

2019 INFUSE CALL FOR INNOVATION

Accelerating immunisation coverage for rapid urbanisation challenge

Calling on innovators with solutions for immunising in complex urban, developing country settings

WHAT IS INFUSE?

Innovation for Uptake, Scale and Equity in Immunisation, or INFUSE, aims to identify proven solutions which, when brought to scale, have the greatest potential to modernise global health and immunisation delivery. INFUSE was launched by Gavi, the Vaccine Alliance at the World Economic Forum's 2016 Annual Meeting in Davos. Every year, INFUSE calls for innovations that can help Gavi, governments and partners to reach more children with life-saving vaccines. INFUSE then works with expert partners to select the most promising innovations and "infuse" them with the necessary capital, expertise or other support needed to bring them to scale. INFUSE aims to accelerate the speed at which developing countries can gain access to and scale up appropriate technologies to strengthen health systems.

In 2019, INFUSE is looking to attract innovators to the urban health space in order to bring the latest technological and innovative business models to urban populations. Ensuring that all children and families are reached by health services, tracking children through their course of vaccines, delivering high-quality immunisation services and improving disease surveillance are all vital to preventing and detecting outbreaks in densely-populated urban settings.

THE CHALLENGE

In 2018, 55% of the world's population lived in urban settings. By 2050, this figure is expected to rise to almost 70%. This rapid growth will add nearly 2.5 billion people to urban areas, with 90% of the expansion occurring in Asia and Africa.¹

These large, congested urban settings, with their often mobile, transient and underimmunised populations, are particularly at risk of disease transmission and outbreaks, such as yellow fever, cholera and typhoid. Inadequately built, densely-packed dwellings; unchecked informal developments; poor infrastructure and sanitary conditions; and frequent travel between urban and rural settings all have the potential to quickly transmit life-threatening diseases. This carries an additional economic cost to countries. According to World Bank estimates, the annual global cost of moderately severe to severe pandemics is roughly US\$ 570 billion, or 0.7% of global income.

Improving routine immunisation in the urban population is an essential component in addressing immunisation coverage and equity. Today nearly 6.4 million, or 40%, of the 16.1 million underimmunised children in the 73 Gavi-supported countries live in cities, and the proportion continues to increase. Gavi's mission is to ensure that every child is immunised with basic life-saving vaccines, no matter where they live. It is clear that the specific challenges in urban environments – which affect health workers, programme managers and caretakers alike – require more innovation in order to ensure that every child is reached.

¹ United Nations. Department of Economic and Social Affairs. <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>

High mobility: Urban residents, particularly those living in informal settlements, are on the move. The high number of migrants in urban settings, including the almost 60% of refugees that live in urban areas across the globe, change residence and seek healthcare across different public and private facilities.

Insufficient services: Due to rapid or unrecognised growth in and around major metropolitan areas, services have not kept pace with the growing population. Immunisation services are not alone in this – water, sanitation and primary healthcare interventions are often absent from urban poor communities. Assuring that data on the population and their needs is made available is critical to designing programmes and advocating for investments to improve access to primary healthcare and to pave the way for universal health coverage for other services.

The INFUSE urban innovation challenge aims to source technologies and tools to:

- 1) **accurately identify and track** underimmunised populations that are highly mobile and impermanent;
- 2) **inclusively plan for services** that are responsive and target underserved populations in urban settings; and
- 3) **continuously monitor** progress of urban programmes, ensuring targeted and continuous high-quality immunisation services.

THE OPPORTUNITY

In 2019, INFUSE is looking for innovations uniquely positioned to address immunisation challenges in urban settings. Through this call, Gavi is seeking innovations that aim to address the following challenges in assuring that children living in urban areas are reached with immunisation.

Accurately identify and track

Identification and tracking of immunisation services received by children in highly-mobile, urban populations to allow for effective coverage and completeness of immunisation service delivery, as well as improve the availability of real-time immunisation data for evidence-based decision-making (eg mapping of informal residential areas, and immunisation and disease surveillance data from public and private facilities).

Inclusively plan for services

Service delivery design that is responsive and targets underserved populations in urban settings, including by addressing gender inequalities in immunisation coverage (eg innovative payment schemes for hard-to-reach areas, mobile service delivery outlets, and demand generation tools for immunisation).

Continuously monitor

The progress of urban programmes should be monitored through platforms that promote the use of data by programme managers and communities (eg health worker tracking and caretaker quality of care reporting).

CONCLUSION

As global population demographics evolve, skewing rapidly towards urban and peri-urban settings, routine immunisation programmes need to adapt with specific interventions tailored to reaching every child. The growing number of people living in urban areas has brought new challenges for gathering data, planning and communicating – as well as opportunities to develop new approaches to routine immunisation.

Immunisation connects the vast majority of families with the primary health system up to five times in the first year of a child's life – more than any other health intervention. As a result, strengthening immunisation services in complex and dynamic urban settings also allows for a fortification of access to primary healthcare more broadly, and enables robust pathways towards achieving universal health coverage.

Through the INFUSE 2019 challenge, selected innovations will be invited to join the INFUSE Community – an ecosystem of leading innovators, corporation, and development partners tasked with collaborating to bring greater innovation to the immunisation and global health space. The most promising of these innovations will be designated as “INFUSE Pacesetters” and will receive focused support from Gavi and its partners to allow them to be taken to scale in interested Gavi-supported countries.

Technical experts and industry leaders will review submissions based on their ability to accelerate, improve and upgrade processes and service delivery across the immunisation value chain to increase coverage and equity in immunisation; the extent to which they have considered cost-effectiveness; potential time to scale; level of impact; evidence base of success to date; strength of the business model and the team; and adaptability. Solutions that have originated in a developing country, have track records with respected public and private partners, can be replicated in at least French- and English-speaking countries, and are sensitive to issues related to gender empowerment and environmental challenges are encouraged to apply.

INFUSE is not seeking early-stage ideas for research or pilot projects. To be successful, an innovation must have advanced beyond the pilot stage and be capable of being deployed at a large scale within six to twelve months. To submit an innovation for consideration and for more details on selection criteria and the annual INFUSE process, please visit gavi.org/infuse.

ABOUT GAVI, THE VACCINE ALLIANCE

Gavi, the Vaccine Alliance is a public-private partnership committed to saving children's lives and protecting people's health by increasing equitable use of vaccines in lower-income countries. The Vaccine Alliance brings together developing country and donor governments, the World Health Organization, UNICEF, the World Bank, the vaccine industry, technical agencies, civil society, the Bill & Melinda Gates Foundation and other private sector partners. Gavi uses innovative finance mechanisms, including co-financing by recipient countries, to secure sustainable funding and adequate supply of quality vaccines. Since 2000, Gavi has contributed to the immunisation of more than 700 million children and the prevention of over 10 million future deaths. Learn more at www.gavi.org and connect with us on [Facebook](#) and [Twitter](#).