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**Process Evaluation of the First  
National Immunization Day (NID)  
in Bangladesh**

**Final Report**

*BASICS is a USAID-Financed Project Administered by*

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**Process Evaluation of  
The First National Immunization Day (NID)  
in Bangladesh  
March 16, 1995**

**Final Report**

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## **ACRONYMS**

<b>BASICS</b>	<b>Basic Support for Institutionalizing Child Support (USAID project)</b>
<b>BNP</b>	Bangladesh National Party
<b>BRAC</b>	Bangladesh Rural Advancement Committee
<b>EPI</b>	Expanded Program on Immunization
<b>FGD</b>	Focus Group Discussion
<b>GOB</b>	Government of Bangladesh
<b>KCC</b>	Khulna City Corporation
<b>LGRD</b>	[Ministry of] Local Government and Rural Development
<b>NGO</b>	Non-governmental Organization
<b>NID</b>	National Immunization Day
<b>OPV</b>	Oral Polio Vaccine
<b>TT</b>	Tetanus Toxoid
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>VDP</b>	Village Defense Party
<b>WC</b>	Ward Commissioner
<b>WHO</b>	World Health Organization

## **I. EXECUTIVE SUMMARY AND RECOMMENDATIONS**

### **A. Introduction**

As part of a global program to eradicate polio, Bangladesh held its first round of the National Immunization Day (NID) on March 16, 1995 and April 16, 1995. As part of its participation in the global program, the Government of Bangladesh (GOB) has committed to the implementation of two NIDs per year for the next three years. As part of the polio eradication initiative, the objectives of the NIDs are to:

1. Provide two doses of polio vaccine with an interval of four to six weeks to all children under five (20 million children) irrespective of their previous immunization status;
2. Flush out the wild polio virus from the environment by replacing it with the vaccine virus; and
3. Supplement vitamin A to all one to five year old children during the NID.

During and immediately following the first NID, a process evaluation was conducted to identify operational difficulties and potential solutions to improve the implementation of future NIDs in Bangladesh. The process evaluation placed emphasis on the NID activities for the urban poor who are considered to be a hard-to-reach and under-served population.

### **B. Methodology**

The process evaluation used several data collection procedures including observations before and during the NID, interviews with mothers leaving the vaccination sites, and focus group discussions with local managers and mothers. The instruments for all the procedures are in the appendices.

A total of 100 vaccination sites were observed during the NID and 286 exit interviews were conducted in these sites. Immediately following the NID, focus group discussions were held in four city corporations and four district municipalities with local managers, mothers who participated in the NID, and mothers who did not participate in the NID.

### **C. Results**

#### *Planning and Management*

Letters from the different line ministries were received too late to facilitate cooperation and coordination (e.g., although funds were available, it was often impossible for staff to provide even tea to volunteers without sanction from the Ministry).

Overall there was a shortage of time for planning activities. There was inadequate lead time once the GOB committed to the NIDs. This was exacerbated by holidays for Ramadan and Eid as well as the frequent *hartals*. During Ramadan, things slow down in general; schools are closed which made it difficult to recruit teachers to be volunteers or use older children as mobilizers. Also, many people leave the cities for the rural areas during the Eid festivities which meant that some parents did not know where to take their children for the NID.

Most cities reported that there was very good cooperation among city officials, the Civil Surgeon's Office, teachers, and non-governmental organizations (NGOs). However, Mymensingh had difficulty maintaining cooperation. The managers from Mymensingh said that there was "little coordination due to misunderstandings of individual responsibilities."

Many places reported a shortage of workers which created many problems. Since there were not enough people to deliver the vaccine, some centers opened late and mothers went home instead of waiting. Shortage of vaccinators caused long lines and crowds, and some mothers just left.

The list of new sites in urban areas was not prepared in advance. This meant that in some areas, staff made two household visits — first to register and tell the family about the NID — and then to give the referral slip with the vaccine site written on it. In Mymensingh, centers were not selected very carefully, some were too close together and others too far apart.

Tetanus toxoid and measles drop-outs were not identified. This was primarily due to the lack of forms, people and time. While over 85 percent of the sites received the tally sheets, registration forms, and referral slips, only 32 percent received the measles and tetanus toxoid (TT) drop-out forms. One manager also mentioned that identifying pregnant women is a sensitive topic that cannot be conducted by strangers who, in this case, were usually male.

Private health practitioners were not briefed or involved in the NID. There was no orientation of the Pediatric Society or other associations. As a result, there were reports that educated people were told by their private doctors that they did not need to participate.

### *Operations on the Day of the NID*

During the debriefing workshop, all observers commented that the first NID has run much more smoothly than anyone had expected. As a rough indicator, observers rated only four percent of the sites visited as "extremely chaotic." Similarly, few sites were observed to have poor teamwork, a poor building site, poor crowd management, or poor client interactions (see Table 3).

Vaccination sites were located near the respondents, according to most respondents. Eighty-seven percent of exit interview respondents said they walked to the center and for 76 percent of them, it took less than 10 minutes. On average, 18 children were waiting in line, but in some centers over 100 children were estimated to be waiting in line. The hours that centers were open

varied somewhat: at 8 a.m., 59 percent of the centers opened and at 9 a.m., 31 percent opened. Twenty-nine percent of centers closed at 2 p.m., but 32 percent were open until 4 p.m. during the NID.

The root problem of many centers was either a staff shortage or inadequate training of available staff. The vaccine did not arrive at some sites until 10 a.m., due to staff shortages. Overall, sites averaged five staff in total, with four of them volunteers who had received three and a half hours of training; there very few supervisors. The volunteer training was inadequate for administering the vaccine or for marking the tally sheets. Some observers reported that children were receiving one to four drops depending on their age (with more drops for older kids), and some volunteers held vials in hands to “keep them cold.”

Even the trained health workers had to adjust to the different procedures for the NID. Some problems were due to the fact that cold chain and record keeping procedures for the NID differed from routine immunization. For example, there is a heavy emphasis on maintaining records on cards for routine immunization, yet for the NID, they were just asked for tally sheets. (Actually, everyone used the registration lists anyway.) Another problem was that some health workers took the ice packs out of the vaccine boxes and placed the vial in the ice pack on the table as is usually done for routine immunization. This meant that the vials left in the box were not kept cold.

There were also some weaknesses in the cold chain in some areas. The ice in the sputum cups melted very quickly. Although innovative, the cardboard vaccine carriers were not very durable and the styrofoam pieces were not always properly inserted.

Everyone (with a few notable exceptions such as Radda Barnum) checked each child off of the registration lists (long lists of names were often 10 to 15 pages long); this caused tremendous lines in many places. Seventy-four percent of the sites observed screened children using registration lists, and 25 percent of the sites recorded the vaccines given on the registration lists. Some observers reported talking to clients who left due to the long lines.

There was a shortage of supplies such as vial cutters, forms, and ice in some areas. Some centers experienced vaccine shortages; these lasted for a couple hours until vaccine could be obtained from another nearby center. There were reports that both 10 and 20 dose vials were used which caused confusion and some temporary shortages.

### *Social Mobilization*

There were a number of problems in the registration process. The most important problems were the lack of both time and human resources. All managers reported that Ramadan hampered the social mobilization efforts. In urban areas, many new temporary vaccination sites had to be created and the location communicated to families. At registration time, the location of some

sites had not yet been determined and some NGOs actually made two visits to each household in their catchment areas to communicate the actual site location.

By far, the most important information sources were the health worker and registration. (Since registration was usually conducted by a health worker, the two categories should be viewed as one.) The second most important information source was miking (i.e., using a microphone), with 34 percent of respondents citing this source. This is lower than might be expected. During the focus groups, some mothers said that they do not pay attention to miking. As one woman said, “Miking is done for various things which aren’t important to me.” One NGO in Dhaka used a woman’s voice for the miking which seemed to be more effective in attracting women’s attention.

Most of the focus group participants thought that vaccines provide general protection against all diseases rather than preventing specific diseases. Taking this logic one step further, one respondent in Chittagong reported, “If a child is healthy enough, then it will do if that child is not vaccinated or given partial doses.” However, many respondents reported that vaccines are not effective if you only take a few doses. In Dhaka, a respondent said, “To receive *tika* is good and if you give *tika*, you should give all of them,” going on to say that if a child had not received the earlier vaccines, it was of no use to get the later vaccines. Many respondents believed that the side effects of fever and swelling mean that the vaccine is working and that poisonous things are coming out from the body. In Mymensingh, one woman said, “If the place is swollen, then poisonous things come out of the child’s body, but if it is not swollen, the poisonous things stay inside the body.”

When NID participants were asked why they attended the NID, most responded that they attended because the health worker told them to attend. NID participants also said that their families were very supportive of immunization in general. Some respondents said that they were poor and did not have any money for treatment if their child got sick. Another reason why people participated in the NID is that they believed the vaccine was a “new medicine for a new disease.”

The exit interview results showed that eight percent of respondents knew someone who did not plan to attend the NID. When asked which children should not receive the vaccine, 15 percent of exit interview respondents said a sick child, nine percent said a child under one month old, and seven percent said fully-immunized children should not receive the vaccine. The reasons for not participating in the NID can be divided into three broad categories:

- beliefs and knowledge about vaccines including confusion about the NID;
- limited access to vaccination sites; and
- social factors including the lack of family support and previous experience with health workers.

Many mothers thought their children were fully immunized and did not need the Oral Polio Vaccine (OPV). They were afraid of harmful side effects of “too many doses” especially when the child had already had the routine polio vaccine. Many urban poor women work in factories or as domestic help from morning until night and could not come to the site during the hours it was open. Other mothers reported that family members did not allow them to take the child to be immunized either because it would affect their household work or because they did not believe the immunization was necessary.

#### D. Recommendations

- The NID should be made a national priority.
- There is a need for increased political support at the national level.
- Opposition party support should be enlisted.
- Letters are needed from line ministries showing support and outlining the various roles and responsibilities.
- Attempts should be made to declare the NID a national holiday.
- There should be an increase in the local NID budget and the budgets should be provided earlier.
- The full implications of holding the NIDs so close to Ramadan should be carefully considered, so that the necessary arrangements to identify sites and involve schools can be made.
- Vaccination sites in urban areas need to be selected in advance.
- The hours that centers are open should be examined since many mothers could not attend due to their work outside the home.
- Volunteers and other staff need to be better trained in vaccine administration, marking the tally sheets, and cold chain maintenance.
- Special attention should be given to emphasize key differences between the NID and routine vaccination services for the trained health workers.
- During the NID, every attempt should be made to encourage clients to continue to bring their children for routine immunization.
- More social mobilization efforts are needed and need to begin earlier.

- Since most information was carried through face-to-face communication, innovative strategies are needed to cover the wide areas in the given amount of time. Messages should encourage people to “tell your neighbor” or “bring five kids in,” etc.

## II. INTRODUCTION

As part of a global program to eradicate polio, Bangladesh held its first round of the National Immunization Day (NID) on March 16, 1995 and April 16, 1995. As part of its participation in the global program, the Government of Bangladesh has committed to the implementation of two NIDs per year for the next three years. As part of the polio eradication initiative, the objectives of the NIDs are to:

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3. Supplement vitamin A to all one to five year old children during the NID.

During and immediately following the first NID, a process evaluation was conducted to identify operational difficulties and potential solutions to improve the implementation of future NIDs in Bangladesh. The process evaluation placed emphasis on the NID activities for the urban poor who are considered to be a hard-to-reach and under-served population. Specifically, the process evaluation objectives were to understand the successes and difficulties of the following aspects of the NID including :

- overall management and planning at the local level;
- operations on the day of the NID;
- communication and social mobilization;
- reasons for non-participation;
- confusion about the purpose of registration — such as health workers who used the registration lists to check off children as they arrived and those health workers who reportedly refused to vaccinate children who were not registered; and
- confusion due to the different procedures in record keeping and use of the ice pack compared with routine immunization.

This report only discusses the experiences of the first NID that was held on March 16, 1995.

### III. METHODOLOGY

The process evaluation used several data collection procedures including observations before and during the NID, interviews with mothers leaving the vaccination sites, and focus group discussions with local managers and mothers.

#### A. Sampling

A purposive sample of vaccination sites was selected in urban poor areas in four city corporations and four district municipalities. The selection criteria for district municipalities were that they should be large enough to include urban poor areas where some difficulties were expected.

Five specific vaccination sites within each city or municipality were selected. Selection criterion for the vaccination sites were to be:

- in an urban poor area;
- in an under-served area (e.g., no large NGO in the area);
- two government outreach or new sites;
- NGO outreach or new sites;
- one fixed site;
- a mix of sites staffed by volunteers and health staff;
- sites where difficulties are expected; and
- one site should be a place where focus group participants could be recruited following the NID with emphasis on eight specific sites.

Focus group participants were identified and recruited by the Urban Operations Officers in each of the cities and municipalities. The criteria for NID managers to participate in the focus group were:

- that the person should have been involved in the actual NID management and planning in the sites observed;
- to include a mix of NGO and government managers if appropriate;
- to involve people who are willing and able to discuss the operational and management problems of the NID openly to improve future NIDs; and
- that the group should **not** include different levels of people so as not to inhibit open discussions.

Participants for the focus groups with mothers were recruited by the Urban Operations Officers with the assistance of NGOs and government field staff. Criteria for recruitment were that the mothers should:

- all be considered "urban poor;"
- all live in the catchment area of one of the vaccination sites that was observed during the NID;
- include six to eight mothers of children aged one to five who did **not** attend the NID;
- include six to eight mothers of children under one year of age who did **not** attend the NID; and
- should include six to eight mothers of children under five years of age who did attend the NID.

## B. Data Collection Procedures

### *Observations*

Approximately 40 independent observers from the Ministry of Health, BASICS, BRAC, CARE, WHO, UNICEF, and other international health organizations observed NID preparations around the country in the week before the NID. The same observers each visited five vaccination sites on the day of the NID. Observation forms were developed and are included as Appendices A and B. At both times, observations were made on the maintenance of the cold chain, social mobilization, and logistics. The independent observers held a debriefing two days after the NID.

### *Focus Group Discussions*

Focus group discussions were held with four types of respondents:

1. local managers;
2. mothers who participated in the NID;
3. mothers of children under one year old who did not participate in the NID; and
4. mothers of children one to five years of age who did not participate in the NID.

The discussion guide for managers in Appendix D focused on the overall planning and management process for logistics, cold chain maintenance, and social mobilization.

The discussion with mothers of children who were vaccinated during the NID focused on the information sources about the NID, reasons for participation, and possible confusion between routine EPI and the NID.

In the week immediately after the NID, in one site in each of the eight cities/municipalities, there will be two focus group discussions with six to eight mothers of children who were **not**

vaccinated during the NID. The primary purpose of these two discussions will be to understand the reasons for non-participation. One focus group will be conducted with mothers of children under one year old and the second will be conducted with mothers of children under five years old.

#### *Exit Interviews*

On the day of the NID, the independent observers conducted a total of 286 exit interviews at the sites visited. This form is attached as Appendix C.

## **IV. RESULTS**

### **A. Planning and Resource Mobilization**

#### **Planning Process in Khulna City Corporation**

The Urban Operations Officer sent a letter to the Mayor of KCC on January 5, 1995 to inform him of the NID. On January 15, 1995, the first planning and advocacy meeting was held with all allied departments, NGOs, and Ward Commissioners. There are 31 wards in two zones in KCC. On February 8, 1995, there was a workshop to orient ward secretaries and hold ward advocacy meetings. Eighty percent of ward advocacy meetings were held by Eid but there was political instability in a few of the wards. On February 19, 1995, the Health Officer was suspended and now there is an Officer-in-Charge (acting). Registration began on February 1, 1995, communication materials were received on March 1, 1995, and vaccine also arrived at the Civil Surgeon's Office on March 1, 1995. There was a shortage of vaccine carriers but that was resolved. KCC did not receive the TT drop-out forms or supervisory checklists.

A total of 55 sites were visited one week before the NID. Results from the pre-NID observations showed that there were five sites without a NID coordination committee and four sites had not held any advocacy or planning meeting. Sixteen sites (29 percent) calculated their target population using census data, while 31 sites (56 percent) used registration lists to estimate their target population. Table 1 (below) shows some the key observations made during the pre-NID monitoring.

**Table 1: Observations of Site Preparations one week before the NID (N=55)<sup>1</sup>**  
(pre-NID observations)

	<b>Yes (percent)</b>	<b>No (percent)</b>
Forms received	46 (84)	9 (16)
Communication materials received	45 (82)	10 (18)
Vaccine received	47 (82)	8 (18)
Cold chain equipment adequate	42 (76)	12 (22)
Local source of ice identified	28 (51)	15 (27)
Confirmed transportation to site	42 (76)	4 (7)
Supervisory plan prepared	47 (85)	7 (13)
Had plan for hard-to-reach areas	28 (51)	14 (26)
Measles/TT drop-out list prepared	31 (56)	11 (20)
All volunteers trained	35 (64)	16 (29)
Adequate social mobilization strategy	35 (64)	14 (25)
Special mobilization strategy for high-risk areas	26 (47)	12 (22)
Communication materials developed	19 (35)	33 (60)
Tapped local resources	16 (29)	24 (44)

During the focus group discussions, managers were asked about their experiences with planning and resource mobilization. Despite real constraints, the overall planning and management of the first NID was quite successful in urban areas. In most cities and municipalities, advocacy and planning meetings were held with Ward Commissioners, NGOs, school teachers, religious organizations, and other social leaders.

Most managers reported that there was very good cooperation among city officials, the Civil Surgeon's Office, teachers, and NGOs. However, Mymensingh had difficulty maintaining

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<sup>1</sup> Due to some missing data, percentages do not add up to 100.

cooperation. The managers from Mymensingh said that there was “little coordination due to misunderstandings of individual responsibilities.” One manager said that the lack of coordination was partially due to the fact that there was no letter from the government which delineated individual responsibilities; the Poura Corporation thought the activities would be done by the Civil Surgeon’s Office.

The main problems that managers cited by were the lack of preparation time, shortage of people, and inadequate supplies of communication materials. There was a lack of time for several reasons.

1. The Government of Bangladesh agreed to the NIDs in December 1994, allowing only three months of preparation time although WHO recommends at least eight months.
2. Ramadan occurred during February which meant that schools were closed and people worked shorter hours.
3. There were frequent *hartals* and strikes.

The lack of preparation time meant that there was little communication from the central level about the roles and responsibilities of various groups. In Chittagong, there was poor attendance by Ward Commissioners because some thought the NID was motivated for political reasons by the Bangladesh National Party (BNP). Managers in Chittagong reported that they talked to some pharmaceutical companies but could not effectively involve them due to time constraints.

The lack of time also resulted in difficulty recruiting and training volunteers. Some managers (in Saidpur, Mymensingh, Khulna) reported that they did not have enough volunteers. In Saidpur, the shortage of people to deliver vaccine meant centers opened late and mothers went home; workers went house-to-house to cover that area.

Table 2 below presents the highlights of the planning and resource mobilization activities in eight cities and municipalities.

**Table 2: Planning and Resource Mobilization According to Local Managers (FGD with local managers)**

City	Operational Difficulty	Operational Success
Dhaka	<p>Received stickers after the NID was over.                      Too few posters and leaflets.                      City corporation felt this was added work and not the highest priority.                      Not enough registration forms.</p>	<p>City Corporation, LGRD, Uttarayan club all cooperated.                      Held meetings with Shabujshangha and Tarunshangha clubs.                      Coordinated with school teachers.                      Involved Rover Scout and Alia Madrasha (religious organization) students.                      Recruited and trained 300 volunteers.</p>

<p>Mymensingh</p>	<p>Little liaison maintained after initial meetings.  Lack of coordination among all parties due to misunderstandings of individual responsibilities.  Could not involve local social workers due to lack of time and <i>hartals</i>.  Funds not supplied in time which caused delays in hanging banners.  Delayed funds for gum and rickshaw fare for posters.  Not enough referral slips.</p>	<p>Held initial meetings with Civil Surgeon, Pourashava and NGOs.</p>
<p>Chittagong</p>	<p>Poor attendance by Ward Commissioners at first meeting, thought NID was politically motivated by BNP.  WC put less priority on NID.  Could not complete registration.  Inadequate volunteer training.  Could not involve students and school teachers as much due to Ramadan vacation.  Forms, posters, leaflets, etc. were received at the very last minute.  Not enough communication materials.</p>	<p>Greater WC participation after Mayor emphasized national importance of NID.  Core committees formed for mobilizing people and establishing sites.  Each officer with a vehicle was asked to carry vaccine to sites, supervise, and return unused vials.  First time that there was such massive resource mobilization.</p>

Comilla	<p>Not enough preparation time.          Needed letters from line ministries.          Could not list measles and TT drop-outs.          Not enough referral slips or communication materials.</p>	<p>Advocacy meetings included WC, the civil surgeon, NGOs, and teachers.          Teachers were main operators of NID, head teachers assigned for supervision.          Backup staff from NGOs.          Made cinema slides to show in halls, used decorated baby taxi for miking.          Imams explained NID in mosques.          Local groups made banners.          Lottery of referral slips.          Might give prizes to volunteers.</p>
Rajshahi	<p>Shortage of time during Ramadan hampered social mobilization.          The one-day orientation was insufficient.          WC did not visit assigned centers.          Some leaders did not allow a center in their house.</p>	<p>WC arranged food and visited assigned centers.          Volunteers worked all day without food.          Local leaders gave food for volunteers and arranged a center in their house.</p>
Saidpur	<p>Time was too short for a new program.          Not everyone actively participated.          Many problems with Eid, holidays, <i>gherao</i>, Krishimela, hot season.          Difficult to find volunteers.          No time for proper volunteer training.          Financial problems for volunteer training.          Some community leaders did not cooperate.          Received too few leaflets, posters, banners, registration forms, and referral slips.</p>	<p>Advocacy meetings included people from NGOs, Government, FP and Health, schools, municipality, WC, and local leaders.          Chairman was busy with fertilizer problem.          Coordination with all these people was new for NID.          Some NGOs copied forms.          Contracted with ice cream factory to provide ice.          Arranged a big ice box to supply ice to centers.</p>

<p><b>Khulna</b></p>	<p>Could not do proper registration. Inadequate supply of posters, registration forms, ice packs.</p>	<p>Meeting to evaluate progress after 15 days. Workers employed through WC. Teachers were involved. Recruited volunteers from Ansar, VDP Office.</p>
<p><b>Barishal</b></p>	<p>Could not select volunteers through WC. WC had not taken the oath so they did not take much responsibility. Inadequate supply of posters and registration forms.</p>	<p>Chairman arranged advocacy meeting with government and NGO managers. Ward committees formed with WC and social leaders. Three WCs cooperated very well.</p>

## B. Operations on the Day of the NID

### **The Day of the NID in Khulna City Corporation**

All the vaccine was stored in one of the zonal offices. All available ice packs were frozen and ice had been made in sputum containers. The night before the NID, a team of people worked all night long to put together the cardboard vaccine boxes. The boxes consisted of a thin cardboard box which had to be folded and six pieces of styrofoam inserted against each of the six sides. A label was pasted onto each box which showed the ward and center where the box was to go. The box and some tally forms were all put in a plastic bag for distribution. On the morning of the NID, right after the morning prayers, the vaccine was packed in the boxes. First, the ice pack or sputum container was put into the box, then the vaccine vials were counted out. At 7 a.m., trucks started taking the vaccine to each ward office; from there someone carried the vaccine by 8 a.m. to each site. Everyone was instructed to get vaccine from a nearby site if they ran out of vaccine. There were also mobile trucks going around with some vaccine.

Mothers and children started drifting in to the sites as the vaccine arrived. At 9 a.m., the Mayor of Khulna arrived at a site to formally inaugurate the NID and administer vaccine to a few children. Press and media were there to document the event. By 10 a.m., most sites were filled with children waiting to be vaccinated. There was a concerted effort to bring children in early for fear the strong heat would destroy the vaccine's potency. Volunteers and older children canvassed the areas to encourage parents to bring their children in. Few sites reported running out of vaccine. By noon, many sites had vaccinated over 300 children (often more than were registered) and were winding down their operations. By 1 p.m., most sites were closed.

At 7 p.m., the vaccine and tally sheets were being returned to the zone office. As each vaccine box was returned, the used vials were put in a pile to be counted. The unused vials were marked with a red pen and returned to the refrigerator. The tally sheets were compiled. Several people counted the marks and entered them into a summary sheet for each ward. Many of the tally sheets had not come in and the Sanitary Inspector said that they would probably have to go collect them. The Sanitary Inspector had been working for 36 hours non-stop and at about 8 p.m. announced that he had to go home to sleep. He was completely exhausted.

### *Overall Operations*

During the debriefing workshop, most of the independent observers commented that the NID had surpassed their expectations for success. There were few vaccine shortages reported. However,

some areas used both 10 and 20 dose vials which were difficult to distinguish and did create some shortages. Though not ideal, the cold chain was maintained using available ice pack and ice made in sputum containers. Observers found that in 66 percent of the sites visited, the ice packs were still frozen.

Using a structured form (see Appendix B), observers made notes about various aspects of the site operations on the day of the NID. Observers were asked to rate their perceptions of the overall operations of each site they visited.<sup>2</sup> Only four percent of the sites were rated as extremely chaotic; the rest of the sites evenly split between being rated as ‘somewhat chaotic’ and ‘quite efficient.’ Table 3 presents the independent observers ratings of specific operational characteristics. Very few sites were rated poor with regard to teamwork, building size, crowd management, or client interactions.

	<b>Excellent</b>	<b>Good</b>	<b>Poor</b>
Staff Teamwork (N=91)	52	46	2
Size of Building (N=87)	45	40	15
Crowd Management (N=69)	32	56	12
Client Interactions (N=86)	35	53	12

The hours that sites were open varied somewhat with 59 percent of sites opening at 8 a.m. and 31 percent opening at 9 a.m.; closing times ranged from noon (one site) to 5 p.m. (14 sites).

The majority of vaccination sites received tally sheets, registration forms, and referral slips, while only 32 percent of the sites received the measles and tetanus toxoid drop-out forms (see Table 4).

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<sup>2</sup> It should be noted that these ratings are subjective, likely to have low inter-rater reliability, and hence should be interpreted with caution.

<b>Table 4: Percentage of Sites That Received Forms (n=100) - NID Observations</b>	
Tally Sheets	87
Registration forms	91
Referral slips	88
Measles and TT drop-out	32

Most sites (74 percent) used the registration lists to screen each child that arrived to be vaccinated. Usually this meant searching the list for the child's or the child's father's name. In the focus group discussions, managers reported that it took far too much time to compare the referral slips to the registration lists and often led to long lines of people waiting. Managers thought that centers should not administer OPV without registering the children (WHO recommends recording names only on the tally sheets and not using registration lists). In Comilla, one respondent said that she took her child to a nearby center, but the health worker refused to vaccinate the child because the child was not registered. As Table 5 shows, 25 percent of the sites recorded the vaccinations given on the registration sheets instead of the tally sheets. In urban areas, 18 percent of sites recorded vaccinations on the vaccination cards. Since there is no specific place for the NIDs to be entered on the cards, it is possible that the NID dose was recorded as a routine dose of OPV.

<b>Table 5: Method of Recording Vaccinations Given (percent of sites)</b>			
NID Observations			
	<b>Rural (N=33)</b>	<b>Urban(N=40)</b>	<b>Overall <sup>3</sup>(N=100)</b>
Tally sheet	79	83	79
Registration lists	21	35	25
Vaccination card	9	18	11

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<sup>3</sup> A number of forms were returned without specifying whether the site was rural or urban. These are included in the overall percentages but not in the breakdown between rural and urban sites. This is why the sum of the number of rural and urban sites does not equal the overall total.

All sites that were observed had four to six staff working, but some sites had an all volunteer staff. Some managers reported that they had a staff shortage and many staff were inadequately trained. The staff shortage meant delays in opening sites (due to late arrival of the vaccine), and in Mymensingh, it meant that some sites could not be opened at all.

On average, volunteers received three and one half hours of training and orientation. The lack of adequate training led to some improper OPV administration. For example, some vaccinators held the vaccine vials in their hands for a long time “to keep it cold” instead of immediately returning it to the ice. Other volunteers did not understand the two-drop requirement and gave three to four drops for older children and one drop to younger children. Other volunteers cut their hands while opening the vials.

The main operational difficulties and successes in eight cities and municipalities are presented in Table 6 (below).

**Table 6: Operations on the Day of the NID According to Local Managers (FGD with local managers)**

City	Difficulties	Successes
Dhaka	<p>Vaccine shortages caused long lines and some mothers left without vaccine.</p> <p>Most centers closed at 1 p.m. and mothers came too early or too late. Working mothers could not come.</p> <p>Takes too long to compare referral slip to registration list.</p> <p>Not enough vial cutters and workers cut their hands.</p> <p>Poor quality of vaccine carriers.</p> <p>Had to purchase ice separately.</p>	<p>More children than those registered received OPV.</p> <p>Volunteers willingly helped.</p>
Mymensingh	<p>When vaccine arrived at one ward, there was no one there.</p> <p>Did not properly select centers, some were very close together and others very far apart.</p> <p>Vaccine was late, so workers left.</p> <p>Shortage of volunteers so not all centers could open as planned.</p> <p>Some workers left after a while leaving the health worker alone.</p> <p>Shortage of vial cutters.</p> <p>Ice packs melted and ice had to be purchased.</p>	
Chittagong	<p>Volunteers searching for name on lists, not using referral slips.</p> <p>Poor volunteer attendance where WC did not cooperate.</p> <p>Two types of vaccine vials (10 and 20 dose) created vaccine shortages.</p> <p>Vaccine shortages due to difficulty of estimating the population.</p> <p>Ice in cold cups melted very fast.</p>	<p>Extra vaccine supplied at ward offices.</p> <p>Assigned staff with vehicles to carry vaccine to sites.</p> <p>Vaccine was stored in personal domestic refrigerators.</p>

Comilla	<p>Two types of vaccine vials (10 and 20 dose) created vaccine shortages. Ice cups melted. Vaccine carriers were inappropriate. Ice cups melted soon.</p>	<p>Used six motorbikes to transport vaccines. Arranged for file, paper, and a pen, for each volunteer to use. Vaccine carriers supplied by rickshaw.</p>
Rajshahi	<p>Volunteers were not good at record keeping or giving the OPV. Shortage of vaccine and transport at some centers. Some centers received vaccine late. One ward received no vaccine because the ward number was changed. Mothers had to wait a long time. Shortage of ice packs. No system to provide ice. No dropper in some boxes. Sputum containers were not good. Vaccinator kept vaccine in hand and did not maintain cold chain.</p>	<p>Some centers had motorcycles and baby taxis. Coordinator supplied two extra boxes.</p>
Saidpur	<p>Shortage of people to distribute vaccine. Needed more women volunteers. No refreshment for volunteers. Confused about efficiency of vaccine once ice melted.</p>	<p>Started distribution very early morning. Storage points around the city. Vaccinated house-to-house when mothers left the center. Got vaccine from other centers during shortages. Did not use registration during the peak periods.</p>

<p>Khulna</p>	<p>Few supervision teams.  Shortage of workers.  Inadequate training caused volunteer to cut hand while opening the vials.  Shortage of transport.  Shortage of ice packs.  Mothers went home due to long lines.  No cutter to open vaccine vials.</p>	<p>Gave vaccine without registration due to crowds.  Transported vaccine by rickshaws.  Brought ice from outside when ice melted.</p>
<p>Barishal</p>	<p>Centers were far from houses.  No transport for workers.  Shortage of volunteers and supervisors.  Some mothers left without immunizing due to long waits.  Vaccine reached late at some centers.  Vaccine shortage.  Inadequate supply of ice packs.  Held ice and vaccine in hands to "prevent melting."</p>	<p>Some mothers went to other centers when vaccine arrived late.  Vaccine collected from other centers.  Porters and supervisors worked as volunteers when short.  Did not register and used tally sheets.</p>

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### *Difficulties in Participating in the NID*

During the exit interviews and the focus group discussions, mothers who brought their children for the NID were asked if they had any difficulties in participating. Most mothers reported that they faced no problems at all. In Chittagong, some mothers said that they brought the children of people who were unable to attend. The centers were located close to where the mothers lived. As Tables 7 and 8 show, over 80 percent of mothers walked to the vaccination sites and for over 70 percent of respondents, it took them less than 10 minutes to reach the sites. Table 9 shows the length of time that mothers reported waiting; overall 69 percent of respondents waited less than 15 minutes to be vaccinated.

<b>Table 7: Mode of Transportation to the Site - Exit Interviews</b> (percent of respondents)			
	<b>Rural</b> (N=52)	<b>Urban</b> (N=231)	<b>Overall</b> (N=283)
Walk	92	85	87
Rickshaw	6	13	12
Bus	2	0.4	1
Baby taxi	0	1	1

<b>Table 8: Length of Time to Reach Site - Exit Interviews</b> (percent of respondents)			
	<b>Rural</b> (N=52)	<b>Urban</b> (N=228)	<b>Overall</b> (N=280)
Less than 10 minutes	85	74	76
11 to 20 minutes	14	21	19
21 to 30 minutes	0	5	4
More than 30 minutes	2	1	1

<b>Table 9: Length of Time Waited - Exit Interviews</b> (percent of respondents)			
	<b>Rural</b> (N=53)	<b>Urban</b> (N=231)	<b>Overall</b> (N=284)
< 15 minutes	59	71	69
15-30 minutes	25	15	17
> 30 minutes	17	13	14

During the focus group discussions, mothers who participated in the NID mentioned a number of problems that were due both the amount of time they had to spend and the scheduled time that centers were open. In general, respondents said that the centers should be less crowded and the number of vaccinators increased so that the line would move quickly. In Barishal, respondents reported that due to the crowds, they went to the site and then went home and came back later. Some people reported that they had to make several trips. In Comilla, respondents said that the centers should remain open until 5 p.m.; in Rajshahi, one respondent said, “We came early but the vaccine came late.” A woman in Dhaka said: “I am a garments worker. That day I went to work at 11 a.m. but there was no problem because I was granted leave on this account.” Dhaka respondents said that it would be better for the NID to be held on a Friday since offices are closed that day. If not Friday, they felt that Thursday is better because there is only a half day at the office.

Respondents also made suggestions to improve the NID experience. Some Barishal respondents said that some seating arrangements would improve the situation. NID participants in Khulna said that they suffered from heat because the room was so small. A number of respondents asked that drinking water be made available. A Barishal woman said that there should be someone to clean up the babies’ stool and urine to avoid the bad smell. A Khulna respondent suggested that medicine for worms also be given at the same time.

### C. Social Mobilization and Communication

#### *Registration*

Prior to the NID, attempts were made to register every child under five in Bangladesh, an estimated 20 million children. The purpose of the registration was to estimate the number of sites and the amount of vaccine and other supplies needed for the NID, and secondly, to inform and motivate households to bring their children for the NID. In addition to registering children under five years of age, the process was also supposed to identify pregnant women who had not received tetanus toxoid (TT), and children nine to 12 months who had not been immunized against measles. During registration, households were given referral slips which had the NID

date written on it and the immunization site location. Table 10 shows local managers' estimates of the registration coverage in selected urban areas.

<b>Table 10: Registration in the Selected Urban Areas (FGD with local managers)</b>		
<b>City</b>	<b>Percent registered</b>	<b>Comments by Managers</b>
Rajshahi	80	Difficult due to shortage of manpower and time. Shortage and late arrival of forms.
Chittagong	70-80	Number of registered children was much less than the 17 percent estimated due to few children in commercial areas.
Comilla	60	Based on estimates but 80 percent according to "our own statistics." <i>Hartals</i> affected the registration badly.
Khulna	80	Many were not registered due to manpower and time shortage.
Barishal	85	Worker and Time Shortage: "Volunteers had to spend a lot of time to motivate mothers because many of them asked why it was needed when their child is fully immunized."
Dhaka	Most everyone	But twice the number of registered people came so maybe registration was only 50 percent. "Registration was a time consuming affair." Used a female voice for miking which created interest among people. Informed people when they came to the clinic for other services.
Mymensingh	50	Only half of the target population were registered because there were not enough workers.

There were a number of problems in the registration process. All managers reported that Ramadan hampered the social mobilization efforts. In urban areas, many new temporary vaccination sites had to be created and the location communicated to families. At the registration

time, the location of some sites had not yet been determined; some NGOs actually made two visits to each household in their catchment areas to communicate the final site location.

No area in the country was able to complete the listing of measles and TT drop-outs. In Chittagong, managers explained that listing children for measles drop-outs and pregnant women for TT created many problems and in the end, it was not carried out. Volunteers could not ask mothers about pregnancy because they are not so familiar to the mothers that they could ask such questions openly.

### *Communication Channels*

A number of print materials and TV spots were developed at EPI headquarters in Dhaka for use nationwide. The print materials included posters, two pamphlets, a bumper sticker, a smaller sticker, banners, and flags. TV spots began airing the week before the NIDs. All managers reported a shortage of print materials.

There were many local initiatives in social mobilization. Some cities prepared their own cinema slides or tapes for miking. In the urban poor areas, house-to-house visits were made and miking used heavily to inform families about the NID. In sites where there was miking, the miking was started three and a half days prior to the NID. In the focus group discussions, local managers reported using the following communication channels:

- Miking in mosques;
- Special radio bulletin;
- Local newspapers;
- House-to-house visits for registration;
- Miking through local club members;
- Preparing cinema slides in Comilla;
- Holding public meetings in Khulna and Barishal; and
- Mobilizing imams.

Table 11 shows the percent of the sites which received the various print materials. The most available material was the poster which 77 percent of the sites received, however as Table 12 shows, only 57 percent of sites used the posters to identify the site.

<b>Table 11: Percentage of Sites Receiving Communication Materials NID Observations</b>			
	<b>Rural (N=33)</b>	<b>Urban (N=40)</b>	<b>Overall (N=100)</b>
Stickers	30	33	31
Leaflets	52	43	44
Posters	82	85	77
Flag/Banner	33	5	56

<b>Table 12: How Site was Identifiable - NID Observations (percent of sites) (N=100)</b>	
Banner	34 percent
Flag	39 percent
Posters	57 percent

During the first NID, health workers were supposed to tell mothers to come back for the second NID on April 16, 1995. Table 13 shows what messages were given by health workers as observed by the independent observers. Note that in 88 percent of the sites, clients were told to return for the next NID, but in only 23 percent (nine percent in rural areas) of the sites were clients told to return for routine immunization visits. During the exit interviews, 69 percent of respondents knew the date of the second NID (April 16, 1995).

<b>Table 13: Messages Given to Clients During the NID - NID Observations (percent of the sites)</b>			
	<b>Rural (N=33)</b>	<b>Urban(N=40)</b>	<b>Overall (N=100)</b>
Come back April 16, 1995	82	93	88
Come back for routine visits	9	25	23
Tell others to come	27	15	17
This is separate from routine EPI	9	10	8

During the exit interviews and focus group discussions, mothers were asked how they heard about the NID and knew where to come. Table 14 shows the sources of information about the NID. By far, the most important information sources were the health worker and registration. (Since registration was usually conducted by a health worker, the two categories should be viewed as one.) The second most important information source was miking; 34 percent of the respondents cited this source. This is lower than might be expected. During the focus groups, some mothers said that they do not pay attention to miking. As one woman said, “Miking is done for various things which aren’t important to me.” One NGO in Dhaka used a woman’s voice for the miking which seemed to be more effective in attracting women’s attention. Table 15 shows when the mothers heard about the NID. The majority of respondents had heard about the NID during the previous week.

<b>Table 14: Source of Information About the NID - Exit Interviews</b>			
<b>(percent of respondents)</b>			
	<b>Rural (N=53)</b>	<b>Urban (N=233)</b>	<b>Overall (N=286)</b>
Registration	28	47	44
TV	11	23	21
Radio	6	17	15
Health worker	81	62	65
Friend/relative	8	26	23
Posters/leaflets	2	4	4
Miking	28	35	34
School	2	1	1

<b>Table 15: When did you find out about the NID? - Exit Interviews</b> (percent of respondents)			
	<b>Rural</b> (N=53)	<b>Urban</b> (N=231)	<b>Overall</b> (N=284)
Today	32	11	15
One to seven days ago	38	55	51
Eight to 14 days ago	15	18	17
>14 days ago	15	17	17

When asked about how they know about immunization in general, most respondents said the health worker tells them when to come or they refer to the immunization card.

A respondent in Chittagong said, “The health worker tells us after measles vaccination that no more vaccines are needed.” In Dhaka, one woman explained that the card helps her remember when to return for the vaccination: “The first time we go to receive a *tika*, they give us a card where the next receiving date is mentioned. We don’t read but we show this card to a literate person in the *bustee* and they tell us the actual date.” In Mymensingh, women explained that literate people read the card and know when to return for the next vaccine.

#### *Beliefs and Knowledge of Vaccines in General*

During some focus group discussions with mothers, beliefs about vaccines in general were discussed to understand how mothers interpreted the NID. It should be noted that this study cannot assess how widespread these beliefs are among the urban poor.

Most focus group participants thought that vaccines provide general protection against all diseases rather than preventing specific diseases. Mothers said, “If you complete all the vaccinations, no diseases will attack” and “The child will remain in good health and he will have no disease.” Others said that vaccines prevent coughs in children. Vaccines also mean that if a child is attacked by any disease, it will not be harmful or serious. A woman in Mymensingh said that her elder daughter did not receive the measles vaccine and had a serious attack of measles (*haam*), but her younger daughter was immunized against measles and had only a mild attack of measles. (The Bengali term *haam* often includes many other types of rashes in addition to measles.) Taking this logic one step further, one respondent in Chittagong reported, “If a child is healthy enough, then it will do if that child is not vaccinated or given partial doses.”

Most mothers were aware that children should receive a series of immunizations. In Comilla and Barishal, almost all mothers said that after taking measles vaccine, their child should not take any more vaccines because that means the child is fully immunized. However, many respondents reported that vaccines are not effective if you only take a few doses. In Dhaka, a respondent said, “To receive *tika* is good and if you give *tika*, you should give all of them” going on to say that if a child had not received the earlier vaccines, it was of no use to get the later vaccines.

A number of mothers said that vaccines improve the eyesight of babies (probably referring to vitamin A capsules which are given twice a year). This also relates to the confusion between vaccinations and curative injections. The distinction made in Bengali is between *tika* (injection) and *ausudh* (medicine which is eaten). Although most people seem to understand that some injections and medicine are preventive while others are curative, there is no distinct term for “vaccine” or “immunization.”

When discussing the side effects, most respondents said there were no harmful side effects of vaccinations. Fever and sores occur but they are not serious and go away after a while. Many respondents believed that the side effects of fever and swelling mean that the vaccine is working and that poisonous things are coming out from the body. In Mymensingh, one woman said, “If the place is swollen, then poisonous things come out of the child’s body but if it is not swollen, the poisonous things stay inside the body.”

However, in most of the focus groups there was a story about a bad experience with vaccines. In Khulna, a mother said: “After my child was given the third dose of vaccine, puss accumulated and it had to be operated. For this reason, my child is afraid and the measles vaccine could not be given.” In Saidpur, one respondent said that a child’s thigh became infected after the *tika* and later required an operation. Respondents also said that fever after vaccination would turn into other diseases. There is also a belief that vaccines can be harmful and even fatal when given incorrectly so that they “touch the bone” or give the vaccine “on a vein.” One respondent in Mymensingh said that a child was attacked by tetanus and died “when the *tika* was pushed and touched the bone.” In Mymensingh, one woman reported: “My husband thinks that the female worker does not know how and where to give the vaccine. If they push the vaccine on a vein, the child may die.”

### *Reasons for Participating in the NID*

When NID participants were asked why they attended the NID, most responded that they attended because the health worker told them to attend. A woman in Khulna said: “At first we were scared thinking that our children got a vaccine dose just a few days ago and why get another one. Then the health worker explained the reasons to me and I was convinced and got my child vaccinated again.” The face-to-face communication was crucial not only from health workers, but also from community members who took the initiative to convince their neighbors to attend. In Saidpur, one woman said that her neighbor was not planning to take her child for the NID but then “I personally convinced her and after that she came for the vaccine.”

NID participants also said that their families were very supportive of immunization in general. In Khulna, one respondent said that her husband and mother-in-law said, “First give the vaccine and then we can eat.” In Barishal, one respondent said, “My mother-in-law said, ‘First go to the center for *tika*, there is no need to do housework.’”

Some respondents said that they were poor and did not have any money for treatment if their child got sick. In Saidpur, one woman said, “We are poor, we could not spend money for treatment, so if we take this vaccine, our children will be in good health.” There is also a belief that there are many more diseases during the Bengali month of Chaitra (March-April), “During the month of Chaitra, children suffer from all sorts of diseases.”

Another reason why people participated in the NID is that they believed the vaccine was a “new medicine for a new disease.” A Dhaka respondent said, “A new disease has come up, so the government tells us to take our children to the center on 16th March so our children will not be limping.” A Saidpur respondent said that one of her elderly neighbors said that there used to be no diseases but now “there is excess medicine and excess diseases.”

#### *Reasons for Not Participating in the NID*

The process evaluation placed an emphasis on understanding the reasons for not participating in the NID so that corrective steps can be taken for the next NID.

The results of the exit interviews showed that eight percent of respondents knew someone who did not plan to attend the NID. The reasons for not participating in the NID can be divided into three broad categories:

1. beliefs and knowledge about vaccines including confusion about the NID;
2. limited access to vaccination sites; and
3. social factors including the lack of family support and previous experience with health workers.

**Knowledge and Beliefs:** Beliefs about immunization in general (discussed in the previous section) also applied to the NID. Table 16 shows the answers to the question “Who should not receive the vaccine?” In general, a greater percentage of rural mothers gave the incorrect answers. Between 15 and 19 percent of respondents reported that sick children, fully-immunized children, and children under one month old should not receive the vaccine. In urban areas, the percentages ranged from six percent to 14 percent. A woman in Khulna who had lost many children was afraid her child would die if vaccinated. In Saidpur, one woman said that one of her neighbor’s children suffered from measles and chicken pox after receiving the vaccine. After this experience, some people thought there was no point to the vaccinations, and did not take their children.

<b>Table 16: Children who should not receive the vaccine - Exit Interviews (percent of respondents)</b>			
	<b>Rural (N=53)</b>	<b>Urban (N=233)</b>	<b>Overall (N=286)</b>
Sick child	19	14	15
Child over five years of age	53	73	70
Fully-immunized child	15	6	7
Child under one month	15	7	9

There was some confusion about the purpose of the NID and how it was the same or different from routine immunization. As a manager in Rajshahi said, “There was confusion between routine immunization and the NID in each and every level of the people.” The confusion among mothers was at several levels. Many mothers thought their children were fully immunized and did not need the OPV. They were afraid of harmful side effects of “too many doses” especially when the child had already had the routine polio vaccine.

Many thought the NID was for an injection. This may be due to the use of the Bengali term *tika* which refers to injections but has also come to mean vaccination to many, but not all, people. There were rumors that an injection would be given to children in their mouths. A respondent in Comilla said that she knew a mother who did not attend because: “The baby was too young and will be hurt if injected. She knows that all vaccines are given by needles.”

Many non-participants simply did not know about the NID. During the focus group discussions in Chittagong, with the exception of two mothers, no one had heard about the NID. In Mymensingh, many respondents reported that no one (health worker) came to their house and they did not know why polio vaccine was given on March 16, 1995. There was also some misunderstanding of the messages that were given. Some people thought that the two days of NID will be March 16 and 17, while others thought they would attend next month *instead* of this month, not realizing that both months were necessary. Other respondents thought the vaccinator would come to their house.

Local managers reported that the educated people were more confused than the poor. A manager in Chittagong stated that:

Illiterate and poor people did not question the immunization on the NID because they depend on the health worker's instructions. But the literate people want to be sure about what is given and why.

In general, private doctors were not briefed on the NID's purpose and hence did not encourage their clients to participate. In Khulna, due to the doctors' confusion, many educated mothers did not receive the OPV. In Dhaka, mothers said, "Why should we give polio to our children without instruction of renowned doctors?"

**Access to Vaccination Sites:** For many non-participants, there was limited access to the sites for several reasons. Many urban poor women work in factories or as domestic help from morning till night and could not come to the site during the hours it was open. In Khulna and Dhaka, respondents reported that many working mothers cannot get vaccines because their wages would be cut. Many mothers also reported that they were busy with their housework and either could not go to the center or went too late. In Dhaka and Mymensingh, mothers went to the center after finishing their housework and found the center closed. In Rajshahi, one mother said, "We know about the *tika* very well, but we have no time to take the children to the center." Another mother commented on the time it takes due to all the crowds, "I did not finish all the doses because of my household work like cow and goat rearing and the center takes a lot of time because of the crowds." In Dhaka, several mothers reported that they had gone to the sites several times but always returned home since the lines were extremely long.

The distance of the center from the house made access difficult in some areas. In Barishal, all respondents said that there was no vaccination center near their house. In Mymensingh, some people could not come because the center was far from their house. Other people were out of town and did not know where to go or thought they had to go to the assigned center. There were a few reports that health workers turned children away. In Rajshahi, one woman was visiting her mother and took her child to the nearby vaccination center. But since the child was not registered there, they refused to vaccinate the child. In Comilla, one mother said that a health worker told her that the child should not be vaccinated when the child had a cough.

**Social Factors:** Many mothers reported that family members did not allow them to take the child to be immunized either because it would affect their household work or because they did not believe the immunization was necessary. Husbands and in-laws say to do household work before taking the child for vaccination. Some respondents said about their neighbors: "If they did not finish their housework and cooking, their husband beats them. By the time their work is finished, the center is closed."

Some respondents said that the mother-in-laws do not allow them to go saying: "In the olden days, there was no *tika* and we did not face any trouble" or "We didn't need the vaccines, so why do they?" In Mymensingh, one respondent said: "My husband says, 'We did not take vaccine, are we not alive?' He thinks the child may be attacked by disease when he receives vaccine." There were also reports that husbands and in-laws do not like the immunizations because they

make the children afraid and cry, while others think that there is no need to go to the center because they have money to purchase medicines if the child gets sick.

During the focus group discussions, respondents talked about their previous experience with health workers which may affect their willingness to participate in NID activities. In general, respondents spoke favorably about the way health workers treat them. Respondents in Mymensingh said that they are well-treated by the health worker because the worker asks them to sit down, “gives the vaccine carefully with a smiling face,” talks about the fever and soreness, and tells them to take care of the immunization card. A Khulna respondent said that the health worker is very nice because she gives water to drink. Respondents like the health workers because they tell them about feeding using pictures and flipcharts.

Many respondents reported that the health worker does not say anything because of the large crowds and lack of time saying that “the health worker treats us well but gets angry when there is a rush.” A Comilla respondent said that the first time she took her child to be vaccinated, she was refused because there were not enough children to open a vial. So she left without receiving the vaccine: “I came to Dhaka and lost my card. So, without the card, they will not give the *tika*, that is why I did not go.”

Table 17 below summarizes the reasons for non-participation mentioned by respondents in each of the eight cities and municipalities.

**Table 17: Reasons for Non-Participation (FGD with Non-Participants)**

City	Reasons for Not Participating in the NID
Dhaka	<p>Did not hear of the NID.                      Was at grandmother's house.                      Could not wait in the crowd because of household work.                      Completed all immunizations.                      Lost the card so did not come.                      Working in other houses and had no time.                      No need for <i>tika</i> because it is up to Allah.</p>
Mymensingh	<p>Husband prevented participation in NID.                      Mother-in-law did not give permission.                      Did not know about the NID.                      Was in the village.                      Center was already closed (at 5 p.m.).</p>
Chittagong	<p>Did not hear about the NID.                      Health worker refused to vaccinate child because she was an outsider.                      Did not know center location.</p>
Comilla	<p>Did not know about the NID.                      Was in mother's village and did not know about the NID.                      Center was closed by the time she came.                      Did not know what vaccine would be given so thought it better not to go.                      Husband was confused about what would be done so did not want child taken.                      Will vaccinate later.                      Child was too young, only one month old.                      Baby had cough.</p>

Rajshahi	<p>Lack of time.  Crowds.  Too much household work.  Child had a skin disease.  Thought they would come to our house.  Don't know location of center.  Negligence (<i>gorimoshi</i>).  Refused at center because not registered.  Did not know what age child should be vaccinated.</p>
Saidpur	<p>Out of the city.  Busy with housework.  Mother-in-law was too busy to take child.  Had left referral slip behind, so did not go.  Visiting relatives and did not know location of the center.</p>
Khulna	<p>Did not know ahead of time.  Child did not want to go.  Out of town.</p>
Barishal	<p>Were at father's house and did not hear about the NID.  Did not return from father's house in time [did not know of other centers].  Was at relative's house.  Child was ill.  No center near our house.</p>

## V. RECOMMENDATIONS BY LOCAL MANAGERS AND OBSERVERS

The following section presents the recommendations for future NIDs that were made by local managers during the focus group discussions. Managers were asked what changes they would recommend at the national and local levels. The last part of this section presents the results of the debriefing workshop which was held with the NID observers.

### A. National Level

Table 18 presents the recommended changes for the national level made by local managers in each of the selected cities and municipalities. Overall, there is a need for increased political support at the national level, an increase in the NID budget and supplies, changes in NID scheduling, and increased social mobilization.

Managers reported that the NID should be a national priority and the Prime Minister's declaration should have occurred much earlier. In addition, they recommended that:

- Opposition party support be considered essential to ensure that everyone is involved; several managers suggested that *hartals* should not be held.
- All members of parliament and other political leaders should express their support.
- It was especially important for relevant line ministries (Health and Family Welfare, Local Government and Rural Development, Education, Religion) to communicate with local officials to clearly delineate roles and responsibilities.

Managers reported that local budgets were needed earlier and needed to be increased to include volunteer training and refreshments. One manager suggested that workers should be paid Tk. 100. There was also a shortage of supplies in some areas. Specifically, more vaccine carriers, droppers, and ice packs were needed. There were reports that due to the lack of vial cutters, workers cut their hands trying to open the vials. Chittagong managers said that the volume of supplies should be calculated based on the estimated target population and items be procured well ahead of time.

The NID scheduling was discussed at length. Many managers reported difficulties due to Ramadan and the *hartals*, and suggested that the NID be scheduled sometime from December to February, before Ramadan. One manager suggested that the dates stay the same so they people will remember the dates. Many managers recognized that working mothers had difficulty attending the NID, due to a conflict in the hours that sites were open. To address this problem, some recommended that the NID be declared a national holiday, that it be held over three days, and that sites open one hour earlier than the factories. Since many of the vaccination sites were held in schools, those schools should be closed on the NID.

With regard to the social mobilization and communication activities, essentially more activities and materials were needed earlier. For registration, more registration forms and referral slips were needed and preferably received at least two months before the NID. Most managers said that there should have been more television and radio coverage and that these spots should have started earlier. One manager suggested getting Sanowara Corporation to advertise the NID on Zee TV; another person suggested that separate TV spots and communication materials be developed for literate and illiterate people. The NID should be promoted by renowned personalities such as Professor Badruddoza Choudhury, prominent doctors, or cinema and TV artists. Managers also needed increased supplies of materials such as posters, leaflets, banners, booklets, miking cassettes, and cinema slides. One manager suggested a daily newspaper column, while others recommended that religious leaders increase their role in social mobilization. One manager in Chittagong said that one message said, "During the NID, all under five children will be given OPV and there is no harm in it." But some literate people interpreted this to mean that it was not mandatory. Instead, the message should emphasize that the NID is mandatory irrespective of vaccination status.

**Table 18: Local Managers' Recommendations To Improve National Level NID Activities**  
(FGD with local managers)

Dhaka	<p>National media should start earlier.  Opposition party should express support for the NID.  Next NID date should not be changed.  Open centers one hour before garment factories open.  Should be inaugurated jointly by LGRD and City Corporation.  Involve Information Ministry to have a daily newspaper column on NID.  Need funds for volunteer refreshments.  Provide certificates for volunteers.  Posters, stickers, and leaflets should be supplied earlier and in greater numbers.</p>
Mymensingh	<p>Budget should be received much earlier.  Increase number of vial cutters.  More referral slips.  Posters, stickers, leaflets should be supplied earlier and in greater numbers.  Supply ice packs.  Budget amount should be increased.  Each worker should receive Tk.100.  Budget was placed only with the Poursava and not the Civil Surgeon.  Send letters to all concerned, e.g., block supervisors.  Opposition party should express support for the NID and cancel <i>hartals</i>.  Should be a clear delineation of work.</p>
Chittagong	<p>Declaration and information on the national program should occur earlier.  Start TV and newspaper coverage three months before NID.  Letters with clear instructions and guidelines are needed from line ministries including Education, LGRD, Cooperative, Religion, etc.  Hold NID during December or January to avoid Ramadan and hot season.  Need political commitment from both ruling and opposition parties.  Use religious avenues more such as <i>juma</i> during <i>khutba</i> (religious discussion).  Prepare documentary film to show on TV to orient volunteers.  Exclude the TT and measles drop-out identification.</p>
Comilla	<p>Exclude the TT and measles drop-out identification.  Ensure letters from line ministries.  Hold NID during winter.  Increase TV and newspaper involvement.</p>

Rajshahi	<p>National level declaration and media should occur earlier.  All ministries should be involved to instruct local authorities.  Declare NID a national holiday.  KG school should be closed.  Prime Minister should give speech earlier.</p>
Saidpur	<p>NID was not given priority at the national level.  More radio and TV coverage.  Provide financial support for volunteer training.  NID should be held in December or January  Use photos of disabled children in posters, leaflets, and banners.  Use NID seal in routine immunization card.  Referral slip should be like routine immunization card.  MP and political leaders should be involved.  No <i>gherao</i>, <i>krishimela</i> or disturbances should be created.  NID should continue for three days.</p>
Khulna	<p>Give national declaration earlier.  Give letters from government to ward commissioners.  Schedule NID around Eid and school closings, etc.  Increase publicity through TV, radio, newspapers.  NID hours should be from 8 a.m. (not 9 a.m.) to 2 p.m.  Some money and refreshment should be given to volunteers.  Registration forms should be sent two months ahead of time.  Letter should be sent to city corporations.</p>
Barishal	<p>Start using TV, radio, and newspapers earlier.  Each department needs letters from ministries to ensure cooperation.  Schedule NID around Eid and school closings, etc.</p>

## B. Local Level

Table 19 below presents the local managers' recommendations for changes at the local level. The main recommendations are that a wide range of local people need to be involved and coordinated in various aspects of the NID, some operational issues need to be addressed, and social mobilization efforts increased.

Though most cities and municipalities involved people from many sectors, there was a sense that this too should be increased. Ward Commissioners were seen to be essential to the local planning and coordination efforts. Other local political leaders, school teachers, local media, and family planning workers had important roles to play, especially for social mobilization. Some managers recommended that they mobilize medical and pharmaceutical associations and involve

private practitioners. The coordination of all these people was thought to be essential. Managers reported that letters from line ministries and meetings to assign responsibilities was also important. Several managers recommended ward level meetings.

Recommendations were made to improve operations on the day of the NID. The volunteers and sites should be selected ahead of time so that volunteers and workers can visit the sites before the NID. It was also recommended that workers be assigned to the same sites for each NID. The transportation of the vaccine and other supplies posed difficulties in some areas. It was suggested that workers could carry the vaccine and other supplies with them. Also motorcycles should be organized in each ward to manage shortages on the day of the NID. Shortages could be minimized by keeping extra vaccine in some fixed centers. A Dhaka manager suggested that mobile vaccine carriers be used to vaccinate “floating populations.” Ice also posed some problems. In Rajshahi, managers said that ice should be collected from nearby houses, while managers in Saidpur recommended that arrangements be made with ice cream factories to provide ice. Managers also suggested that local arrangements be made to provide refreshments to volunteers.

Managers recommended that posters and banners be available earlier so they could be put in schools, colleges, and factories. Group theater and folk songs (*jarigan*) as well as announcements in the mosques could also be used to increase social mobilization.

<b>Table 19: Local Managers' Recommendations To Improve Local Level NID Activities (FGD with local managers)</b>	
Dhaka	Posters in garment industries. Posters in schools, colleges and markets. Use mobile vaccine carrier for “floating populations.” Involve teachers in slums.
Mymensingh	Involve Ward Commissioners. Central Poursava committee will form sub-committees and allocate responsibilities. Vaccinators should visit the centers ahead of time. School teachers, VDP, local elites, and the Scouts should be involved. Workers should work in the same centers for the next NID. Workers should carry the vaccines and materials. Banners and posters should be ready well ahead of time.
Chittagong	Improve liaison with the local press. Undertake initiatives to involve elites and local political leaders.

Comilla	Increase communication with allied NGOs and departments.
Rajshahi	<p>Each center should be responsible for providing refreshment for volunteers.</p> <p>Every mosque should announce the NID.</p> <p>Volunteers should be told of the location of the assigned center the day before NID.</p> <p>NGO and the government should coordinate the registration.</p> <p>Local organizations should provide certificates for volunteers.</p> <p>Each ward should have one to two coordinators with a motorcycle to solve problems.</p> <p>For next NID, there should be one vaccinator for OPV and one for vitamin A.</p> <p>Vitamin A and OPV should be given separately because children might vomit.</p> <p>Some centers should be open until 5 p.m. and people sent there.</p>
Saidpur	<p>Chairman, WC and social leaders should be actively involved.</p> <p>Volunteer training should be arranged by area.</p> <p>Center locations should be fixed ahead of time.</p> <p>Community leaders should provide money and refreshment to volunteers.</p> <p>Vitamin A in next round may cause problems due to a shortage of volunteers.</p>
Khulna	<p>Arrange for local publicity.</p> <p>Hold meetings with local influential leaders.</p> <p>Request family planning workers to cooperate.</p> <p>Organize more meetings with teachers.</p> <p>More cooperation with local commissioners.</p> <p>More meetings with Imams and teachers of Madrasses.</p> <p>Improve volunteer orientation.</p>
Barishal	<p>Arrange meetings in each ward long before the NID.</p> <p>Increase advocacy in schools, colleges, <i>madrassas</i> and mosques.</p> <p>Chairman and WC should organize advocacy meetings.</p> <p>Mobilize school teachers and Imams.</p> <p>Select volunteers and workers well in advance to give them orientation.</p>

### C. Effects of the NID on other Health Promotion Activities

The NID had a number of effects that could potentially support other health promotion activities. During the focus group discussions, managers spoke very positively about the longer-term effects of the NID. Most managers felt that the NID will increase awareness of EPI in general. Since many family planning workers were involved in the NID, this may increase the acceptance of family planning. A Dhaka manager said that the NID generated a lot of new family planning clients, and the family planning workers were able to develop better relationships with mothers.

In each city and municipality visited, managers and observers both commented on the inter-sectoral cooperation and coordination. In many places, this was the first time that there was such coordination. In Chittagong, all managers commented that the success of the NID was due to multi-sectoral cooperation, and that this experience will work favorably toward routine immunization and other health programs. In Comilla, managers were very positive about their NID experience and said that this was the first time they had undertaken such a huge activity. They now have a better idea of how to mobilize different groups of people and resources to manage mass programs. This will help them manage routine immunization and other health programs.

In all the cities and municipalities, creative local initiatives made the NID run smoothly. For example in Rajshahi, ice was obtained from ice cream sellers and from nearby households. In one center, volunteers purchased ice cream bars from a hawker to maintain the cold chain! Mayors in several areas decided to hold a lottery of all referral slips that were turned in after the second NID. Pharmaceutical companies were involved and some distributed balloons to children who participated.

### D. Debriefing Workshop

A debriefing workshop was held two days after the first NID for all the people who observed the NID operations. The meeting was chaired by the EPI Project Director and included participants from CARE, UNICEF, and BRAC, as well as the WHO adviser, and about seven people from BASICS. Hence many of the comments had an urban bias. Participants were asked to think of the strengths and weaknesses of the first NID. Their recommendations for the next NID are presented in Table 20.

**Table 20: Strengths, Weaknesses, and Recommendations of the First NID:  
Debriefing of Observers**

Strengths	<p>Inter-sectoral cooperation.          Strong local political support.          Strong NGO support.          Strong mobilization of volunteers and the community.          Logistics and cold chain was accomplished well locally.          Miking and inter-personal communication very effective.</p>
Weaknesses	<p>Ward commissioner involvement varied but was critical.          No letters from line ministries (LGRD, Education).          Inadequate volunteer training.          Cold chain weaknesses in some areas.          Confusion between the NID and routine vaccination.          Low coverage among the elite.          Use of the registration lists.          NID procedures differed from routine immunization (records, cold chain).          NID was too soon after Ramadan.          New sites were not known in advance.          In some areas, vaccine only arrived at 10 a.m. at the sites.          No orientation of the Pediatric Society or health practitioners.          Some children were receiving one to four drops depending on their age.</p>
Recommendations	<p>Drop vitamin A in the second round primarily because of the need to screen for age.          Improve the site organization, especially by just using the tally sheets.          Develop a strategy to recruit people who did not participate in the first NID.          During the second NID, tell parents of children under one to return for their routine immunization visits.          Publicize the NID results.          Reinforce the idea that the purpose of registration is for inter-personal communication only.</p>

## **APPENDICES**

## **APPENDIX A**

## NID PREPARATION CHECKLIST

Date of visit: \_\_\_/\_\_\_/\_\_\_ Place of visit : \_\_\_\_\_

Visit to which level(circle) : City Corporation/District/Municipality/Thana

Person interviewed : CS/DD(FP)/HO/THFPO/TFPO/MO(EPI)/\_\_\_\_\_

1. Advocacy, Planning & Logistics:

1.1. Is there a NID coordination committee?

Yes	No

1.2. Is NID advocacy and planning meeting held at this level ?

1.3. Have all record/report forms received ?

1.4. Have communication materials received (Poster, leaflet, car sticker etc)?

1.5. Have required amount of vaccines (OPV) received ?

1.6. Is cold chain equipments adequate ?

If no, what is the shortage ?

Type

\_\_\_\_\_

Number

\_\_\_\_\_

1.7. Is local source of ice been identified (in case of shortage of ice pack)

Yes	No
Yes	No

1.8. Is vaccine transportation to the sites confirmed ?

If yes, by what means ?

car motor bicycle animal  
foot other

1.9. Is supervisory plan prepared?

Yes	No

1.10. Is there an alternative plan for hard- to- reach area (if applicable)?

1.11. Has activities being carried out as per plan ?

1.12. How was the target population calculated (circle) ?

Census

Registration

1.13. What is the ratio of target population/post

1 post per \_\_\_\_\_ target pop'n

1.14. Approximately what percent of the target population has been registered ? \_\_\_\_\_ %

Have you prepared list of Mesales and TT drop out ?

How will you use the drop out list ? \_\_\_\_\_

Yes	No
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1.15. How many vaccination sites need to be created (especially in urban areas) ?

How many are complete ? \_\_\_\_\_

How will sites be identifiable to clients ? \_\_\_\_\_

1.16. How will you identify the left out children ? \_\_\_\_\_  
 What is the strategy for bringing the left out children to the session ? \_\_\_\_\_

1.17. What is the strategy for additional vaccine if the supply runs out ? \_\_\_\_\_

1.18. How many volunteers have been recruited as Vaccinators ? \_\_\_\_\_  
 What is the requirement ? \_\_\_\_\_

1.19. How many volunteers have been recruited as mobilizers ? \_\_\_\_\_  
 What is the requirement ? \_\_\_\_\_

1.20. Have staff at this level been trained?

1.21. Have all volunteers been trained ?

1.22. Are enough NID guides received (for Managers)?

Yes	No
Yes	No
Yes	No

2. Social Mobilization:

2.1. Are local social mobilization strategies adequate?

2.2. Are there special social mobilization strategies for high risk or hard-to-reach population ?

2.3. Are strategies being implemented according to plan?

2.4. Have brochures, posters and other communication materials been developed at this level?

2.5. Has local resources been tapped ?

If yes, mention type and amount

Yes	No

Type \_\_\_\_\_ Amount \_\_\_\_\_

3. Ask 4 health workers at this level the following 4 questions:

What are the dates of NID?

# of correct responses \_\_\_\_\_ of 4

What is the target age group for NID ?

# of correct responses \_\_\_\_\_ of 4

When the child has completed the routine OPV series, will you vaccinate the child during NID ?

# of correct responses \_\_\_\_\_ of 4

Will you vaccinate a sick child ?

# of correct responses \_\_\_\_\_ of 4

4. Ask 5 mother/father of under 5 children the following 4 questions:

What are the dates of NID ?

# of correct responses \_\_\_\_\_ of 5

What is the target age group for NID ?

# of correct responses \_\_\_\_\_ of 5

Where are vaccines given during NID ?

# of correct responses \_\_\_\_\_ of 5

When the child has completed the routine OPV series, will you vaccinate the child for vaccination during NID ?

# of correct responses \_\_\_\_\_ of 5

3. Problems Identified during this visit:

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4. Recommended actions to solve above problems (specify WHO, WHAT, WHEN, WHERE):

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Name of the supervisor: \_\_\_\_\_

Designation/Organization of the supervisor: \_\_\_\_\_

Signature of the supervisor: \_\_\_\_\_

## **APPENDIX B**

# National Immunization Day Observation Form for Vaccination Post

District: \_\_\_\_\_ City Corp./Municipality/Thana: \_\_\_\_\_

Site: \_\_\_\_\_ Observer: \_\_\_\_\_

Characteristics of Site (Check all that apply): \_\_\_ (1) New or \_\_\_ (2) Existing;  
\_\_\_ (1) Outreach or \_\_\_ (2) Fixed; \_\_\_ (1) Government or \_\_\_ (2) NGO

## ***OBSERVE THE FOLLOWING....***

1. What is the total number of staff at this site? \_\_\_\_\_ Staff
2. What is the number of government, NGO, and volunteer staff?  
\_\_\_\_\_ Government \_\_\_\_\_ NGO \_\_\_\_\_ Volunteer
3. How is the vaccine kept cold?  
\_\_\_ (1) vaccine carrier \_\_\_ (2) ice \_\_\_ (3) Other, Specify: \_\_\_\_\_
4. Are the ice or ice packs still frozen? \_\_\_ (1) Yes \_\_\_ (2) No
5. How are children being screened?  
\_\_\_ (1) Age only \_\_\_ (2) Registration lists \_\_\_ (3) Other \_\_\_\_\_
6. Are vials opened one at a time? \_\_\_ (1) Yes \_\_\_ (2) No
7. What are clients told by health workers? [Check all that apply]  
\_\_\_ (1) Come back April 16 \_\_\_ (2) Come back for routine visits (if under 1 year)  
\_\_\_ (3) Tell others to come \_\_\_ (4) This is separate from routine EPI
8. How are vaccinations being recorded? [Check all that apply]  
\_\_\_ (1) Tally sheet \_\_\_ (2) Vaccination card \_\_\_ (3) Other  
\_\_\_\_\_
9. Roughly, how many children are waiting in line to be vaccinated? \_\_\_\_\_ children
10. Do clients stand in only 1 line for services? \_\_\_ (1) Yes \_\_\_ (2) No ►► How many? \_\_\_\_\_
11. Rate the level of efficiency and orderliness in the site  
\_\_\_ (1) Extremely chaotic, high frustration among clients and staff  
\_\_\_ (2) Somewhat chaotic but under control  
\_\_\_ (3) Quite efficient, most understand the process

**12. Rate the following overall operational aspects of the site.**

- a. Teamwork among staff            \_\_\_ (1) Excellent            \_\_\_ (2) Good            \_\_\_ (3) Poor
- b. Size of site building            \_\_\_ (1) Excellent            \_\_\_ (2) Good            \_\_\_ (3) Poor
- c. Crowd management (if applicable) \_\_\_ (1) Excellent            \_\_\_ (2) Good            \_\_\_ (3) Poor
- d. Interaction with clients            \_\_\_ (1) Excellent            \_\_\_ (2) Good            \_\_\_ (3) Poor

**13. How is the site identifiable from the outside? (Check all that apply)**

- \_\_\_ (1) Banner            \_\_\_ (2) Posters            \_\_\_ (3) Flag
- \_\_\_ (4) Other \_\_\_\_\_

***ASK THESE QUESTIONS TO STAFF AT VACCINATION POST...***

1. What is the number of under 5s expected? \_\_\_\_\_
2. How many vaccine vials have been received? \_\_\_\_\_
3. Is the number of vials X 20 more than the number of under 5s? \_\_\_ (1) Yes \_\_\_ (2) No
4. What is the strategy for additional vaccine if the supply runs out?

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5. How many hours of training did the volunteers receive? \_\_\_\_\_ hours

6. Mark the forms which have been received.

- \_\_\_ (1) Tally            \_\_\_ (2) Registration            \_\_\_ (3) Referral slips
- \_\_\_ (4) Measles & TT Drop-out

7. What are the planned hours of operation? From \_\_\_\_\_ to \_\_\_\_\_

---

8. What communication materials have been received? (Check all that apply)

- \_\_\_ (1) Stickers            \_\_\_ (2) Leaflets            \_\_\_ (3) Posters            \_\_\_ (4) Flag/Banners

9. How many days ago did miking begin in the area? \_\_\_\_\_ days

10. Will there be miking today? \_\_\_ (1) Yes \_\_\_ (2) No \_\_\_ (3) Don't know

11. What is the strategy for house-to-house visits on the day of the NID?

---

12. What hard-to-reach populations are there in the area? What are the plans for reaching them?

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### CONDUCT 5 EXIT INTERVIEWS WITH PEOPLE LEAVING THE SITE

(Use Exit Interview Form)

Total length of time for exit interview: \_\_\_\_\_ hours      Number of exit interviews completed: \_\_\_\_\_

Recommendations to Improve this Site: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### WALK OUTSIDE THE SITE INTO THE COMMUNITY...

1. How would you characterize the neighborhood? (Check all that apply)  
 (1) Slum     (2) Open drains     (3) Mostly kutcha houses/shacks     (4) Rural  
 (5) Densely populated     (6) Few paved streets     (7) Poor water supply

2. Ask at least 5 people in the community with young children the following questions and keep a tally:

	<u>Yes</u>	<u>No</u>
a. Have you heard about the NID?	_____	_____
b. Which children should be vaccinated? (Record Yes if correct response is given)	_____	_____
c. Have you already been or are you planning to go? If not planning to attend the NID, list reasons: _____	_____	_____

RETURN ALL FORMS  
BY MARCH 19 TO: Dr. Anwar Hossain, M.O, EPI, Mohakhali, Dhaka

## **APPENDIX C**

# National Immunization Day - Exit Interview

(ASK Adults Who Brought a Child for Vaccination)

Division:  (1) Dhaka  (2) Khulna  (3) Rajshahi  (4) Chittagong  (5) Barishal

District: \_\_\_\_\_ City/Municipality/Thana: \_\_\_\_\_

Site: \_\_\_\_\_ Interviewer: \_\_\_\_\_

1. Age of child: \_\_\_\_\_ months Sex of child:  (1) Male  (2) Female

2. What vaccine did your child receive today?

(1) Polio  (2) No vaccine was received

(3) Don't know  (4) Other \_\_\_\_\_

3. [If child is under 1 year] Did you bring the child's card today?

(1) Yes  (2) No  (3) Child has no card  (4) Child over 1 year

4. How long did you have to wait for the vaccination?

(1) Less than 15 min  (2) 15-30 min  (3) More than 30 min

5. How did you know where and when to come for the vaccine? (DO NOT READ RESPONSES; Check all that Apply)

(1) Registration  (2) TV  (3) Health worker/ Volunteer

(4) Friend/relative  (5) Radio  (6) Posters, leaflets

(7) Miking  (8) School  (9) Other \_\_\_\_\_

6. How many days ago did you find out about this immunization day?

(1) Today  (2) 1-7 days ago  (3) 8-14 days ago  (4) more than 14 days ago

7. Do you know anyone who is not planning to bring their child here today?

(1) No, do not know anyone

(2) Yes, because \_\_\_\_\_

8. Which children should NOT receive this vaccine? [READ RESPONSES, Check all that apply]

(1) Sick child  (2) Child over 5 years  (3) Fully immunized child

(4) Child under 1 month  (5) Other \_\_\_\_\_

9. How did you come here today?

(1) Walk  (2) Rickshaw  (3) Bus  (4) Baby taxi  (5) Other

10. How long did it take you to reach the site?

(1) < 10 min  (2) 11-20 min  (3) 21-30 min  (4) > 30 min

11. What difficulties did you face in coming here today? \_\_\_\_\_

12. When is the next NID?

(1) April 16  (2) Don't Know  (3) Other \_\_\_\_\_

Remind Respondents About Next NID on April 16

ID Number \_\_\_\_\_

## **APPENDIX D**

## Focus Group Discussion Guide Local Managers of NIDs

**OBJECTIVES:** To identify operational difficulties during the first NID  
To recommend changes at the national and local levels for future NIDs

*Introduction: Thank you for coming here today. We are talking to NID managers in urban areas around the country in order to understand the planning and operation of the first NID and for you to recommend changes in the way the second NID is conducted. The purpose of this is not to blame anyone or any organization for problems but to understand how the NID should be changed for the next round and in future years.*

### Planning Process:

1. How did you mobilize local resources? Specifically, how did you coordinate with NGOs, local government, ministry of health and family welfare, schools, and the private sector (such as hotels, private health practitioners etc.)? What was the involvement of ward commissioners and local social/political leaders? Do you usually coordinate with these organizations or was this new for the NID?
2. What operational difficulties did you encounter on the day of the NID? How did you handle them? [*Probes: How were vaccine shortages in centers identified and addressed? How were very high or low turn-outs dealt with? Were there any difficulties in staff and volunteer mobilization?*]
3. What changes would you make in the planning process at the national level?
4. What changes would you make in the planning process at the local level?

### Logistics and Cold Chain:

5. What logistical problems did you face and how did you handle them? What difficulties did you have in maintaining the cold chain? [*Probes: Did you have enough vaccine and other supplies (forms, carriers, droppers etc.)? How did you transport the vaccine to the vaccination sites?*]
6. What changes would you make in the logistics and cold chain at the national level?
7. What changes would you make in the logistics and cold chain at the local level?

### Communication and Social Mobilization:

8. Approximately what percent of the target population was registered? How did you register participants and what did you tell them? What difficulties did you encounter during registration?
9. What other methods did you use to tell people about the NID? [*Probes: e.g. miking, posters, leaflets, stickers, rallies, etc.*]

10. What changes would you make in the social mobilization process at the national level?

11. What changes would you make in the social mobilization process at the local level?

**Confusion between routine immunization and the NID:**

12. As you know, there are some important differences between routine immunization and the NID. Do you think that people confused the NID with routine immunization? Specifically, were health workers and private practitioners confused? Were administrative officials confused? Was the general public, especially the press, confused? And were mothers of young children confused?

13. What problems did this confusion create or will create in the future?

14. How should such confusion be avoided in the future NIDs?

*Finally ..*

15. How do you think the NIDs will affect routine immunization and other health programs?

*Closing: I'd like to thank all of you for taking the time to discuss these issues. We will be preparing a report of all the discussions which will be presented to EPI headquarters in Dhaka and will be used in making modifications to the NID process. Thank you very much.*

## Focus Group Discussion Guide Mothers of Children Under 5: NID Participants

**OBJECTIVES:** To identify any difficulties that mothers had during the first NID  
To identify any misconceptions between the NID and routine immunization  
To identify reasons for non-participation of their neighbors and relatives

Introduction: *Thank you for coming here today. We would like to discuss your children's immunizations with you. We want to understand any problems you are having so that we can improve the services. There are no right or wrong answers and you should feel completely at ease discussing with us.*

1. About a week ago, on March 16, all of you took your child to be vaccinated. Do you remember what was given to your child on that day? Which children were supposed to receive the vaccine?

[Probes: What age children should participate? Are there any children under 5 who should not participate?]

### Difficulties:

2. What difficulties did you have in bringing your child for the NID?

[Probe: Was the center close to your house? Was the time of day convenient for you? Did anyone oppose your bringing the child?]

### Misconceptions:

3. As you know, very young children need several different types of immunizations. How do you know WHICH immunizations your child needs?
4. How do you know WHEN to bring your child for an immunization?

[Probes: When should you bring your child for the next immunization? How do you know when your child doesn't need any more immunizations?]

5. Are there any harmful effects of immunizations? What happens if you give 2 or more vaccinations very close to each other?

### Reasons for Non-Participation:

6. Some people in your community did not come to the NID. What do you think are some of the reasons that people didn't come for the NID?

[Probe: What are some of the difficulties parents in your community face in bringing their children for immunizations? For example, did some people say that their child doesn't need to be vaccinated? Why do you think they think that? Or was it difficult for some people to find time to bring their child? How could we make sure that doesn't happen in the future?]

7. What should we do to encourage more people to come for the next NID?

**Next NID:**

8. Have you heard about the next NID? When is it? *[If no one in the group knows about the next NID, explain that another NID will be held on April 16.]* What do you think should be changed for the next NID? How should it be done differently so that it is easier for you?

*Closing: Thank you very much for taking the time to talk to us about your children's immunizations. This will help us to improve these services for you. Please don't forget that there will be a second NID on April 16. Every child under 5 should attend no matter how many other vaccines they have received. I hope you will tell everyone about the next NID on April 16. Thank you.*

## Focus Group Discussion Guide

### Mothers of Children Under 5 and Under 1: NID NON-Participants

**OBJECTIVES:** To understand the reasons for not participating in the NIDs

*Introduction: Thank you for coming here today. We would like to discuss your children's immunizations with you. We want to understand any problems you are having so that we can improve the services. There are no right or wrong answers and you should feel completely at ease discussing with us.*

#### **Beliefs:**

1. What have you heard about vaccinations for children? How many doses does a child need?
2. What effects do vaccinations have on the child? Are there any harmful side effects? Do you think some children should not be vaccinated at all or receive only some of them?

#### **Social:**

3. What do others in your household say about vaccinating your child? What does your husband say? your mother-in-law? sisters-in-law?
4. Have you vaccinated your child or children before? What was your experience at that time? When was the last time your child was vaccinated?
5. How are you treated at the clinics and vaccination sites? How long do you have to wait? What do the health workers say to you?

#### **NID:**

6. Did you hear about the NID that was held on March 16? *[If no one had heard of the NID, explain that an NID was held on March 16 and ask again if anyone heard of it. If still no one has heard of it, probe for the following reasons: were you out of town? Did a health worker come to your house? Do you ever watch TV or listen to the radio? Did anyone in your para mention an immunization day?]*

*If some people in the group have heard of NID, ask the following..*

7. What was the purpose of the NID? Who should have participated? Did your child receive the vaccine?
8. What are the main reasons that your child did not receive the vaccine? *[Probes: Was there a vaccination center near your house? Were the hours that it was open convenient? Did you think your child should not be vaccinated? Why or Why not?]*

*Closing: Thank you very much for taking the time to talk to us about your children's immunizations. This will help us to improve these services for you. Please don't forget that there will be a second NID on April 16. Every child under 5 should attend no matter how many other vaccines they have received. I hope you will tell everyone about the next NID on April 16. Thank you.*