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THE ROLE OF THE PRIVATE SECTOR FOR THE SURVEILLANCE OF POLIOMYELITIS



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**The Role of the Private Sector
for the Surveillance of Poliomyelitis**

by

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1.0 Introduction: The Need to Improve Surveillance for the Eradication of Poliomyelitis

It is widely believed that improvements in the surveillance system finally made it possible to eradicate smallpox (1,2). The same will be true for poliomyelitis. To eradicate a disease, the surveillance system must become sensitive enough to rapidly identify virtually every case. For polio, surveillance sensitivity can be increased by reporting all cases of acute flaccid paralysis (AFP), not just those diagnosed as poliomyelitis (3). It will also be necessary to increase the scope of the surveillance system. This means increasing the number of reporting sites to include any person who may see or treat a case of AFP, including the private sector health providers. However, before the number of reporting sites are increased, the existing surveillance system's completeness and timeliness must be improved and methods developed to investigate cases and outbreaks.

1.1 What is the "Private Sector"?

By definition the private sector is any person or agency not directly employed by the government. For the purpose of disease surveillance the private sector can be divided into non-medical persons and groups as well as health care providers. Health care providers include private physicians and hospitals and community health workers (CHWs), as well as non-governmental organizations (NGOs), private voluntary organizations (PVOs) and other groups involved in health care. The second group includes the business community, fraternal organizations, women's groups, religious groups, etc. (See Annex 1). The type of assistance that these two groups can provide for disease surveillance will vary greatly, from direct case reporting to assisting with the reporting process through voluntary work and social mobilization.

1.2 The Importance of the Private Sector for Health Care

In many countries private physicians play an important role in the delivery of health care. The World Federation of Public Health Associations states that, "In a few nations, the private sector provides as much as 80% of health services" (4). In Brazil for example, there are more than 4,400 private health clinics and only 1,700 government clinics (5). In El Salvador the private sector provides 45% of out-patient medical care, while the Ministry of Health provides 40% and the remaining 15% is provided by other governmental organizations. In the capital city, San Salvador, the private sector accounted for 54% of curative care (6). A recent lameness survey in Bangladesh revealed that only 12% of patients with paralytic disease sought care at governmental health sources. The remaining 88% either did not seek care, or went to village doctors (7).

The private sector also plays an important role for preventive health services such as immunizations. In Lagos, Nigeria, cluster surveys have shown that 18% of all measles immunizations are given by private sources (8). In Zaire, NGOs and PVOs have assumed complete responsibility for the immunization program in certain zones of the country (4).

NGOs and PVOs may also provide a significant portion of health care. The Organization for Economic Cooperation and Development estimates that there are more than 3,000 international NGOs active in the world today. In India there are more than 12,000 national and international voluntary organizations (3). In Haiti there are more than 200 NGOs that provide 49% of all medical care for the country (9). Unfortunately, in some countries these groups do not participate in the surveillance system. Non-reporting by the private sector leads to poor reporting completeness and will make disease eradication difficult, if not impossible.

1.3 Using Non-Health Private Sector Organizations and Individuals

Non-health organizations have been involved in assisting health programs for years. The best example of this may be the Rotary Foundation's PolioPlus effort to eradicate poliomyelitis. Businesses have also helped with health programs and surveillance. In India, the Tata Steel Corporation assisted the smallpox eradication program, and more recently a major soft drink bottling company in Ecuador is offering rewards for the identification of cases of acute poliomyelitis caused by wild polio virus (10). Businesses can offer a pre-existing organization, transportation and communication structure and often have greater access to resources such as personnel, telephones, vehicles and facilities. They also have a vested interest in the health of the communities they serve.

Other groups, such as some women's groups and fraternal organizations have traditionally assisted health care programs. Their role can be expanded to include educating the public about the Polio Eradication Initiative (PEI) and to identify AFP cases in the areas they serve.

Non-health governmental employees, particularly teachers and local officials have been involved successfully in health programs and even for surveillance. Teachers were used to identify smallpox cases for the Smallpox Eradication Program. They are a well educated sector of the population that has routine contact with large groups of children who are likely to be affected by polio. Their reports can be used to estimate trends. In Peru, local community commissioners are taught to identify and report cases of AFP during monthly administrative meetings. They have been very successful for finding cases in remote villages in the North of the country (10).

2.0 Reasons for Non-Reporting by the Private Sector

There are many reasons that private physicians do not report. The most prominent of which seems to be their lack of knowledge of why to report and the methods by which they report. Other reasons include the perception that reporting was too time consuming and that the reportable disease list was too extensive (11). The reasons for non-reporting can be broken down into three categories:

2.1 Exclusion from the Routine Reporting System

Around the world, some sectors of the health care system do not participate in the disease surveillance system. This is due to a lack of communication between public health authorities and those providing clinical care. In developing countries private physicians rarely participate in the national disease surveillance system, particularly those who only provide outpatient care in a non-hospital (office) setting. They may be intentionally excluded from the reporting system because of an inability to supervise their reporting, or they may not report, despite requirements, due to a lack of knowledge and motivation.

Private and NGO hospitals may or may not participate in the surveillance system. If they are included, they usually only report hospitalized cases. Even government hospitals may report only on inpatients and not the far greater number of outpatient or clinic cases. International NGOs and PVOs also often act as autonomous institutions within countries. They may not participate in governmental health programs such as disease surveillance, policy planning or even in the use of standardized essential drug and medical care plans (12). These organizations value this independence and integrating them into the national surveillance system can be difficult.

2.2 Lack of Education

Many physicians are uninformed about the need to report or what to report on. Even in the USA, where laws require reporting of certain diseases, studies have shown that lack of knowledge by the physician leads to under-reporting (10, 13). The general population's and the medical community's knowledge of a disease and the interventions available to treat it greatly affects reporting completeness. A physician must know why, how, where, what and when to report; but first a sick person must recognize the illness, know treatment is available, and seek care. Therefore, activities that increase the knowledge of both of these communities can improve reporting and case finding. The use of the mass media may be the best method to reach both the general population and private physicians.

2.3 Obstacles

Obstacles to reporting are often the same for both the public and private sectors: Too much time, too many forms, no supervision, no feedback. When surveyed about the reasons for not reporting physicians often cite the time it takes to complete the process. Private physicians have little motivation to report because they receive no supervision or feedback and perceive a lack of any response from the public sector on cases they do report. There may also be administrative obstacles within health institutions such as poor communication between departments that prevent the reporting of some cases (14). Identification of problems in the mechanics of reporting and the use of very simple, short reporting cards for private physicians can help.

International health organizations face special obstacles because they are required to report by many different organizations on many different indicators. They must report to their home and regional offices, funding agencies, and host governments on issues that range from program management and expenses to the number of disease cases they treated. These reporting requirements may conflict with one another, leading to increased reporting workload and decreased reporting compliance and completeness.

3.0 Strategies to Develop Private Sector Surveillance

For specific recommendations see Annex 3.

3.1 Assess the Importance of the Private Sector for Health Care and Disease Surveillance in Each Country

The importance of private physicians and NGOs in providing health care varies widely between countries and even within countries. Private medical practitioners tend to concentrate in metropolitan areas, and provide a larger percentage of health care there, while NGOs and PVOs often work in rural areas. The amount and type of care that these groups provide will determine the need for including them in the surveillance system.

The first step is to enumerate the sources and types of health care for each country. Existing government and EPI records will provide some information. The Ministry of Health may have records on all private physicians as part of medical licensing procedures. Sections of the Ministry may have records of the physician-specialists, such as pediatricians, that they supervise. Government medical schools may keep records of their graduates. State and municipal government agencies may have lists of health workers, NGOs and PVOs in their jurisdiction. The Ministry of Health or the Ministry of Foreign Affairs may also register the international NGOs and PVOs providing health care in the country.

EPI coverage surveys include information on percentage of immunizations provided by the private sector. Using information on preventive services --such as coverage survey--probably underestimates the participation of the private sector in all types of health care i.e. preventive and curative. Future surveys can be modified to include more detailed information about the source of both preventive and curative services.

Recent experience in Bangladesh has shown that polio lameness surveys can be used to collect information on where cases of acute poliomyelitis seek initial care. In Bangladesh, where only 12% of cases sought care at governmental facilities it will be necessary to include many private sector sources in the surveillance system.

There are other sources of information on the number and location of private physicians in a country. Medical associations have lists of members, hospitals keep records of their staff and cities may have telephone directories that include physicians. If private health care

providers do not play a significant role in the care of AFP, it is best to concentrate efforts on social mobilization and community education.

3.2 Utilize all Potential Reporting Sources to the Extent Possible

Once there is information on the amount, types and sites of health care provided by the private sector, efforts must be made to include these sites in the surveillance system. The number of reporting sites that can be included are limited by the ability of the system to collect and analyze the new data and to supervise the reporting from new sites. The reporting system should not be expanded to include the private sector until the pre-existing surveillance system is timely, consistent and complete. Before the system is expanded, reports of AFP cases from the private sector should not be disregarded. In fact, the cases should be investigated rapidly to encourage further reporting.

Private sector reporting should be phased in slowly so that it will not overwhelm the current reporting system. The reporting sites should be prioritized as to their likelihood of identifying cases of AFP by reviewing previous polio reporting and conducting lameness surveys or other studies. Previous experience has shown that sites likely to see cases of AFP include rehabilitation, infectious disease or pediatric hospitals or the physical medicine departments of other hospitals. For example, a study conducted in Nigeria showed that physiotherapy records were useful in monitoring the efficacy of a poliomyelitis vaccination program. While this data is not appropriate for estimating prevalence, it may be effectively used for indicating trends (27). As the reporting completeness at previous sites improves, gradually expand the number of reporting sites. First, include large, private and NGO hospitals; then, if possible all private and public physicians. For example, in Kinshasa, Zaire polio was originally only reported from the national rehabilitation hospital. When 26 additional reporting sites, including the pediatric hospital and NGO health centers began to report, almost twice as many polio cases were found. The additional data also allowed geographic mapping of the cases and the identification of high-risk areas to better target eradication efforts (15).

Other government employees can assist with identifying cases of AFP. They may be from other sections of the Ministry of Health, other ministries, or even from regional and local governments. To be effective, government employees must have contact with susceptible individuals on a regular basis. Examples include: malaria workers who visit villages and individual homes on a regular basis for spraying activities, traditional birth attendants who are often stationed in every village and village health workers who, in many countries, help organize community health activities. Even local government leaders can be helpful for surveillance by acting as a reporting point for others who identify cases and by educating and motivating the populations they serve.

3.3 Inform and Educate

Do not limit educational programs for polio eradication to health workers and physicians. Increasing community awareness of the program will lead to increases in those seeking care for paralysis, the demand for immunization services, and the lay reporting of cases. In countries with inadequate surveillance systems that cannot be expanded, this may be the only

way to find cases occurring in remote, rural areas. The mass media is useful to educate both the general population and physicians. In the USA, pharmaceutical companies have begun using radio, television and newspaper advertisements to reach physicians because they have found it to be as effective as using medical journals (16).

Involve physicians in the polio eradication effort. In the Americas, the Interagency Coordinating Committees include NGOs and bi-lateral organizations and the National Committees for Case Classification include private physicians such as pediatricians, pathologists, and neurologists. These committees have been successful in increasing physician awareness and participation in the polio eradication efforts. Use medical and professional societies as educational forums to reach private physicians. Many of these societies have regular meetings, educational seminars, newsletters and mailing lists that provide access to this audience.

Invite private health care providers and persons from health-related NGOs to attend EPI and polio eradication training workshops and meetings, or hold such forums specifically for them. Design EPI literature, brochures and posters to target the private health sector or to be distributed by them for patient education in their offices.

3.4 Remove Obstacles

The easier it is to report a case, the more likely it will be reported. Therefore, keep the reporting process as simple as possible. The easiest and most rapid reporting method is to use telephones, telexes or faxes, but few health centers have these forms of communications. However, the police, the military, and local businesses often have telephones and may be willing to assist the program by making their communication equipment available for case reporting. If there are no electronic forms of communication available, then use messengers to deliver case reports. As a last resort, mail in reports. Keep reports and reporting forms as simple as possible, such as using short forms or pre-stamped postcards that request the minimum of information to identify a case in a checklist form (See Annex 2).

For private physicians the reporting process should be simple. Clearly identify the person to whom they should report. This could be the nearest health worker at a government health clinic or hospital, or they could directly report to the district or provincial level. These physicians, who will see relatively few cases of a rare disease such as polio, should not be expected file monthly 'nil' reports. They should only report if they identify a case of AFP. All cases reported by the private sector must be investigated by public health authorities. This means that reporting, feedback and case investigation methods should be in place before initiating private sector reporting.

Another way to remove obstacles is to require private physicians to only report on a short list of notifiable diseases such as polio, cholera, and meningitis. The criteria for a disease to be placed on this list are that it be of epidemic potential and has clinical and epidemiologic

interventions available to disrupt the spread. Any disease on this list should be reported immediately on detection, even before lab confirmation. Then investigate each report.

3.5 Active Collection of Data

Active surveillance is an essential part of disease eradication programs. Surveillance research has repeatedly demonstrated that active surveillance identifies far more cases of a disease when compared to passive systems. Experience with smallpox eradication confirmed this. A study conducted in the USA showed that the use of simple reporting forms and a feedback newsletter alone were not sufficient to improve reporting completeness. Actively contacting reporting sites greatly improved reporting completeness (13, 26).

The difficulty with active surveillance is that it is relatively expensive because of the staff required to collect the data. Volunteers and voluntary organizations can help to actively collect data by telephoning or visiting the reporting sites on a regular schedule. Businesses can also assist by allowing reporting sites to use their communications equipment or transportation system.

Actively collecting data from private sector physicians will stimulate them to report and is a way to supervise the quality of the data. Because of the expense, initially use active surveillance in the areas of the greatest need and/or easiest access. Start with weekly telephone calls or visits to hospitals or clinics near the EPI office. As more resources and personnel are available, expand the system to include increasingly distant sites.

3.6 Motivate

Since it is impossible to supervise reporting from all private sector sites, it is necessary to motivate them to self report. Experience has shown that the best form of feedback, and therefore the best motivation to report, is to demonstrate to health workers that reporting cases leads to case investigation and intervention (17). Furthermore, direct follow-up of a case report by a visit, letter or telephone call is a more effective stimulus for reporting than a periodic, non-specific surveillance newsletter.

Encourage private physicians to report by offering incentives such as professional recognition and awards. Involve medical and professional societies in the development of reporting guidelines. Use other incentives such as cash awards for case finding, as are being used in the Americas (10). Also, the provision of free vaccines, posters, pamphlets, subscriptions to medical journals, or other immunization related supplies may stimulate private physicians to report.

There should be legal requirements for the reporting of certain infectious diseases. This requirement serves two purposes: it encourages health care workers to report because of potential penalties, and it reduces their concerns of breaking patient confidentiality by legally requiring them to report. Finally, the communities must also be motivated to seek care and

to self report. Once again, the mass media and other social mobilization techniques can be used to encourage community-based reporting.

4.0 Examples of Utilizing the Private Sector for Surveillance

The non-health sector has an important role to play in surveillance. Private Voluntary Organizations, religious, business and women's groups and fraternal organizations are all potential sources of assistance. Some of these groups have already become involved in the Polio Eradication Initiative, and some specifically with the effort to improve surveillance. In Bangladesh, World Vision has organized a surveillance workshop in conjunction with the government, and Rotary will be organizing a series of surveillance meetings in India.

4.1 Rotary International's Plan for Assisting with Disease Surveillance

Rotary International has developed a plan to use its members to assist in polio surveillance (18). The plan lists surveillance activities for Rotary Clubs, including:

1. Strengthening surveillance laboratories;
2. Assisting with the transportation of stool specimens to labs;
3. Participating in outbreak interventions and national immunization days, by providing personnel, supplies and transportation;
4. Promoting community participation and lay reporting through workshops, pamphlets, posters and other media;
5. Providing awards and/or rewards for the reporting of new cases;
6. Increasing the participation of private physicians and traditional healers by providing seminars, pamphlets and awards; and
7. Working to involve the corporate and local business sector in the eradication effort by having them provide media messages and materials, transportation of specimens and emergency funds for outbreak interventions.

It has also been recommended that Rotarians extend polio surveillance networks to their assigned areas by:

1. Identifying key persons such as private physicians, pharmacists, teachers, etc., who could serve as a referral source for the weekly reporting of AFP cases in areas of the country lacking a reporting infrastructure;
2. Collecting reports and forwarding them to the area health officer; and
3. Assisting with reporting in areas already reporting by using their own communication resources such as telexes, telephones, and radios and by ensuring the distribution of feedback reports.

This year Rotary is sponsoring and helping to run nine surveillance workshops in India. The aim of these workshops is to train local Rotarians as well as EPI managers and health

workers on improved surveillance techniques. Rotarians in Africa plan to use the communications systems of banks to assist in case reporting.

4.2 Involving In-Country Private Voluntary Organizations

In Haiti, a program was developed to utilize PVOs to improve population registration and health surveillance (19). Within the health district it served, selected PVOs each chose a geographic area with a population of approximately 10,000. A physician from the PVO received extra community health and surveillance training and the villages in the district provided a community health worker to register the population, follow health events and organize periodic health days. The physician then acted as the supervisor and data coordinator for these volunteers. The project was successful in identifying high-risk groups, educating and motivating the populace, and improving immunization and contraceptive coverage. Since the recent political problems in Haiti, the entire disease surveillance system has been contracted to the NGO, Institut Haitien de L'Enfant.

4.3 Involving Industry: Tata Steel and the Eradication of Smallpox

Near the end of the smallpox eradication campaign in India it was found that a town in Bihar state, Tatanagar, was a major source of smallpox cases exported to other parts of the country, although very few cases were being reported there (20). The town's economy and government were dominated by a single industry, the Tata Iron and Steel Company (TISCO). When company officials were informed that their town was a major source of smallpox, they came to an agreement with the WHO to help end the epidemic. The WHO provided the technical expertise while the industry provided materials, personnel and management skills. They were able to organize fifty physicians and hundreds of support staff, vehicles, and facilities within days for the case finding and immunization campaign. This assistance helped to greatly reduce the number of cases from the town.

4.4 Using Lay Reporting

In the late 1970's the World Health Organization developed a method of lay reporting using disease symptom categories in an attempt to improve disease surveillance (21). This system was never widely used, but there have been other country or program-specific attempts to use lay reporting. Many smaller villages and towns will not have health care providers, so reporting needs to come from other sources. Village leaders, teachers and volunteer health workers have been used for vital events' registration (22), lameness surveys (23), smallpox case identification, and actual disease or symptom-cluster reporting. These programs have met with mixed success, from less than 10% of laypersons reporting vital events (22), to effective case finding by using teachers and persons in the marketplace by the Smallpox Eradication Program (2), to accurate measles reporting in Senegal (24). For example, in Indonesia a recent diphtheria outbreak was identified and reported by a village headman after the hospital failed to report the case on time (25). Education efforts must also reach these most peripheral communities.

5.0 Conclusions

The use of the private sector, both medical and non-medical, to assist in health programs in developing countries has had many successes. There are also some examples of specifically using the private sector to improve disease surveillance.

In order to identify all cases of AFP as rapidly as possible it will be necessary for many countries to include private health providers in the polio surveillance system. However, because of the difficulty of managing such a diverse system, assistance from the private sector will be needed to make it successful. Private health workers will assist by spontaneously reporting AFP cases with little direct supervisor. Volunteers from private sector organizations such as Rotary can also assist by donating manpower, money, communication and transportation equipment to improve the surveillance system.

Before expanding the surveillance system to include the private sector, the existing surveillance system's completeness and timeliness must be improved. After that, the first priority is to educate the entire population, including private health providers, about the importance of the Polio Eradication Initiative. This will encourage community participation in polio eradication efforts including case finding. The mass media is the best method to simultaneously educate and motivate these groups.

Since most private health providers will be voluntarily participating in the surveillance system efforts must be made to educate them about reporting needs and methods, to motivate them to participate in the system, and to remove the obstacles that make reporting difficult.

Non-medical voluntary organizations can assist in developing private sector surveillance by acting to educate their members, the public and the health community. They can also directly help with specimen transportation and the transmission of reports. These organizations can be a valuable link between EPI program managers and the private health care sector. Using the mass media to educate the general population, including private medical workers, about the Polio Eradication Initiative should lead to better case reporting.

Some of the efforts needed to improve the existing surveillance system, such as educating health care workers about AFP reporting, can also be used to begin private sector reporting. It is also important to have a system and the personnel in place to do case and outbreak investigations to make the system effective.

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Annex 1

A List of Potential Non-Traditional Reporting Sources

I. Governmental

A. Public Health Programs

1. CDD, ARI, Malaria, TB, etc.
2. Community Health Workers

B. Non-Health Governmental Agencies

1. Education: Teachers, administrators, etc.
2. Agricultural workers
3. Regional and local politicians/officials

C. The Military

Often has its own medical system, may not participate in reporting.

II. Private Sector

A. The Private Health Sector

1. Private physicians: including specialists most likely to care for cases of polio such as neurologists and pediatricians.
2. Pharmacists
3. Hospitals
4. Traditional Healers
5. Medical Associations
6. Community Health Workers

B. National Voluntary Organizations

1. Fraternal and business organizations such as Rotary and Lions
2. Women's Groups
3. Religious Organizations

C. International Organizations

1. Non-governmental Organizations (NGOs) providing health care.
2. NGOs providing other services: Feeding programs, agriculture, etc.
3. Private Voluntary Organizations: Charities, Missionary hospitals, MSF, World Vision, Red Cross, etc.

D. Business

1. Business Associations
2. Labor Unions
3. Specific large and small businesses

E. Education

1. Teachers and Teacher Associations

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2. Students, including medical students

Annex 2

Simplified Reporting Card

BACK:

NOTIFIABLE DISEASE REPORTING CARD		
Case Name:	Age: _____	<input type="checkbox"/> Acute Flaccid Paralysis
Address:	City:	<input type="checkbox"/> Measles
Hospitalized? <input type="checkbox"/> Yes <input type="checkbox"/> No	Where?	<input type="checkbox"/> Cholera
ATTENTION: You must also report this case in the routine monthly reporting forms. You may also call 12-34-56 to report cases.		<input type="checkbox"/> Meningitis
		<input type="checkbox"/> Plague
Your Name:	Tel:	<input type="checkbox"/> Diphtheria
Address:	City:	<input type="checkbox"/> _____ Other

FRONT:

----- -stamp- -stamp- -----
Ministry of Health Epidemiology Section 123 Government Rd. Capitol City 12345
-URGENT-

Annex 3

Specific Recommendations

The recommendations are directed towards two groups, private health providers (physicians, nurses, pharmacists, community health workers, etc.) and other private sector groups (PVOs, business, etc.).

FOR COUNTRIES OR AREAS WITH A HIGH INCIDENCE OF POLIOMYELITIS

Initial efforts should be directed towards improving the existing surveillance system so that reporting completeness is greater than 75% and that AFP cases are reported within one week of the onset of symptoms. Educational efforts should also be emphasized, both for the general population, and more specifically for health care providers to motivate all sectors of society to participate in the Polio Eradication Initiative. It is also important to involve voluntary groups in polio surveillance and the eradication program in its early stages.

Incorporate Private Health Providers into the Surveillance System

1. Assess the Need for Private Sector Reporting

1.1 Review previous EPI cluster surveys to see the percentage of immunizations provided by the private sector.

1.2 Contact all sections within the Ministry of Health which keep records on physicians. Specifically: Medical and hospital licensing boards, other specialty programs such as malaria, tuberculosis and AIDS control.

1.3 Contact the Ministry of Foreign Affairs or a similar Ministry or individual country embassies for the address of all NGOs working in the country and the types of services they provide.

1.4 Review the current reporting system with the MOH section responsible for surveillance to determine if they are receiving reports from the private sector. If yes, then: Who reports? What do they report? How? How often? Estimate reporting completeness.

1.5 Contact medical associations for lists and addresses of their members and to encourage their involvement in the eradication and surveillance efforts.

1.6 Contact hospitals for lists and addresses of their medical staff.

1.7 Identify and enumerate all other sources of health care in your area, such as pharmacists, nurses, traditional healers and TBAs. Inform them of the program and the need to refer cases of AFP to government health centers that do report.

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1.8 If private health providers do not play a significant role in the care of AFP, then efforts should be directed at community education and social mobilization.

2. Utilize All Potential Reporting Sources

2.1 Prioritize the importance of individual reporting sites by the number of polio cases they see, or are likely to see. Large hospitals are most likely to see cases, while individual physicians are perhaps least likely.

2.2 Develop a plan to gradually expand the number of reporting sites, as the quality of the existing surveillance system allows.

2.3 Educate community leaders and voluntary health workers about the Polio Eradication Initiative and the need to rapidly report cases.

3. Inform and Educate

3.1 Use the mass media to educate health workers and the general population on the Polio Eradication Initiative and the importance of reporting cases of AFP. Include how to identify cases and whom to contact.

3.2 Prepare literature and educational aids for private health workers for themselves and to distribute at their workplace.

4. Remove Obstacles

4.1 Identify barriers to reporting by:

1. Reviewing the current system.
2. Questioning health care workers and private physicians about their reasons for non-reporting.

4.2 Work with the section of the MOH responsible for surveillance to develop a simple, rapid method of reporting cases of AFP. Questions to be answered include:

Who collects the data?

How is it reported (Letter, visit, telephone, fax, computer)?

What forms will be used?

How often is it reported?

Who analyzes the data, and provides feedback?

4.2 Develop case definitions and educate health care workers and private physicians about them.

4.3 Identify a staff member responsible for surveillance activities and coordination of private sector reporting.

5. Active Collection of Data

5.1 Identify a reporting site with easy access to the EPI office (by telephone or visit) from which to begin the active reporting process.

5.2 Compile a list of other potential active reporting sites.

5.3 Develop plans for active case detection through case investigations.

6. Motivate Physicians to Report

6.1 Develop a method for case investigation as described by previous Polio Eradication Initiative guidelines.

6.2 Use medical and professional societies to encourage their members to report cases of AFP.

6.3 Work with the government to require reporting of cases of AFP by all health care workers.

6.4 Respond to all AFP reports by private physicians, if not by investigation, then by letter or telephone.

6.5 Be sure to include private physicians in the country's Interagency Coordinating Committees (ICC).

Encourage Private Sector Assistance for Polio Surveillance

Appoint an EPI staff member to act as the liaison with the private sector voluntary groups.

Contact local Rotary organizations to solicit their involvement. They may also be able to assist with involving other voluntary groups and businesses.

Contact national and local private voluntary organizations to ask for assistance with community education, social mobilization and surveillance.

Contact national and local businesses and industry to encourage them to become involved in eradication efforts and surveillance through the provision of donations, incentives, supplies, or access to transportation or communications or mass media time.

Collaborate with interested organizations and businesses to develop work plans outlining the goals and responsibilities of each group.

FOR COUNTRIES WITH FEW CASES OF POLIOMYELITIS, AND WHERE THE ROUTINE SURVEILLANCE SYSTEM IS TIMELY AND COMPLETE

The previous recommendations should be used to prepare for greater private sector reporting and assistance with reporting. In countries with effective surveillance systems there is a need to increase the number of reporting sites in order to identify cases of AFP as early as possible.

Incorporate Private Health Workers into the Surveillance System

1. Assess the Need for Private Sector Reporting

Should be completed in the initial phase. See above recommendations.

2. Utilize All Potential Reporting Sources

2.1 Using the prioritized plan developed previously begin expanding the surveillance system to include more sites.

2.2 Review reporting completeness from each site to assess the quality of the system.

3. Inform and Educate

3.1 Continue to use the mass media to educate the general population and private physicians about the Polio Eradication Initiative and the need to report cases of AFP.

3.2 Give presentations on the Polio Eradication Initiative at medical and professional society meetings.

3.3 Invite selected physicians (primary care specialists, neurologists, leading educators, heads of medical societies) to attend EPI meetings and workshops.

3.4 Educate all health care workers about the importance of referring cases of AFP to government health facilities so that they will be reported.

4. Remove Obstacles

4.1 Implement a short list of notifiable diseases (including poliomyelitis/AFP) for private physician and hospital reporting. Reporting should be by the most rapid available method and include as little data as needed.

4.2 Use alternative sources of communications where available, such as telephones, messengers, faxes.

5. Active Collection of Data

5.1 Expand the number of active reporting sites to include the most important sites in the country.

5.2 Use volunteers to actively collect the data by personal visits or telephone calls (See below).

5.3 Active case finding through case investigations should be the first priority as the number of cases decreases and immunization coverage increases.

6. Motivate Case Reporting

6.1 All cases of AFP reported by the private sector requires follow-up in the form of a case investigation.

6.2 As the incidence of polio is reduced to almost zero cash rewards should be offered for culture proven cases of wild poliomyelitis. These rewards could be provided by businesses.

6.3 To encourage physicians to participate in the disease surveillance system and the EPI incentives such as free or reduced cost vaccines, educational materials or other related goods should be provided to them.

6.4 Educational seminars and workshops should be broadened to include as many private health providers as possible.

6.5 Encourage medical societies to give professional recognition to physicians participating in the Polio Eradication Initiative and disease surveillance.

6.6 Include private sector health workers for routine feedback with the EPI newsletter or surveillance reports.

ENCOURAGE PRIVATE SECTOR ASSISTANCE FOR POLIO SURVEILLANCE

1. Work with a committed, well organized voluntary organization or business who can assist with coordinating the work of other groups and volunteers.

2. Members of volunteer organizations can be responsible for actively collecting data on cases of AFP from selected active reporting sites. Organizations which have branches in many towns across the country would be particularly useful for this.

3. Businesses or voluntary organizations with pre-existing transportation and communication systems can be used for reporting cases of AFP and to transport personnel, vaccines and specimens.