

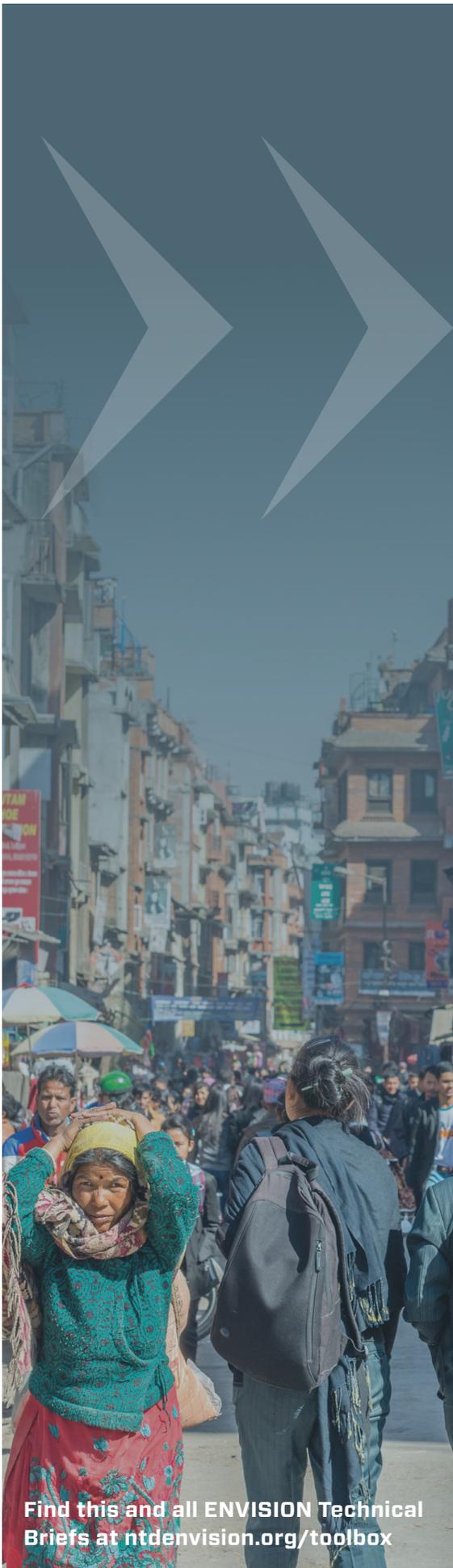
ENVISION TECHNICAL BRIEF SERIES

Eliminating Neglected Tropical Diseases (NTDs) in **Urban Settings**

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ELIMINATING NEGLECTED TROPICAL DISEASES (NTDs) IN URBAN SETTINGS

CHALLENGES IN URBAN AREAS

Reaching people with vaccines for immunization programs and with drugs that prevent disease for neglected tropical diseases (NTDs) has been difficult in urban areas¹⁻⁶. Challenges in urban areas include less accessible housing, low access to public health programs, lack of trust, and issues of safety. Inadequate numbers of health workers, the strong presence of private healthcare sector, migrant populations, and disorganized poor urban settlements pose challenges⁷.



Slum housing



Private Health Care



High rises



Safety Concerns

URBAN AREAS REQUIRE A DIFFERENT APPROACH

Although the core components of vaccination or of mass drug administration (MDA) programs in urban areas are similar to those in rural areas—training, supervision, supply chain management, community engagement—how they are delivered must be different. Reaching the diverse groups that make up urban populations requires careful planning of

different tailored approaches and often additional resources.

In planning, the following aspects need to be considered: is treatment needed in all of the city?; what distribution mode should be used (fixed point and/ or house-to-house)?; how do we ensure the safety of distributors?; how to do directly observed treatment (DOT)?; how should data be used to plan for follow up and repeat house visits?; how many drug distributors and supervisors are needed?; who should be chosen as drug distributor?; how to engage private medical practitioners, the media, and municipality administrators?

This document addresses these questions, providing country examples from national NTD programs throughout.

ABOUT THIS DOCUMENT

Scale up of neglected tropical disease (NTD) programs has been rapid since 2007. Emerging challenges include treatment in urban environments. Here we review the challenges of working in urban settings, provide examples of solutions that have been tried, and draw on the experience from longer running immunization programs. This technical brief was developed based on literature reviews and key informant interviews.

SUMMARY OF KEY POINTS:

Key message: More detailed planning is needed in urban areas to address the mix of different population types.

- 1 Micro map urban areas: You may not need treat everywhere.
- 2 Identify target groups: More than one approach may be needed to reach different target groups.
- 3 Identify urban stakeholders: Stakeholders may be different than in rural areas.
- 4 Design social mobilization strategies: Tailored to reach the different target groups.
- 5 Select appropriate drug distributors and supervisors: Urban drug distributors need to be highly professional in their approach.
- 6 Support drug distributor: Urban drug distributors may require different types of supervision, training, and compensation
- 7 Plan for managing adverse events: Rumors can spread fast in urban environments.

1 MICRO MAP URBAN AREAS

A first recommended step is to identify the target population. Not everyone in urban settings may need treatment. Identifying any populations that do not need treatment will simplify the task and allow a more focused use of resources. This can be achieved using micro-mapping approaches and can be done before launching a program and by checking impact after several rounds of MDA. As disease prevalence is known to change in urban settings, even without specific interventions, up to date information should be used.

When treatment is required, effort should be made to get accurate census information, especially if the national census data for the urban centers may be highly inaccurate. Municipal offices are potential sources of data and, when needed, a pre-MDA census may be conducted.

2 IDENTIFY TARGET GROUPS

Urban populations can be very heterogeneous (slum dwellers, peri-urban dwellers, religious and cultural minorities, migrants, etc.) and coverage can vary widely between neighborhoods and population groups⁸⁻¹⁰. As a result, a variety of tailored approaches may be required to overcome population-specific barriers to coverage.



SLUM DWELLERS

People residing in slums may be socially excluded or fear retribution if they engage with public health campaigns^{11,12}. Gang activity or other security concerns may also hinder program activities.

HIGH-RISE DWELLERS

House-to-house distribution may not be feasible in urban areas where many people live in hard-to-access compounds or high-rise apartment buildings.

Consider using fixed post sites to capture people living here as they enter and leave their buildings.

PERI-URBAN DWELLERS

Peri-urban areas are where urban and rural areas overlap, usually at the outskirts of rapidly expanding cities. Boundaries are poorly defined, with considerable

KATHMANDU, NEPAL

Six rounds of MDA for lymphatic filariasis (LF) were conducted and the program struggled to get good coverage in the urban area of the **Kathmandu Valley**.

The decision was taken to get additional and more up to date information on LF prevalence. Prevalence was assessed in the 3 sentinel sites (previously selected at baseline) and in another 10 spot check sites. Based on these findings showing prevalence less than 2%, follow-up impact assessments were conducted. Impact assessments showed that MDA could be stopped in three out of the four implementation units¹³.

movement of population groups between urban and rural areas. It is often unclear who has responsibility for health care services in this area (i.e., the city or rural district)¹⁴.

In planning peri-urban MDA programs, early engagement of all relevant local administration and leadership needs to be undertaken to ensure that all stakeholders are engaged and ready to support MDA activities.

MINORITY AND MIGRANT GROUPS

Minority and new migrant populations are frequently overlooked in urban MDA activities. They are often excluded from formal structures or services, and interventions need to overcome cultural, religious, and language barriers.

3 IDENTIFY URBAN STAKEHOLDERS

Engaging leaders in planning MDA programs is important in urban areas, just as it is in rural areas. In these areas, strong engagement with the media is even more important.



Key stakeholders to consider include:

- | | |
|--|--|
|  Celebrities |  Mayors and local officials |
|  Religious leaders and minority group leaders |  School teachers |
|  Heads of large factory or businesses |  NGOs |
|  Public and private health professionals |  Media |



FREETOWN, SIERRA LEONE

A collaboration with the leadership and health officers of mining companies helped improve coverage in areas that recently became peri-urban due to large migration by people in search of jobs in the mining companies¹⁵.

SANTO DOMINGO, DOMINICAN REPUBLIC

When working in the slums of **Santo Domingo** by the banks of the river Ozama, the Ministry of Health engaged the services of a local NGO, with strong ties in the community, to assist with planning. This helped build trust between the local population and the public health program. Moreover, trust was further strengthened by having local leaders select locally known and respected community members to serve as drug distributors and supervisors, and by giving them official identity cards and a “uniform” (T-shirt and hat)¹⁶.

4 DESIGN SOCIAL MOBILIZATION STRATEGIES

As with MDA implemented anywhere, key messages need to be widely conveyed—information on NTDs and why MDA is needed, information on drug safety and possible side effects, and time and location of MDA. The diversity of the population—including mix of highly educated, illiterate, different minority groups, and different languages spoken—means several different strategies and information, education, and communication (IEC) products need to be used. Having local celebrities, including popular athletes and artists, champion the MDA program as well as using testimonials from people suffering from the disease have proven successful in gaining broader acceptance among community members.



MASS MEDIA

Mass media is an important source of information in urban areas for both immunization and NTD programs¹⁷⁻²². Television is often the most effective method, although newspaper and radio may also be effective in some areas¹⁸⁻²⁰.

WHEN AND WHERE

Advertisements should be planned to occur during high viewing or listening times such as during local news, sporting events, and popular soap operas. Advertisements at the beginning or end of the commercial break are most likely to be seen. Dissemination through both local and national channels should be considered. Urban populations may have more trust in advertisements on national television channels.

INTERPERSONAL COMMUNICATION

Interpersonal communication—health messages delivered in person, for example when drug distributors or others go house to house—has been reported by both NTD and immunization program managers to be one of the most effective communication strategies. The most important factor is that these champions are respected and trusted individuals within the community, and that varies depending on the targeted group, e.g. a known community leader may work for one group and a health professional for another group.

BAMAKO, MALI

In **Bamako**, where coverage is high, all IEC materials are written by the media division of the government, Centre National d'Information, d'Education et Communication pour la Santé (CNIECS), who have local knowledge and technical expertise in creating effective messaging²³. Key messages include:

1. Date, location, and duration of campaign
2. Drugs are available and of high quality
3. Some side effects are normal and will pass
4. Taking the drugs will prevent NTD burden and eliminate these diseases

KATHMANDU, NEPAL

Given high levels of internal migration into the **Kathmandu Valley**, there are several minority groups. Information materials were printed in local languages and community centers were used to target information distribution to specific ethnic groups and castes¹³.

KOTA BATAM, INDONESIA

In **Kota Batam**, Indonesia, a national television public service announcement about “ending LF together” was received well by the urban population²⁴.

KATHMANDU, NEPAL

Village health workers visit all households before the MDA and leave information, including the time and place of MDA, behind. A survey found that hearing about the MDA from a village health worker made people more likely to take the treatment¹³.

USE OF TESTIMONIALS

Testimonials from persons with an NTD are useful in combating “low perceived risk” of disease in urban areas, allowing people suffering from the disease to share their experiences with the broader public. These accounts provide an effective means of communicating the long-term effects of the disease, especially when the target audience identifies with the person sharing their story.

TIME AND PLACE OF MDA

Consider adapting the locations and times of MDA to work with urban population’s schedules (people are often out working during the day) and where people routinely congregate such as shopping centers, markets, bingo halls, or airports²⁵.

5 SELECT APPROPRIATE DRUG DISTRIBUTORS AND SUPERVISORS

The criteria for choosing drug distributors should be evaluated before the campaign, with particular attention to urban realities. Urban drug distributors tend to be those who are known, trusted and respected by the community (e.g., a manager at a factory or a neighbor from the slum area) or someone who is respected due to their status and knowledge, e.g. a recognized health worker who is able to answer complex or technical questions about the MDA.



The number of drug distributors and first level supervisors should also be carefully considered and more may be required in urban settings.

6 SUPPORT DRUG DISTRIBUTOR

Given the different urban requirements for drug distributors, recruitment, and training methods may also differ in urban areas. More generous incentives, accountability systems, and greater preparation for drug distributor turnover should all be considered.

ALIGARH, INDIA

In an immunization campaign in six high-risk urban areas in Aligarh, India, more enthusiastic promoters did follow up visits to households of persons not yet vaccinated, achieving 80% coverage²⁶.

BAMAKO, MALI

During a fixed-post style MDA, health workers follow up at households of persons who did not come for treatment, providing information about MDA and encouraging participation²³.

FREETOWN, SIERRA LEONE

MDA in Freetown was successful based on a rolling, dynamic model. The campaign was launched on a Thursday, allowing community health workers to reach schools and colleges. Distribution in prison populations, the military, council workers, and the police was also carried out on Thursday and continued to Friday. The remaining population was targeted at mosques on Friday and churches on Sunday. On Monday, the remaining commercial areas were covered, and mop-up activities began¹⁷.

NIAMEY, NIGER

Initial estimates of the number of supervisors needed in urban areas was underestimated for the capital Niamey. The same number of supervisors per distributors (1 per 10 drug distributors) was applied in urban areas with poor results as the amount of work was far greater in urban areas. Drug distributors also had to cover far more people and were paid the same daily rates because urban areas have higher population density. Adjustments were made based on these findings. The number of distributors and supervisors, and the payments to drug distributors and supervisors were increased.

In urban areas particularly, measures should be in place to assure the competence of drug distributors. To assure quality, the following issues need to be emphasized:

1. **Training**—ensuring that distributors can answer questions about NTDs and the MDA, manage adverse events, as well as accurately record and report the number of treatments given.
2. **Strong supervision**—focusing on whether target treatment numbers are reached.
3. **Identification**—carrying an official letter, wearing official identify badges, and wearing campaign branded T-shirts, hats, or vests will increase the community’s trust in the distributors.

7 PLAN FOR MANAGING ADVERSE EVENTS

In urban areas, the risk of perceived adverse events affecting MDAs are greater than rural areas due to contact with media sources, and the widespread presence of private practitioners who may not be well-educated about MDA. Plans to address adverse events—both medically and in the media—should be established prior to all urban MDAs. Responses to adverse events should be quick and decisive to avoid the development of negative impressions. The IEC campaign may include a media advocacy approach before and during the MDA. If possible, initial planning should involve private practitioners to whom many affluent people turn to when they need medical attention in urban areas.

BAMAKO, MALI

Urban MDA campaigns in **Bamako, Mali**, identified nurses and nursing students as particularly effective. Because of their training, they were better equipped to handle complex questions from a more highly educated urban population, and allay any concerns about the MDA²³.

FREETOWN, SIERRA LEONE

Initial treatments in the Rural Western Area district (a peri-urban setting around the capital Freetown) was conducted in 2009 using the community-directed approach that was already ongoing with excellent coverage in rural areas of the country. Drug distributors were selected by village/community members but most of them refused to work for free afterwards. It was also noted that the more affluent areas did not accept non-health workers as drug distributors. The strategy was changed the next year with great improvement in treatment coverage. Health workers were selected as drug distributors and they were paid to treat certain areas allocated to them within a 5-day period with good supervision of their work¹⁵.

KATHMANDU, NEPAL

In the **Kathmandu Valley**, for example, adverse events in other parts of the country had a large effect on the population’s compliance in the metropolitan area. In the years that followed the media continued to propagate the idea that the MDA was unsafe, leading to widespread mistrust of the program among the population, and consequently, low coverage¹³.

MDA programs in **Kenya, Haiti, and India** have also suffered when news outlets falsely reporting deaths due to MDA^{3,27,28}.

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