	111	111	1[illegible]
TOTAL REGIONAL	0	32	32	389	0	163	163	2245	1	370	371	3[illegible]

REGION: Central

DEPARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	L
LA LIBERTAD	0	6	6	179	0	21	21	981	0	52	52	16
CHALATENANGO	0	1	1	536	0	13	13	2782	0	22	22	34
TOTAL REGIONAL	0	7	7	715	0	34	34	3763	0	74	74	51

REGION: Metropolitana

DEPARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	L
SAN SALVADOR	0	6	6	204	2	41	43	1747	3	81	84	25
TOTAL REGIONAL	0	6	6	204	2	41	43	1747	3	81	84	25

REGION: Paracentral

DEPARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	L
CUSCATLAN	0	2	2	43	0	3	3	164	0	7	[illegible]	2
LA PAZ	0	5	5	169	0	22	22	1315	0	60	60	19
CABAZAS	0	0	0	10	0	8	8	326	0	9	[illegible]	3
SAN VICENTE	0	0	0	32	0	5	5	162	0	16	16	3
TOTAL REGIONAL	0	7	7	254	0	38	38	1967	0	92	92	29

REGION: Oriental

DEPARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	L
USULUTAN	0	6	6	149	0	53	53	1358	0	115	115	20
SAN MIGUEL	0	6	6	169	0	84	84	1305	0	238	238	22
MORAZAN	0	0	0	0	0	13	13	316	0	13	13	3
LA UNION	0	20	20	286	0	219	219	2114	0	403	403	35
TOTAL REGIONAL	0	32	32	604	0	369	369	5093	0	769	769	81
TOTAL PAIS	0	84	84	2166	2	645	647	14815	4	1386	1390	227

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DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR

EMANA: 6

EGION: Paracentral

PARTAMENTO	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM
SCATLAN	0	2	2	43	0	3	3	164	0	7	7	263
PAZ	0	5	5	169	0	22	22	1315	0	60	60	1915
BAZAS	0	0	0	10	0	8	8	326	0	9	9	383
N VICENTE	0	0	0	32	0	5	5	162	0	16	16	365
TAL REGIONAL	0	7	7	254	0	38	38	1967	0	92	92	2926

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DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR

EMANA: 6

EPARTAMENTO: CUSCATLAN

OCALIDAD	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM
JUAPA	0	0	0	2	0	0	0	2	0	0	0	2
S ALVARADO	0	0	0	0	0	0	0	1	0	0	0	2
ESCUELA	0	0	0	0	0	0	0	2	0	0	0	2
LO BLANCO	0	0	0	0	0	0	0	1	0	0	0	1
FRRITA	0	0	0	1	0	0	0	1	0	0	0	1
ESCUELA	0	0	0	0	0	0	0	0	0	0	0	2
ESPINO	0	0	0	0	0	0	0	9	0	0	0	9
ERMITA	0	0	0	0	0	0	0	2	0	0	0	2
ESCUELA	0	0	0	0	0	0	0	6	0	0	0	6
ESCUELA	0	0	0	0	0	0	0	2	0	0	0	2
ERMITA	0	0	0	0	0	0	0	6	0	0	0	6
CRUZ	0	0	0	0	0	0	0	2	0	0	0	2
ESCUELA	0	0	0	0	0	0	0	2	0	0	0	2
RINCONADA	0	0	0	0	0	0	0	0	0	0	0	3
.22	0	0	0	0	0	0	0	4	0	0	0	4
ERMITA	0	0	0	4	0	0	0	6	0	0	0	6
N AGUSTIN	0	0	0	0	0	0	0	1	0	0	0	1
BOMBA	0	0	0	0	0	0	0	1	0	0	0	4
LLANO	0	0	0	0	0	0	0	1	0	0	0	1
COLUCO ARRIB	0	0	0	0	0	0	0	2	0	0	0	4
COLUCO ABAJO	0	0	0	0	0	0	0	1	0	0	0	1
. NUEVA	0	0	0	4	0	0	0	11	0	0	0	11
IA AUXILIDOR	0	0	0	4	0	0	0	4	0	0	0	4
ITA SAN JOSE	0	0	0	0	0	0	0	1	0	0	0	1

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DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR

SEMANA: 6

DEPARTAMENTO: CUSCATLAN

LOCALIDAD	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM
LA ESTACION	0	0	0	0	0	0	0	0	0	0	0	1
CAS. KM. 42	0	0	0	0	0	0	0	1	0	0	0	1
EL CENTRO	0	0	0	0	0	0	0	0	0	0	0	2
EL CALVARIO	0	0	0	0	0	0	0	0	0	0	0	2
CAS. LA RINCONA	0	0	0	0	0	0	0	0	0	0	0	3
LA RINCONADA	0	0	0	0	0	0	0	0	0	0	0	1
CAS. SAN ANTONI	0	0	0	0	0	0	0	7	0	0	0	8
BOCANA	0	0	0	0	0	0	0	3	0	2	2	6
LA ESCUELA	0	0	0	0	0	0	0	0	0	1	1	2
LA ERMITA	0	0	0	0	0	0	0	0	0	0	0	1
EL CENTRO	0	0	0	0	0	0	0	4	0	0	0	4
LA ERMITA	0	0	0	0	0	0	0	1	0	0	0	1
LA ERMITA	0	0	0	0	0	0	0	1	0	0	0	1
EL PUENTE	0	0	0	0	0	0	0	1	0	0	0	1
LA ERMITA	0	0	0	0	0	0	0	3	0	0	0	3
LOS PEREZ	0	0	0	0	0	0	0	3	0	0	0	3
LA ESCUELA	0	0	0	0	0	0	0	6	0	0	0	6
EL PORTILLO	0	0	0	0	0	0	0	1	0	0	0	1
SAN JOSE	0	0	0	0	0	0	0	1	0	0	0	1
LA ESCUELA	0	0	0	0	0	0	0	0	0	0	0	3
EL CALVARIO	0	0	0	0	0	0	0	1	0	0	0	1
CONCEPCION	0	0	0	0	0	0	0	1	0	0	0	1
LA ERMITA	0	0	0	0	0	0	0	1	0	0	0	1
LA PAZ	0	0	0	0	0	0	0	1	0	0	0	1

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DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR

SEMANA: 6

DEPARTAMENTO: CUSCATLAN

LOCALIDAD	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO ANUAL			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM
LA ERMITA	0	0	0	0	0	0	0	1	0	0	0	1
LA ERMITA	0	0	0	0	0	0	0	2	0	0	0	2
LA ERMITA	0	0	0	0	0	0	0	2	0	0	0	2
SAN JOSE	0	0	0	0	0	0	0	0	0	0	0	1
LA ESCUELA	0	0	0	0	0	0	0	1	0	0	0	1
BO.EL CENTRO	0	0	0	4	0	0	0	4	0	0	0	22
COL. FERROCARRI	0	0	0	0	0	0	0	0	0	0	0	1
COL. 3 DE MAYO	0	0	0	0	0	0	0	0	0	0	0	3
LA ESCUELA	0	0	0	0	0	0	0	0	0	0	0	2
BUENA VISTA	0	0	0	4	0	0	0	4	0	0	0	7
LOS DELGADO	0	0	0	0	0	0	0	0	0	0	0	8
LA RINCONADA	0	0	0	0	0	0	0	0	0	0	0	2
LA ESCUELA	0	0	0	4	0	0	0	4	0	0	0	4
EL CALVARIO	0	0	0	0	0	0	0	2	0	0	0	2
LA ESCUELA	0	0	0	0	0	0	0	1	0	0	0	1
CENTRAL	0	0	0	0	0	0	0	0	0	0	0	2
SANTA ISABEL	0	0	0	0	0	0	0	1	0	0	0	1
BARRIO DE JESUS	0	0	0	0	0	0	0	0	0	0	0	2
EL AMATILLO	0	0	0	0	0	0	0	2	0	0	0	3
CENTRAL	0	0	0	0	0	0	0	1	0	0	0	1
SAN MARTIN	0	0	0	0	0	0	0	1	0	0	0	1
LA ERMITA	0	0	0	0	0	0	0	0	0	0	0	4
SAN JOSE	0	0	0	0	0	0	0	0	0	0	0	1
LA ESCUELA	0	0	0	2	0	0	0	2	0	0	0	2

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DEPARTAMENTO DE MALARIA, MINISTERIO DE SALUD, EL SALVADOR

NA: 6

RTAMENTO: CUSCATLAN

ALIDAD	ESTA SEMANA				ULTIMAS 4 SEMANAS				ACUMULADO			
	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM	FAL	VIV	POS	LAM
NTES NUEVOS	0	0	0	0	0	0	0	1	0	0	[illegible]	2
LANO	0	2	2	5	0	2	2	6	0	2	[illegible]	6
ICHITO	0	0	0	4	0	0	0	5	0	0	0	5
NIO SAN FRA	0	0	0	4	0	1	1	7	0	2	2	26
SAN FRANCI	0	0	0	0	0	0	0	4	0	0	0	4
IRGEN	0	0	0	0	0	0	0	5	0	0	0	5
SCUELA	0	0	0	0	0	0	0	1	0	0	0	1
SCUELA	0	0	0	0	0	0	0	1	0	0	0	1
SCUELA	0	0	0	1	0	0	0	2	0	0	0	2
L DEPART.	0	2	2	43	0	3	3	164	0	7	7	263

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