

Closing the immunisation gap will require safer, more efficient and reliable vaccine supply chains

Investing in next-generation health supply chains saves lives.

Poor vaccine supply systems aren't just costly; they can put lives at risk

Under-resourced and poorly functioning supply chains—the network of staff, equipment, vehicles and data needed to get vaccines safely from manufacturer to health clinics—can restrict access to vaccines and put people at risk of contracting diseases. Across Africa and around the world, too many vaccines are lost, damaged or expired before they reach local health clinics.

Vaccines are sensitive biological products that can lose potency when exposed to heat or freezing temperatures. With a limited shelf life, they must be discarded after reaching their expiry date. Reaching remote communities with perishable products is not easy in any context—it takes time, meticulous temperature control, specialized cooling equipment and logistical expertise to make sure health workers have the supplies they need to ensure more people have access to lifesaving vaccines.

Expanded immunisation programmes won't work without stronger immunisation supply chains

Most immunisation supply chains were developed three decades ago when immunisation programmes were much smaller and vaccines less costly. Immunisation programmes are growing in size, value and complexity. Immunisation and broader health supply chains must be transformed to meet the robust global effort to immunise every child, parent and community. Closing the immunisation gap depends on it.

Estimated growth of immunisation programmes between 2010 and 2020

Diseases vaccinated against		2.5x ↑
Additional storage and transport capacity		2x ↑
Vaccine doses per person (#)		6x ↑
Vaccine volume per fully immunised person (cm ³)		4x ↑
Immunisation cost per person (US\$)		6x ↑

World Health Organization. *Immunization Supply Chain and Logistics: A Neglected but Essential System for National Immunization Programmes. Call to Action*. 2014: Geneva. WHO/IVB/14.05.

Next-generation supply chains will help reach more children

Leaders can meet the needs of immunisation programmes by investing in next-generation supply chains. Next-generation supply chains fundamentally improve the way vaccines are managed and delivered to communities. They employ the latest refrigeration and monitoring technologies, and reflect new strategies for transport, management and data tracking. **For example, in Mozambique, supply chain improvements dramatically reduced stockouts from 80 percent down to 1 percent in rural health centers, contributing to increased vaccine coverage (DTP3) from 70 percent to more than 95 percent.**

*Vaccine coverage is indicated by 3 doses of diphtheria-tetanus-pertussis, DTP, vaccine.

Five ways to innovate supply chains

According to Gavi's immunisation supply chain strategy (2014), supply chain innovations should be built on five fundamentals:



1. Redesign the system

New approaches to supply chain design have been shown to increase supply chain performance and raise coverage.

Gavi, the Vaccine Alliance, and partners are available to provide technical support, focusing on change management, modeling and last-mile delivery to help countries achieve a successful redesign of their immunisation supply chain system.

ACTION

Contact your local World Health Organization or UNICEF offices, or request support in your Gavi Health System Strengthening (HSS) application or Joint Appraisal.



2. Hire professional supply chain managers

As immunisation programmes have grown more complex, supply chain management has become a specialized field requiring skills and competencies that are not traditionally included in pharmacist, logistician and health professional training.

A formal job post of immunisation supply chain manager is one way to ensure that managers have the appropriate level of expertise, authority and resources to oversee the supply chain.

ACTION

Find new guidelines and tools, including an assessment for human resources for immunisation supply chain management, on the People that Deliver website (www.peoplethatdeliver.org). You can also request support for developing professional supply chain leaders from your local UNICEF office or through the Gavi HSS application and Joint Appraisal.



3. Collect data for decision-making

Most immunisation programme managers are acutely aware of the need for better data when it comes to stock availability and management, equipment performance and the temperature conditions at which vaccines are being exposed.

ACTION

Contact your local WHO and UNICEF offices for technical guidance on the use of immunisation supply chain dashboards, including key indicators to be included. Gavi and its partners are also available to provide guidance and technical assistance on data standards and use.



4. Modernize cold chain equipment

Reliable, well-maintained and cost-effective cold chain equipment is vital to ensure that vaccines are available and potent to protect all children. Yet most health facilities struggle with equipment that is unreliable and expensive to run and maintain, whilst many remain entirely unequipped.

ACTION

Gavi is launching a new platform that offers joint investment support and technical assistance to upgrade cooling equipment and extend the cold chain to currently unequipped facilities. Contact your Gavi Country Manager or local WHO or UNICEF offices for more information.



5. Strive for continuous improvement approach

Building on the successes of the Effective Vaccine Management (EVM) initiative, WHO and UNICEF are scaling up their support to countries for continuous supply chain improvement. Joining forces under the "WHO and UNICEF immunisation supply chain Hub," a comprehensive framework for Effective Vaccine Management is being developed and rolled out.

ACTION

More information is available on http://www.who.int/immunization/programmes_systems/supply_chain/evm/en/ and in the EVM Joint Statement. WHO, UNICEF and certified technical assistance partners are available to provide direct support to countries.

