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গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়
স্বাস্থ্য সেবা বিভাগ
পরিকল্পনা অনুবিভাগ, স্বাস্থ্য-১ শাখা
বাংলাদেশ সচিবালয়, ঢাকা।

PM(EPT)
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তারিখঃ ৩১.১০.২০১৯

বিষয়: National Urban Immunization Strategy Bangladesh 2019 অনুমোদন।

সূত্র: স্বাঃ অধিঃ/ইপিআই/ফিসা-০০৫/২০১৯/১৩২২, তারিখঃ ২২/০৮/২০১৯

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৩১/১০/১৯

মোঃ ইব্রাহিম খলিল
সিনিয়র সহকারী প্রধান

ফোনঃ ৯৫৬২০৫৭/০১৭০৯-৬০০৪৭২

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এমএনসিএসএইচ ওপি

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National Urban Immunization Strategy Bangladesh (2019)

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Executive Summary

Background and rationale: The drafting of the National Urban Immunization strategy was initiated in October 2014 and a draft was prepared. Following review by the Inter-ministerial Coordination Committee on Urban Health on 29 November 2018, decision was taken to further update the strategy and submit for approval. The goal of the National Urban Immunization Strategy is to develop sustainable system of provision of immunization services for children and child-bearing age women living in the urban areas all over Bangladesh in order to attain coverage for all antigens provided by EPI above 90% at national level and at least 90% in all local government institutions (LGIs) by 2022 and above 95% at national level and at least 95% in all LGIs by 2030, and to develop a system to sustain the coverage meeting the increasing demand in pace with enhanced urbanization.

The country has adopted National Urban Health Strategy 2014 for strengthening primary health care service delivery in urban areas. The National Urban Immunization Strategy supports and supplements the broader National Urban Health Strategy. The expected outcome of implementation of the strategy will be revitalised urban health care system that is capable of providing quality, equitable immunization and related health care services to the urban population in a sustainable manner. The strategy is in response to rapidly increasing urbanization in Bangladesh, where there is expected to be an increase of 50% in the urban population over the next 15 years. Concerns are being expressed by public health planners about the capability of the existing health system to sustain and grow service coverage for basic PHC services including immunization during this time. A stronger collaboration among the partners and stakeholders, specially MoLGRD&C and MoHFW with increasing engagement of the latter to meet the present gap and to align the urban immunization services with increasing demand in the future will need to be established.

The document through analysing the prevailing bottlenecks in urban immunization, defines the seven objectives reaching the goal mentioned, and contains brief outlines of the recommended activities to meet these objectives in urban areas of Bangladesh. Medium- and long-term actions in four strategic areas of governance, systems development, service delivery strategies and communication are compiled in this document.

The present strategy document has been prepared for implementation during the period of the 4th Health Sector Development Programme and could be adopted for the period leading to the attainment of Sustainable Developmental Goals (SDG), specific to the immunization programme, by 2030.

Main highlights of the strategy, which are further outlined in this document are summarised in the box below:

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Development of long- term **organisational development plan** to ensure sustainability of urban health functions and structures including human resources plans

Establishment of an **organisational structure** in the DGHS to ensure adequate oversight and resourcing of public health including immunization services in urban areas in close collaboration with the Local Government Institutions (LGIs) and MOLGRD&C.

Establishment of an urban unit in EPI for planning, managing, supervising and monitoring the immunization activities in urban areas in close collaboration with Local Government Institutions.

Establishment of Primary Health Care centres (PHC) in urban areas, (1 centre per 50,000 populations or 1 centre in one ward of a City Corporation) and immunization outreach sites.

Location of **decentralised cold chain and logistics systems** in larger City Corporations and Municipalities

Development of SOPs and guidelines adapted for the urban context to develop and monitor **management systems** in such areas as supervision, cold chain and logistics, waste management, service delivery planning and mapping and coordination systems with NGO and private sector partners

Development and implementation of **annual action planning systems** for City Corporations and Municipalities to ensure that all stakeholders work together.

Expansion of **surveillance networks** to Ward level and below in order to monitor impacts of immunization and detect and respond more readily to disease outbreaks, especially of vaccine preventable diseases

Development and implementation of **communication strategies** for implementation through the private sector in schools, slums, communities and hospitals.

Promotion of **universal health coverage** through strengthening immunization drop out tracing, expansion of birth registration system, and ensuring no service charge for vaccination.

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1. Background and Rationale

1.1 Present Health and Immunization Service Delivery in Urban areas

The primary health care service delivery in urban areas is managed by city corporations and municipalities. City Corporations and Municipalities directly employ City Health Officers, public health officers and service providers for delivery of a range of public health services to their respective population. These services include, PHC services, vector control, food and sanitation, waste management and immunization services.

Due to inadequate number of health workers and health care infrastructure, a greater part of the PHC services are provided through the network of NGOs, contracted for this purpose by the Local Government Institutions.

The NGOs provide a mix of maternal and child health services including immunization, and their clinics and outreach posts are networked across the administrative zones of the larger City Corporations.

The service delivery is organized through the network of clinics and outreach posts established across the administrative zones of City Corporations. The NGO facilities operate in an urban slum and non-slum areas, covering 58% of slum and 53 % of non-slum communities. The remaining areas are covered by the government (under both MOLGRD and MOHFW) and private health facilities.

In immunization programme, vaccines, immunization supplies, and equipment are provided by the National EPI under the MOHFW. The National EPI also provides programmatic support for immunization service delivery in urban settings. Although vaccines, logistics and cold chain for urban populations are provided by National EPI, there is less control over programme implementation due to weakness in system and culture of reporting of performance to EPI.

The level of coordination, micro-planning, supervision, and monitoring of health services including immunization provided by different NGOs is sub-optimal. The catchment population area of individual NGO is not strictly demarcated and there is a high possibility of duplication, as well as living behind uncovered areas. Moreover, there is high internal migration among slum dwellers making it difficult to keep track of missed individuals or drop-outs of vaccination. Further, there is problem of continuity of service provided by any individual NGO, that depends upon availability of its funding and service allocation by the parent organization under which it works. Finally, there are concerns regarding the over-reliance on external financing and NGO service provision in urban areas, raising concerns over financial and programmatic sustainability. Most of the NGOs rely on the donor support, mostly from outside the country. As Bangladesh has graduated from a Least Developed Country (LDC), the donor support for the NGOs is increasingly becoming scarce and many of the NGOs are not able to sustain their PHC/immunization activities.


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1.2 Challenges in urban immunization

1.2.1 Rapid urbanization

In recent years, increasing attention has been given by policy makers and development agencies to increasing rates of urbanization in Bangladesh. Currently, 37% of the population (over 50 million) reside in urban locations. The urban population is expected to grow from its current level of 53 million people to 79.5 million in 2028, which will be an expected increase of 50% in 14 years.¹ By 2050, it is projected that the majority of the population in Bangladesh will be urbanised.² Dhaka's 2019 population is now estimated at 20,283,552 whereas in 1950, the population of Dhaka was 335,760. Dhaka's population has grown by 2,686,375 since 2015, which represents a 3.62% annual change. These population estimates, and projections come from the latest revision of the [UN World Urbanization Prospects](#).³

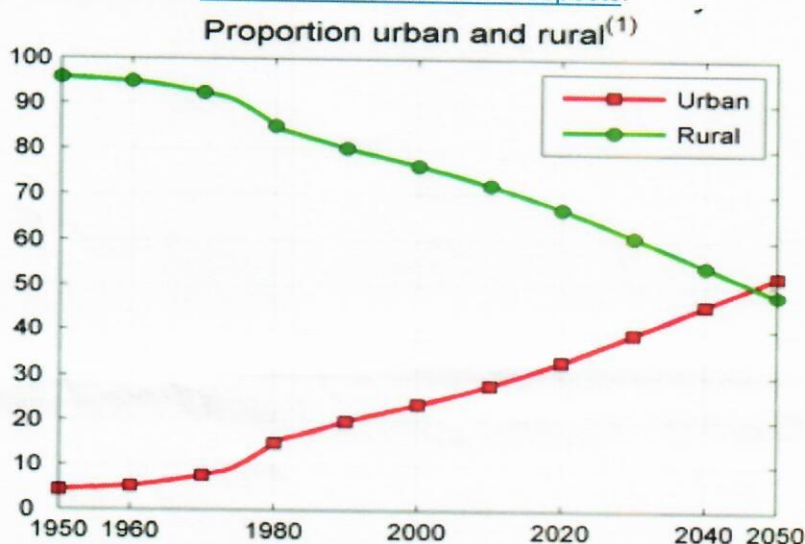


Fig1: Dynamics of proportion of urban and rural population, Bangladesh 1950-2050

1.2.2. Urban immunization coverage: lower than national average

Bangladesh is well recognized for the wide coverage and improved access by the population to overall health care services. Declining child mortality rates, decreasing fertility, and reduced incidence of vaccine preventable diseases all provide a solid evidence base to support the claim that the rural primary health care system has been a key factor contributing to human development progress in Bangladesh.

The country's immunization programme is hailed as a global success with significantly improving coverage, especially after establishment of the Expanded Programme on Immunization (EPI) in 1979. For example, country official estimates for DTP3 coverage increased from 66% in 1999 to 90% in 2017. With strong government ownership at the Directorate General of Health Services (DGHS) of the Ministry of Health and Family Welfare (MOHFW), EPI is maintaining high national coverage levels and reducing drop-out rates—reported immunization coverage rates, as well as WHO/UNICEF coverage estimates, have remained over 90% for more than ten years.

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According to the most recent Coverage Evaluation Survey (CES 2016), the national estimate for Penta3 was 93.6% coverage, and for measles-rubella (MR) / MCV1, 87.5%. In addition, coverage of fully vaccinated children (FVC) was 82.3% (i.e., BCG, TT, DTP3, OPV3, and MCV). The relatively large gap between DTP or Penta3 and MR1 remains high over the years as evidenced by JRF reports and CES. This trend is linked to multiple factors, including inadequate knowledge among parents about the importance and timing of MCV1 and MCV2, and inadequate follow-up by health workers.

However, the full vaccination of children in urban areas (77.1%) is lagging behind rural coverage (83.5%). Seven out of 11 City Corporations of the country achieved FVC coverage less than 80 percent (Ref: EPI CES 2016)

The urban areas of Dhaka City Cooperation (CC) North and Dhaka CC South are the lowest performing areas in the country, with FVC coverage of around 67-68 percent, therefore improvement of coverage in urban areas is one of the most important factors to ensure the equity in service delivery.

While the in rural areas the immunization coverage is on the rise over the past decade, the trend of coverage in urban areas is on the reverse.

Rapid urbanization coupled with lowering of coverage is a cause of severe concern which warrants to look into the problem closely into the underlying challenges and prepare a strategic guidance to strengthen the urban immunization performance.

1.2.3 Bottlenecks for Immunization in urban areas

Low access to and utilization of PHC services is the major bottleneck of the health system to immunization performance. It can be explained by a set of factors both on supply (service supply) and demand sides.

On the supply side insufficient service availability limits the ability of population to avail themselves of PHC services including immunization despite high demand.

- Absence of PHC/ immunization sites in certain areas, or insufficient number of sites per population;
- Weak coordination between service providing organizations (LGIs, MOHFW, NGOs) and other stakeholders in terms of securing availability of quality vaccines supply; and
- Inability of PHC facilities or immunization sites to function properly even if they exist due to the following reasons:
 - Staffing problems due to the lack of appropriate HR planning based on population size (allocated positions under CC/ municipalities or under urban dispensaries run by MOHFW do not meet the HR requirement of the population) and/or lack of sufficient funds
 - Catchment area of some vaccination sites not clearly demarcated and weak system of registration and follow-up


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- Demotivating factors among existing staff (e.g. Irregular salary, over-burdened with other tasks, frequent shift/transfer)
- Limitation of the private sector in places it is providing quality immunization services with equity caused by poor networking/coordination, insufficient supervision and monitoring, irregular reporting, and charging public for vaccination (which is not permissible as per the law).
- Limitation of technical capacity of existing staff of CCs/municipalities and to some extent, of the NGOs/ field staff of DGHS providing the proxy support where CC/municipal staff are not available
- The low demand for immunization services can explain low utilization rates for specific risk-group populations even in the case availability of quality services. It can be caused by:
 - Low recognition of the importance (benefits) of interventions either due to misconceptions or lack of information (that is linked to the level of education of care givers).
 - Social barriers (working mothers, inappropriate timings of available services, dependency on other members of family for availing the services) that impede demand generation even if mother/parents are willing to use MCH or immunization services.
 - Financial barriers affect demand when a family is reluctant to visit health facility (for preventive services in particular) because of inability to cover the service-related costs including transportation costs/ loss in wages and fees charged by some private or NGO clinics for vaccination.

In addition, there are bottlenecks related to enabling environment including inadequate understanding of programme ownership and roles different stakeholders including LGIs, NGOs/CSOs and MOHFW, weak coordination, low resource allocation including for vaccine transport and transport for supervision, absence of guiding principles of programme management including planning, implementation, monitoring, supervision and assessment specifically in the urban context.

A few more related challenges have been noted by stakeholders during series of workshops and review meetings during the development of the present strategy document.

Registration: Inadequate systems for effective recording and registration of target population and lack of capacity among urban service providers to maintain registration systems, limits capacity of immunization system to reach out the migrant population with immunization services.

Organization of Service delivery and communication: In most of the urban areas service delivery is not adequately coordinated. The work performed by satellite/outreach centers is not properly


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organized leading to the overlapping of immunization activities by different providers. According to the documented evidence, in many of urban areas, the number of satellite/outreach centers is not sufficient to cover all target geographic areas in a ward, however the immunization sessions are conducted 3-4 times in the same location rather than in hard-to-reach areas or in the areas away from the immunization site. The awareness and knowledge of parents on immunization and vaccination sessions is much lower than in rural areas. Attempts are rarely made by service providers to follow-up and reach missing children.

Financial sustainability: There are concerns regarding the over-reliance on international financing and NGO service provision in urban areas, raising concerns regarding the vulnerability of the urban health care systems to external political or financial shocks.

2. Policy and Planning Developments of Relevance to Urban Immunization Strategy

In response to the existing public health challenges, the MoLGRD has developed an urban health strategy (2014), which specifies universal health coverage as a major goal.⁴ The MoHFW has also drafted a National Immunization Policy,⁵ which is designed to provide a uniform platform for guidance for government, NGO and private sector agencies for delivery of immunization services. Given the recent policy and strategy developments, and also given the public health challenges of urbanisation outlined above, it is considered timely by the government and other stakeholders to develop a **National Urban Immunization Strategy** for Bangladesh.

3. Development of National Urban Immunization Strategy

3.1 Process of Strategy Development

Initially the urban immunization strategy was developed between October 2014 and February 2015. Literature review was conducted on health policy and strategy in Bangladesh. Consultations were undertaken directly with the Chief Health Officers in two City Corporations in Dhaka including with development partner and UN agencies, non-government organisations and the Ministry of Local Government, Rural Development and Co-operatives (MLGRD & C). Based on these activities and a desk review of policy and planning documents, an outline of an urban immunization framework was developed and presented at a Consultative Workshop in October 2014 in Dhaka City, attended by the two Ministries and representatives of development partners, NGOs and City Corporations from across Bangladesh. Participants from this consultation reviewed and revised this framework; and identified new component areas to be included in the urban immunization strategy. Later a review meeting was conducted in presence of all stakeholders in February 2015 including representatives from MOLGRD&C, the outcome of was a draft of the Urban Immunization strategy. Again, in August 2015, the Strategy was examined by EPI Sub-group formed under 'Inter-ministerial coordination Committee on Urban Health and forwarded' it for approval to the Inter-Ministerial Committee. The draft strategy was

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further examined in workshop on August 2017 and a few recommendations were added, which was presented in the 'Inter-Ministerial coordination committee on Urban Health' chaired by Secretary, HSD, MoHFW.

Based on the outcomes of these consultations, the strategy was then reframed and detailed. In late 2018 and early 2019, the draft was further reviewed by the members of Urban Immunization Taskforce and other stakeholders including field staff from most city corporations, major municipalities and CSO platform through a series of meetings and workshops.

3.2 Scope and Limitations of Strategy

This strategy sets forward a multi-year approach to improving coverage and quality of immunization services in urban areas in Bangladesh. As such, it does not contain the detailed implementation steps by which the strategy will be implemented. In contrast, the strategy outlines in broad terms the means by which the existing national immunization program coverage and quality standards (as described in the national Immunization Policy and Multi Year Plan for Immunization) will be attained and sustained in the urban context in Bangladesh.

The strategy is intended for use by health managers and service providers, providing health services through DGHS, LGIs, NGO and private sector partners in the City Corporations and Municipalities of the country. Given that there is a wide diversity in population size and demographic characteristics of these urban areas, this strategy will need to be adapted to the local context and public health needs of the population in each locality.

4. Principles of National Urban Immunization Strategy Development

A number of principles, guided through the National Health policy, National Urban Health Strategy (2014); 4th Health Population and Nutrition Sector Plan (HPNSP 2017 -2022) and draft National Immunization Policy as well as Comprehensive Multi Year Plan (cMYP 2018-22) on immunization have been considered in the development and direction of this National Urban Immunization Strategy.

4.1 Good Governance

Good governance is a leading principle informing the development of this strategy and is cross-cutting most strategic areas. *Leadership and accountability* are intended to be developed through establishment of inter-Ministerial and Local Government coordination mechanisms. *Transparency* to be enhanced through development of health planning systems with wide involvement of all stakeholders in the planning process. *Regulatory functions* of government to be advanced through establishment of quality assurance mechanisms for immunization, including through regulatory mechanisms of the National Regulatory Authority on vaccines and biologicals by the Directorate of Drugs Administration (DDA) and related PHC services. *Civil society participation* is intended to be enhanced through improved coordination and quality of health contracting and public private partnership systems.


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4.2 Alignment and Harmonization

The urban immunization strategy is well aligned with existing national policies and strategies. Principles of universal health coverage embedded in the national health policy and in the urban health strategy was considered as guidance to this immunization strategy in focussing on reaching every community with immunization services.

In addition to this alignment, it is proposed that the urban strategy will assist to better harmonise the efforts of many stakeholders participating in immunization services management, financing and delivery. The national urban immunization strategy (NUIS), by identifying common focus areas for achieving immunization goals (see following section), will enable stakeholders to share common strategies and plans for achievement of public health outcomes. To this end, it is recommended in this strategy that the next steps will be development of common annual immunization action plans so that the various stakeholders can work together under common M&E framework.

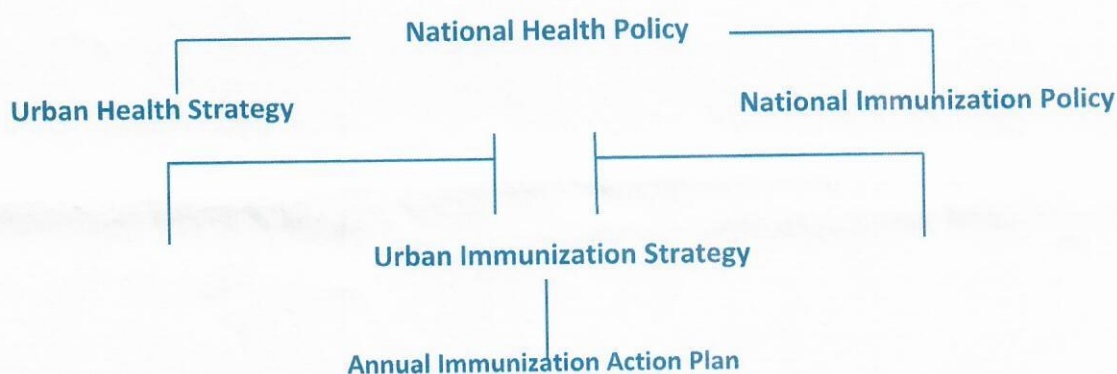


Figure 2: Alignment of Urban Immunization Strategy with national Policy and Planning

4.3. Universal Health Coverage, Quality and Equity

As noted in the introduction, Bangladesh has achieved substantial public health impact through implementation of a national immunization program. As noted in the Immunization Policy, one of the main policy challenges will be to improve the quality of immunization services, so that there is a consistent standard across government, private sector and civil society providers. For this reason, quality and regulation has been defined as one main component under the Governance Strategic Area of this strategy. In addition to this quality principle, the equity principle will guide strategy development and implementation, particularly with regard to expanding health infrastructure and service provision in the urban areas.

4.4 Sustainability and Innovation

Consultations for the development of this strategy have demonstrated that stakeholders are concerned regarding the sustainability of immunization services in urban settings, given that local

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government is highly dependent on external funding and NGO providers to achieve high coverage rates. Lack of a “permanent structure” for service delivery is among the chief concerns. Principles of sustainability and innovation has therefore guided this strategy development, enabling the flexibility required to look at new ways to sustain the significant gains that have already been made in reduction of vaccine preventable diseases.

5. Goal and Objectives of National Urban Immunization Strategy

5.1 Goal

The overarching goal of the National Urban Immunization Strategy is to develop sustainable system of provision of immunization services for children and child-bearing age women living in the urban areas to bring up the immunization coverage maintaining vaccine safety and quality.

5.2 Objectives

General Objectives

To attain coverage for all antigens provided by EPI above 90% at national level and at least 90% in all local government institutions (LGIs) by 2022 and above 95% at national level and at least 95% in all LGIs by 2030.

Specific Objectives

The following are the specific objectives designed to address the prevailing bottlenecks in urban immunization in Bangladesh:

1. To ensure the accessibility of immunization service delivery based on target population by 2021 by
 - ensuring functioning of adequate number of vaccination sites
 - conducting 100% planned vaccination sessions, including special sessions for mobile population
2. To ensure adequate, dedicated and skilled vaccinators for immunization services in the urban areas by 2020 (1 vaccinator per 200 birth cohort or 8,000 population);
3. To improve the immunization services from private sector in the urban areas in terms of access, quality, equity and reporting by 2020 through supporting existing public private partnership (PPP) mechanism of service provision by NGOs/ CSO platform/ private clinics/hospitals in the interim period prior to establishing new urban PHCs;
4. To achieve at least 80% of planned supervisions annually by 2022 to be conducted by dedicated supervisors;
5. To improve the knowledge and practice of care giver on vaccination through targeted communication strategy and actions for addressing the bottlenecks related to demand generation for immunization;


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6. To strengthen coordination amongst different stakeholders through ensuring optimal functioning of coordination committees at different levels; and
7. To ensure adequate budget with incremental allocation related to urban population growth.

6 Strategic Areas and Components

The strategic framework outlines the major focus for achievement of immunization objectives.

Following consultations with stakeholders, the following strategic areas are being identified for the National Urban Immunization Strategy (NUIS).

- 1. Governance, innovations and sustainability**
- 2. Health systems development**
- 3. Service Delivery and UHC Strategy**
- 4. Demand side strategy**

Based on these strategic areas, strategic actions and detailed costed plans of action will subsequently be developed (i.e. Annual Action Plans for Immunization) for each urban jurisdiction (City Corporation, Zone, Municipality etc.).


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6.1 Governance, Sustainability and Innovations Strategy

The *Governance, sustainability and innovations* strategic area outlines strategies for developing the organisational capacity to coordinate and sustain the delivery of immunization and related PHC services in the catchment area.

It is required to strengthen dedicated structure and system for PHC for providing immunization services in the urban setting. This will require a long-term organisational development and infrastructure plan to ensure that the Local Government Institutions (LGIs) have the institutional capacity to administer and provide basic health care services. This is an organisational development strategy that will require long term strategic actions which will include the following:

1. **Functional Analysis:** Conducting functional analysis of existing and planned capacity for PHC health service delivery (including immunization) in the urban setting
2. **Inter-Ministerial Coordination Mechanism for Urban Health:** Formation of National Urban Health Coordination Committee is a crucial step for setting up of inter-ministerial coordination at the highest level, which is intended to assist overseeing strategic planning for urban health, as well as linking policy, implementation and regulatory functions in the context of immunization. Similar coordination bodies would be built up and made functional at the district, city and municipal levels as well.
3. **Establishment of Urban Health Organisational Structures:** Establishment of an organisational structure in the DGHS to ensure adequate oversight and resourcing of public health including immunization services in urban areas in close collaboration with the Local Government Institutions (LGIs) and MOLGRD&C. Establishment of an urban unit in EPI for planning, managing, supervising and monitoring the immunization activities in urban areas in close collaboration with Local Government Institutions.

This will lead to formulation of immunization specific development plan for each City Corporation and Municipality. This will be in the centre of attention for ensuring long-term sustainability.

In addition to the above mentioned longer term organisational development activities, there are a range of medium-term strategic actions that can be undertaken by respective LGIs and partners to enhance governance capacity for urban health service provision. These medium-term strategic actions include the following:

- A. **Coordination System:** Establishment of guidelines and standards for coordination mechanisms at City, Zone and Ward levels. There would be a coordination committee including participation of all relevant stakeholders including GoB, private sector, CSO and development partners.
- B. **Public Private Partnership System:** Development of protocols and procedures for partnerships with private sector for delivery and reporting of immunization services


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- and reporting of vaccine preventable diseases. Standard contractual mechanisms and performance agreements with service contractors including private hospitals/clinics for delivery of immunization and related PHC services to be in place.
- C. **Supportive Supervision Guidance:** Standard guidelines and procedures for supportive supervision, including reporting and follow up systems to be ensured. Ensure that 100% of the planned supervisory visits are taking place and recommended follow-up actions are implemented.
 - D. **Quality Standards and Regulatory Functions:** Norms and standards for PHC infrastructure, human resources and quality of care will be established at each level of immunization service provision. Mechanisms to be established by which these quality standards are monitored, and corrective actions are taken. Vaccine quality assurance mechanisms will be ensured in close coordination of the local government authorities, National EPI and National Regulatory Authority on vaccines and biologicals (Directorate of Drug Administration).
 - E. **Oversight:** A National Technical Committee on urban immunization (a sub-committee of the existing National Immunization Technical Advisory Group - NITAG) will act as a technical oversight body to guide implementation of the National Urban Immunization Strategy. It is recommended that technical committees be formed at all the CCs and municipalities.

6.2 Systems Development Strategy

Systems development outlines the strategies by which Local Government Institutions, in collaboration with the MoHFW and partners develop the required management systems (planning, information, M&E, surveillance, human resource management, logistics, infrastructure etc.) to provide adequate oversight and quality delivery of immunization services. It is proposed that investments are made in the development of management systems to support sustainable provision of health care services including immunization in the urban setting. Consultations have demonstrated that it is the absence of management systems, particularly for planning and financing, that have constrained the development of Local Government led health services, leading to an over reliance on NGO providers and international development assistance. This leaves the health system highly vulnerable to external economic or financial shocks in the longer term. Further, in relation to transition of Bangladesh from a least developed country (LDC) to a developing country, the donor support for NGOs will decline substantially, which will add up to the risk of financial sustainability of the NGOs themselves. To minimise these risks, the development of local government management systems for health will provide the opportunity for LGIs, in collaboration with EPI and MOHFW, to acquire the management systems to mobilize resources, plan their allocation, and monitor public health impacts of urban health investments. The development of these management systems (particularly planning, surveillance and disease response systems) will enable management to more promptly respond to public health emergencies would they arise, which is an ongoing risk given high population densities and ongoing internal migration to urban areas. The following are the proposed system developments based on consultations with stakeholders in the recent past.


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6.2.1 Planning System Development

A top priority will be development of Annual Action Plans for Urban Health and Immunization. The plan (at City Corporation, Zonal, or Municipal levels) would reflect inputs from all stakeholders and focus on coordinated effort on the achievement of common goals for urban primary health care services including immunization. Micro-plans from below ward level would be incorporated into larger plans at Zone or municipal level, to ensure adequate resources are mobilized for reaching hard to reach populations.

The main strategic action in this area is development of an urban annual health/immunization planning system that has at least the following features:

- Ensure service delivery mapping with periodic updating.
- Planning of service strategy in collaboration with partners (including services at fixed and outreach sites)
- Maintaining an equity focus, through integration of community level micro-plans into high level planning actions and budget requests.
- Budgeting of activities, reflecting inputs of LGIs, EPI, NGOs and private providers in catchment areas
- Specification of sources of finance and financial gaps for the annual action plans
- Setting of indicators to track progress and targets for achievement

6.2.2 Human Resource Planning specific for immunization

A Primary Health Care Centre is recommended to be established for 50,000 population or for an urban ward, whichever is feasible. The catchment area for each PHC centre needs to be well defined in such a way that duplication and/or omission of any part of the urban area are avoided. Each PHC will be staffed with 6 trained vaccinators and 2 immunization supervisors (similar to, AHI in rural setting).

6.2.3 Surveillance System Development

The development of disease surveillance systems in the urban health context is a critical area for development, given the elevated public health emergency risk associated with the high density of population and environmental hazards in large cities, especially in slum areas. A highly developed disease surveillance systems in urban areas can use surveillance data to identify high-risk neighbourhoods and provide information about the effectiveness of existing EPI interventions. To minimise the risk of communicable disease outbreaks, early detection of unimmunized populations, and early detection and reporting and response to disease related events is a critical public health function of LGIs (in collaboration with partners).

Given the introduction of multiple new vaccines, tracking and responding promptly to adverse events following immunization is also a vital system area that would need to be further developed. Currently Surveillance and Immunization Medical Officer (SIMO) network- supported through WHO conducts surveillance of VPDs and supports strengthening of routine immunization in urban areas. However, the SIMO network is now in the transitioning phase and disease surveillance functions will be taken over by government system by 2022. Transitioning process has started through creation of new positions for surveillance to replace the SIMOs in future.


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During planning stage, it is of paramount importance that adequate number of positions is created to address the increasing numbers of surveillance officers needed for large cities due to rapid rate of urbanization.

The main strategic action in this area is strengthening of the urban health and VPD surveillance system that has at least the following features:

- Building the capacity of the focal person for surveillance.
- Expansion of local surveillance networks to include according to the standards and guidelines.
- Periodic review of the health facilities for inclusion as active or passive surveillance sites in accordance with national vaccine preventable disease surveillance guideline.
- Development of continuing training and supportive supervision programmes to ensure surveillance activities and reporting meet the standards of surveillance.
- Creation of community surveillance network through involvement of local leaders (ward commissioners/councillors), teachers, religious leaders, pharmacists, general practitioners, private clinics, traditional healers, residential societies, etc.
- Usage of social media and other digital approaches for enhancing disease reporting sensitivity.

6.2.4 Reporting System

One of the main challenges with monitoring the immunization program is to ensure that all the required data on the population in the catchment area is included in both the population denominator (target population in catchment area), and in the numerator (population who have accessed services). This is particularly the case in the urban setting due to inward and outward migration, and the multiple set of health care providers (GoB, private, NGO, CSO). This being the case, in line with the draft National Immunization Policy, a consistent standard needs to be maintained across all layers of service provision for recording and reporting of immunization and VPDs.

This will include the following:

- Ensuring a fully functional system of weekly, monthly and yearly reporting of immunization from reporting units to DHIS2.
- Establishment of consistent reporting systems of immunization sessions from government, private and civil society/NGO providers
- Ensuring reporting of VPDs in urban areas through DHIS2.
- Establishing a system for periodic checking of data quality through either coverage surveys or preferably, through data quality self-assessment systems
- Ensuring consistent use of Immunization cards in government, private and NGO clinics and by providers of PHC services.

6.2.5 Logistics and Cold Chain systems


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It will be important to ensure a consistent standard and quality of cold chain and logistics management across public, private and civil society sectors. To ensure this consistent standard, the following longer-term actions would be undertaken.

- Conducting of periodic cold chain and logistics assessments in each City Corporation and Municipality to set baseline and measure progress
- Development of cold chain and logistics improvement plans to be included in each Annual Plan of Action
- Development of cold chain infrastructure according to the improvement plan, including establishment of vaccine and logistics stores in City Corporations and large municipalities
- Conducting training for EPI managers and cold chain technicians on cold chain logistics and vaccine management
- Ensuring adequate supply of vaccines and logistics from EPI HQ through regular coordination and backed up by strong reporting mechanisms
- Use of DHIS2 data to guide and monitor vaccines and logistics supply
- Conducting monitoring of private sector to ensure consistent standards for vaccine management

6.2.6 Financing and resource mobilization strategy

A financing and resource mobilization strategy will be required for the NUIS in order that long-term organisational and infrastructure development programs be implemented. Increased resourcing will also be required in order to gradually reduce reliance on assistance from developmental partners for operational costs. The critical intervention in this regard is the development of a planning system that reflects inputs from all partners and ministries, and which can convert required planning actions for public services delivery into a budget request through LGIs and to the MOHFW. The following are suggested strategies for financing and resource mobilisation.

- Development of an annual action planning system that is budgeted and which identifies a financing sources (LGIs, MOHFW, Partners) and funding gaps
- Costing of organisational development and infrastructure plans
- Development of budgeting and financial management SOPs and guidelines for urban public health services, including specification of a resource allocation formula
- Consider meeting financial gaps through available funds in relevant OP using HNPSF pooled fund using the opportunity of OP review in 2020.
- Consider financial allocation from the next cycle of MOHFW sector plan.

6.2.7 Health care medical waste management system

Given the density of the population and the large number of service providers working in different sectors, safe injection practices and waste management is a top priority of the urban immunization strategy. There are three main elements of the strategy: Safe injection, Waste management and communication activities for safe injection practices.

- Dissemination and utilization of safe injection protocols and SOPs to all providers in the urban catchment area


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- Dissemination and use of waste disposal protocols and SOPs to all providers in the urban catchment area
- Inclusion with monitoring and supervision frameworks, and all contractual arrangements, for conformance to agreed procedures for injection safety and waste management practices
- Inclusion within all immunization and PHC training programs of protocols and procedures for injection safety and waste management practices

6.3 Service Delivery Strategy

The *Service Delivery strategy* outlines service delivery models in the urban context, the strategies for reaching every community and the infrastructure and human resource requirements to ensure there is universal coverage for immunization services. This strategy is divided into three sub areas – service delivery models, health infrastructure and universal health coverage.

6.3.1 Service Delivery Models

Service delivery models are concerned with mapping service delivery needs and providing services based on need through a range of service delivery providers:

- The first strategy is to expand development and implementation of micro-plans, and establish immunization sites (both fixed and outreach) based on needs
- In support of universal coverage objectives, each catchment area would have a specific service delivery strategy for hard to reach population like slums, high-rise building dwellers, garments workers, working mothers, street dwellers/homeless population, etc. through
 - location of one PHC facility for every 50,000-urban population;
 - planning outreach immunization sites
 - planning mobile sites for mobile population/ street dwellers
 - planning evening or Friday sessions, etc
 - setting up of outreach immunization clinics at the health posts of the factories with large number of women workers (e.g., garment factories)
- To ensure that services are adopted to the needs of floating populations and migrating populations, including in peri-urban areas (example: support functioning of union sub-centres or rural community clinics that were established in the area prior to expansion of the urban area into the previous rural setting).
- School based Immunization Programs (e.g. tetanus, MR and HPV) would be served through a school-based strategy that incorporates both immunization services and health education and communication activities
- A Hospital based immunization strategy would be developed to ensure that trained vaccinators and the appropriate cold chain facilities are available at the designated vaccination corners
- The Private Sector and NGO immunization strategy would be documented, outlining contractual arrangements and methods for monitoring and supervision and reporting by


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- the government sector. If a specific NGO or private clinic plan withdrawal of services due to lack of funds or human resources, plans should be in place to take over the function.
- Regular supportive supervision of the activities by Municipal, Zonal or CC Health Office or from respective CS/ UHFPO and from EPI HQ would be planned for promoting quality and quantity of immunization services.
 - "Facility assessments" would be carried out which include observation of immunization practices and logistics, and interviews with mothers and health workers. Such assessments can identify service delivery problems and evaluate improvements after training and supervision.
 - Monthly reporting of every individual immunization unit would be submitted to Zonal Health Office or to Municipal Health Office/UHFPO. Annual review of performance of each facility would take place and service improvement plan be prepared.

6.3.2 Infrastructure Development

Health infrastructure is an important need that was clarified by stakeholders during consultations with City Corporations and Municipalities and NGOs in October 2014. As outlined in the background, gaps that have opened up in health infrastructure have resulted from rapid growth in urban populations, and an over reliance on NGOs providers and the private sector to fill this gap. The aim therefore is to address infrastructure gaps through gradually developing the logistical and infrastructure capacity of City Corporations and of municipalities to store and transport vaccines and other essential medicines, and to provide health care services as close as possible to where communities are located. This will increase the frequency and proximity of PHC and immunizations services to the population and reduce drop out and administration of invalid doses.

The following long-term actions are required in order to achieve this aim:

- Establish a Central EPI store and training centre for large City Corporations
- Establish Zonal EPI stores in the larger city corporations
- Establish one PHC centre per 50,000 population or per one urban ward across the urban areas of Bangladesh according to service delivery mapping and health coverage planning
- PHC centre could be placed in existing urban health dispensaries, in the outdoors (immunization corner/MCH corners) of public hospitals like medical colleges, Sadar hospitals, Railway hospitals, Military hospitals, Maternity hospitals, private clinics/hospitals, private medical colleges etc. Reconstructing/ refurbishing of the existing facilities would be undertaken as may be necessary. Provisions for constructing new facilities would be kept in areas where existing facilities are not existent.
- **Outreach Immunization sites** would be set up in line with described norms. While NGO clinics, private hospitals, schools, club houses, commissioners' offices and similar facilities would be used for this purpose, it may be useful in the long run to set up community clinics in urban areas which would promote principle of public private partnership (PPP) and also be sustainable in the long run.


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- Each facility would map their catchment area and take the responsibility for immunization of the target population and disease surveillance in their respective areas.
- At the CC or zone level the catchment maps of each facility will be incorporated into a single map to explore any possible duplication or omission.
- CC would plan to set up new PHC facilities in the areas currently covered by the NGOs in collaboration with MOHFW to ensure long term sustainability.
- **Recruitment and placement of vaccinators** according to the organisational development and HR plan
- Provision of supervision transport & vaccine transport for programme supervisors.
- Financing of infrastructure development could be an issue; however, options to be explored are:
 - Upgradation of urban dispensaries under existing operational plans of MoHFW
 - Inclusion of infrastructure support in next cycle of MoHFW sector programme
 - In some cases, especially in the areas which do not have immunization services, DPP modality with use of support from MOHFW funding can be considered.
- In the long term, establishment of urban PHC, building it in a blend of public private partnership with setting up of primary health care, limited OPD and emergency services, ANC & PNC, childhood growth & development monitoring, immunization, dental care, domiciliary follow up care and referral system and with system of bringing the catchment population under social safety net.

6.3.3 Urban Immunization Service Structure and Functioning

It is estimated that each PHC will have 1,000-1,100 infants (around 2-2.2% of the total population) to be vaccinated annually and another 1,000 pregnant women for ANC visits who may require Td vaccines. Each child is expected to come for 5 visits to the immunization site. Considering the target, it is recommended that each PHC would be staffed with 6 vaccinators and 2 immunization supervisors (similar to AHI in rural setup). Each supervisor will be teamed with 3 vaccinators. Each vaccinator will be assigned with a specific catchment area, which will be divided into 8 sections (similar to sub-blocks in rural setup). Each section will have an outreach site setup in the community.

Immunization schedule would be fixed similar to the rural schedule. For example, vaccinator will hold vaccination session on 1st Monday of each Month in section 1, on 1st Wednesday of each month in section 2. Similarly, in second week on Monday and Wednesday sessions will be held in section 3 and 4, in third week in section 5 and 6; and in 4th week in sections 7 & 8. From the 1st week of the next month the cycle will be repeated.

Figure 4 schematically represents the flow of immunization services within a City Corporation


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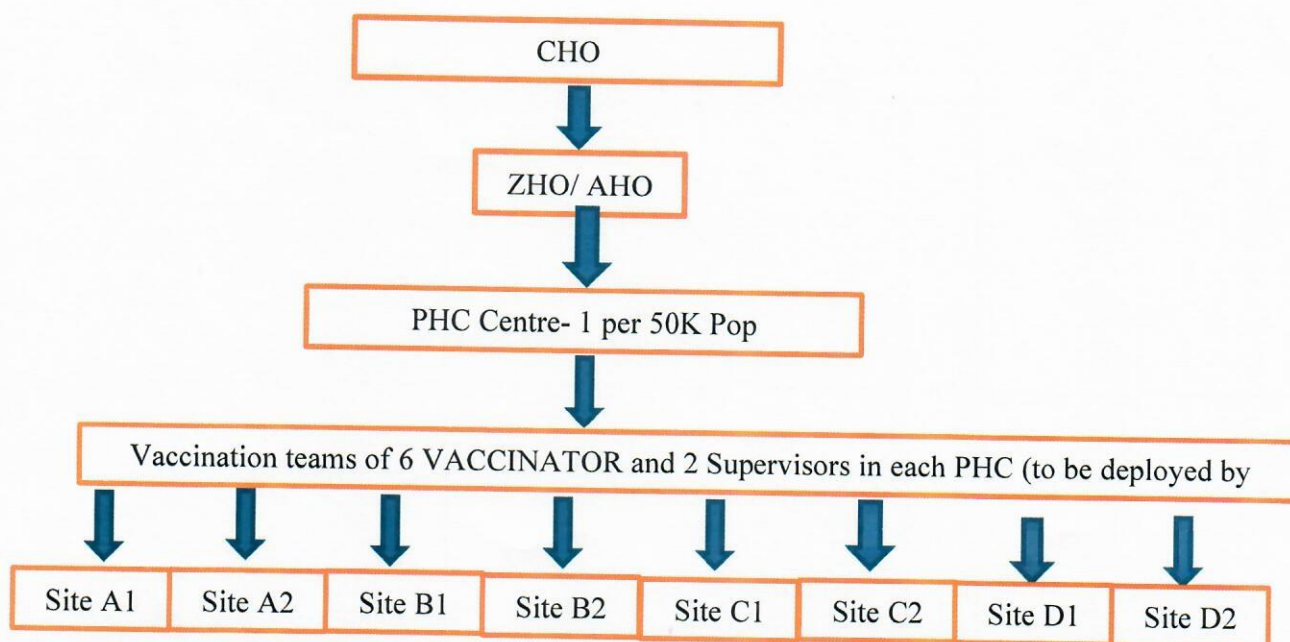


Figure 4: Functional organogram for immunization services in a CC


Information about the session schedule, timing, location of the site and about the services available, will be communicated to the catchment area community through appropriate channels (inter-personal communication, commissioner's office, mosques, schools, SMS text message, local cable network, etc).

The schedule of vaccinators would be coordinated, so that, wherever possible, within area of a supervisor there is not more than one vaccination session on the same day. This will enable the supervisor to provide support to every session and also will ensure backup in case vaccinator is absent from duty.

The days the vaccinator does not have vaccination session, would be used for planning of the next session, follow-up of the defaulters, communication with the community and domiciliary visits. Additional sessions like evening sessions/ Friday sessions, mobile sessions for mobile or homeless population would be planned based on actual needs depending upon location of the PHC and the profile of the target population and would be reflected in the annual micro-plan. Session performance to be monitored at all levels from zone to the national through live data entry into immunization reporting into DHIS2.

6.3.4 Universal Health Coverage

The corner stone of both the National Health Policy and Urban Health Strategy is the concept of universal health coverage. The Urban Immunization Strategy will assist achieving these policy aims through various measures to ensure that all of the population will have equal opportunity to access immunization services. This equal opportunity will be promoted through birth registration, issuing of immunization cards/ smart cards that would enable tracking of each individual, important for promoting immunization coverage and dissemination of targeted


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specific health messages, implementation of pro poor delivery strategy and by enforcement of a policy of no financial charge for immunization services.

- As per National Immunization Policy, if children are being registered for immunization, health workers and managers would encourage parents to obtain Birth Registration and a system of follow-up/tracking of defaulters using digital technology;
- Ensure that immunization cards are provided to the eligible population, irrespective of whether the service provided through government, private or NGO facilities.
- Efforts would be made to ensure that free services for immunization is provided at government and private service delivery points.
- Efforts would be made to ensure supply of quality vaccines through single source (vaccines procured by EPI) maintaining cold chain from manufacturer to end user level. The quality control in the private clinics and for the imported vaccines outside EPI would be ensured by NRA (DGDA).
- Annual Action Plans of City Corporations and Municipalities would specify a Pro-Poor Delivery Strategy.
- Community level support groups are essential in the areas where the area of the primary health care worker is large for expanding coverage and access.
- In order to ensure adequate resourcing of immunization services in urban areas, budgeted Annual Implementation Plans identifying multiple sources of finance would be developed

6.4. Demand Side Communications Strategy

The communication strategic area outlines principles strategies for increasing demand for immunization services. Sub components cover such areas as health education, social mobilisation, and media and gender strategy. Each City Corporation would develop a communication strategy based on these component areas. The communication strategy will be critical for a number of reasons. Firstly, through stimulation of demand, it will enable better service access for groups that are often at high risk for not accessing services in the urban context. These populations include the very poor living in slum areas, urban migrants and those who live in high-rise apartments. For this reason, there would be multiple strategies to reach specific population groups, including school age children and those who access private sector services only.

6.4.1 Health Education Strategy

- Arranging regular group awareness raising meeting in slum areas (with parents, ante and postnatal care patients and with adolescents)
- Assign persons for conveying EPI messages at different health facilities;
- Utilize waiting times of public or parents in the OPDs of hospitals and clinics for conveying EPI messages through TV films/ cartoons
- Organizing fairs /rallies periodically
- Conducting Immunization weeks


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6.4.2 School Education strategy

- Incorporate EPI messages into the existing “little doctor “concept
- Inclusion of EPI messaging in Text books
- Arrange production of immunization IEC materials for schools

6.4.3 Social Mobilization Strategy, Local Community Involvement Strategy

- Involvement of ward councillor, religious leaders, local elites and school teachers in immunization communication
- Involve sports icons to support immunization

6.4.4 Media Strategy

- Produce newspaper supplements on immunization in national and local press
- Broadcast immunization information through Radio and TV coverage
- Preparation of media releases on new vaccines or campaigns

6.4.5 Gender strategy

- All promotional messages and activities to be universal considering gender sensitivity and equity
- Working with women's groups at community level to disseminate EPI information, support immunization and birth registration and identify high risk groups
- Identifying actions to improve men's knowledge and understanding of the benefits of immunization

6.4.6 Adverse Events Strategy

- Each City Corporation and Municipality would establish an AEFI committee and report and investigate AEFI as per AEFI surveillance guideline.
- As per national Policy, ensure through supervision and monitoring programs that all health facilities (hospitals, NGOs and private clinics) in the urban areas report adverse events following immunization to the relevant disease surveillance focal points.
- As per national Policy, any serious AEFI (death, hospitalization, and significant community concern or cluster event) must be investigated in urban areas by the designated AEFI committee, and a report would be submitted by the AEFI investigation team to the relevant health authority as early as possible.
- Broadcast the appropriate response to any AEFI reported on media by assigned AEFI focal point.

7 Implementation Framework, Timeline and Next Steps

The implementation framework mentioned is a guidance and would enable City Corporation and Municipal planners to develop Annual Action Plans based on the main strategic areas, components and long-term activities specified in this framework.

The next step will be to develop costed action plan based on this strategy document with timelines. This will be followed with development of annual plans at the city/zone and municipal levels.

Accountability for implementation of this strategy will be a responsibility of National EPI in collaboration and coordination with Local Government Institutions.


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