One in ten infants worldwide did not receive any vaccinations in 2016
WHO and UNICEF immunization coverage estimates 1980 – 2016
Marta Gacic-Dobo and Hayatee Hasan, WHO Headquarters, and Mamadou Diallo, UNICEF HQ

Worldwide, 12.9 million infants, nearly 1 in 10, did not receive any vaccinations in 2016, according to the most recent WHO and UNICEF immunization estimates. This means, critically, that these infants missed the first dose of diphtheria-tetanus-pertussis (DTP)-containing vaccine, putting them at serious risk of these potentially fatal diseases.

Additionally, an estimated 6.6 million infants who did receive their first dose of DTP-containing vaccine did not complete the full, three dose DTP immunization series (DTP3) in 2016. Since 2010, the percentage of children who received their full course of routine immunizations has stalled at 86% (116.5 million infants), with no significant changes in any countries or regions during the past year. This falls short of the global immunization coverage target of 90%. Coverage for the 3rd dose of pneumococcal conjugate vaccines was at 42% and the completed dose of rotavirus vaccines at 25%. Visual presentation of key findings can be found here.

"Most of the children that remain un-immunized are the same ones missed by health systems," says Dr Jean-Marie Okwo-Bele, Director of Immunization, Vaccines and Biologicals at WHO. "These children most likely have also not received any of the other basic health services. If we are to raise the bar on global immunization coverage, health services must reach the unreached. Every contact with the health system must be seen as an opportunity to immunize."

Immunization currently prevents between two–three million deaths every year, from diphtheria, tetanus, whooping cough and measles. It is one of the most successful and cost-effective public health interventions.

The WHO/UNICEF estimates are based on data officially reported to WHO and UNICEF by Member States as well as data reported in the published and grey literature. More about the estimation methods is available here.

Read the news release WHO/UNICEF 2016 country and regional immunization coverage data. Illustrations on the data analysis are available on the WHO web site here, and on the UNICEF site.

The data can be accessed in tabular format, excel file, and country profiles in pdf.
Publication of the data reported by the WHO Member States on immunization
Laure Dumolard, Claudia Steulet, and Olivier Beauvais, WHO/HQ, 24 July 2017

Since 1998, WHO and UNICEF annually collect data on national immunization systems through the WHO/UNICEF Joint Reporting Form on Immunization (JRF).

The JRF collects national level data on reported cases of selected vaccine preventable diseases, immunization coverage, recommended immunization schedules, supplementary immunization activities, vaccine supply, and other information on the structure, policies and performance of national immunization systems.

During the second quarter of each year, national authorities complete the form and submit the data to WHO and UNICEF, who consolidate the replies and reconcile any differences between the two reporting channels. This data is analyzed, and queries are sent back to the countries. The data is constantly revised upon reception of updated information from Member States.

By 11 July 2017, 186 of the 194 WHO Member States reported data for 2016. This includes JRF from all countries of the WHO Regions for Africa, the Eastern Mediterranean and South East Asia. Completeness of the data reported in the JRF varied from one indicator to another. For example, 90% countries reported on the number of measles confirmed cases, 95% on the existence of a multi-year plan, 81% on the number of districts with DTP3 coverage >=80%, and 74% on the percentage of total expenditure on vaccines financed by government funds. An indicator with high reporting levels is the National Immunization Technical Advisory Group (NITAG) one, as 96% of countries reporting on the question related to the existence of a NITAG (see map).

In addition to contributing to numerous publications, this data is the main source of information for WHO Member States and Partners for annual review at the World Health Assembly, of the progress made towards achieving the Global Vaccine Action Plan (GVAP) goals.

The WHO vaccine preventable diseases monitoring system is updated with 2016 data and can be accessed through country profiles, or by subject. By visiting the country profiles, you will be able to view and download graphs of indicators overtime.

National Immunization Technical Advisory Groups (NITAGs) in 2016

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For previous editions of the GIN, visit the GIN archive on the WHO website: www.who.int/immunization/gin
US CDC and WHO provide support to the Lao Ministry of Health to improve Surveillance and Immunization Data
Lauren Franzel-Sassanpour, Dessie Mekonnen and Irene Tan, WHO Country Office, Lao PDR

Lao People’s Democratic Republic (Lao PDR) became the first country in the WHO Western Pacific Region and the second country in the world, to introduce US CDC’s Stop Transmission of Polio (STOP) Immunization and Surveillance Data Specialists (ISDS) project.

The Ministry of Health (MOH), National Immunization Programme (NIP) welcomes the support from US CDC and WHO. Dr Phouthone Muongpak, Deputy Health Minister said “The ISDS project will improve immunization and surveillance data in the country, which will be used for policy-making and introducing key interventions that will effectively address vaccine preventable diseases (VPD).”

Under the STOP ISDS programme, five international ISDS participants will partner with five Lao counterparts to conduct activities to improve data management, immunization and VPD surveillance systems.

Each team will be deployed to one of six provinces, Vientiane Capital and Vientiane Province, Champassack, Khammuane, Oudomxay, and Xiengkhuang provinces, for the next two years. To ensure the sustainability of the programme, the STOP ISDS Lao counterparts will continue to improve data management quality after the project is completed.

Following the successful project in Kenya, the Global Immunization Division at US CDC worked with WHO to implement a similar project in the country. “The interest and commitment from MOH has been instrumental in moving this project forward” said Anna Callaghan, project coordinator from US CDC.

Dr Juliet Fleischl, WHO Representative to Lao PDR said “WHO is pleased to be the convening agency for this STOP ISDS project with the US CDC to support the Ministry of Health in Lao PDR. This complements our work on Health Information System, aligning District Health Information Software (DHIS2) with ISDS project, and continuing with capacity building for the health staff.”
Bhutan and Maldives eliminate measles
Hayatee Hasan, WHO Headquarters

Bhutan and Maldives have eliminated measles, a highly infectious disease that is a major childhood killer globally. The two countries have become the first in WHO South-East Asia Region to be verified in June 2017 for having interrupted endemic measles virus transmission, ahead of the 2020 Regional target.

“Bhutan and Maldives have demonstrated how a highly contagious virus like measles can be eliminated. WHO commends them for this momentous public health achievement,” Dr Poonam Khetrapal Singh, Regional Director of WHO South-East Asia, said, announcing the findings and conclusions of the WHO South-East Asia Regional Verification Commission for Measles Elimination and Rubella control.

The Regional Director said, “The strongest political commitment, alongside the concerted efforts of health workers, officials and partners at all levels, has helped achieve this landmark success, which is a boost to the Region’s effort to eliminate measles and control rubella”.

Bhutan and Maldives launched their Expanded Program on Immunization in 1979 and 1976 respectively, and since then worked indefatigably to increase access to immunization services.

“Both countries achieved and maintained high coverage of measles vaccination, despite geographical challenges. They also established strong laboratory-supported surveillance for measles, and have conducted detailed case investigation and tracking, right up to the very last case,” Dr Khetrapal Singh said.

Read the full story here.

New journal supplement on the Polio Endgame provides a powerful resource to guide immunization programme planning
Lisa Menning, WHO/HQ

Global polio eradication and immunization partners announced on 10 July 2017 the launch of a new supplement to the Journal of Infectious Diseases, Polio Endgame and Legacy: Implementation, Best Practices, and Lessons Learned.

The 51 articles in the publication serve as a resource and reference on how to implement large scale, globally synchronized public health activities within ambitious timelines, and provides valuable insights for other initiatives looking to do the same.

This open access supplement represents the achievements and learning of a three-year multi-partner collaboration that was responsible for the activities set by objectives 2 and 4 of the Polio Eradication and Endgame Strategic Plan 2013-2018. This includes efforts to coordinate implementation of inactivated polio vaccine (IPV) introduction, switch oral polio vaccines (OPV), strengthen immunization systems, and ensure that the investments made in polio eradication secure longer term benefits.

Recent years have been marked by defining events that required intensive action towards the accelerated timelines of the Endgame Plan. In April 2016, the withdrawal of the type 2 component in the switch from trivalent to bivalent OPV in 155 countries and territories was described as a “marvellous feat” by Dr Margaret Chan, the former Director General of the World Health Organization. In preparation for the switch, the level of commitment of countries to introduce IPV signified a new collective momentum towards the goal of polio eradication. And as we come closer to achieving eradication, a transition process has been initiated to prepare for a polio-free world.

Papers in the supplement offer detailed assessments of efforts across areas such as strategy and management, planning and implementation, communications, financing, vaccine supply, and routine immunization strengthening. Furthermore, regions and countries have directly contributed a significant number of papers to the supplement, offering a unique insight into the practical challenges that were overcome in a range of diverse settings.

The supplement has the potential to greatly inform future similar efforts; from globally coordinated public health initiatives, to the expected withdrawal of all OPVs, vaccine introductions, and polio transition planning.

The supplement can be accessed at no cost by visiting this website.
Updates on the development of the Polio Post-Certification Strategy and polio transition planning
Lisa Menning, WHO/HQ

As the world comes closer to achieving eradication, the Global Polio Eradication Initiative (GPEI) is beginning to wind down its operations and will eventually come to a close in the post-eradication era. Over its three decades of operation, GPEI has built significant infrastructure for disease surveillance, social mobilization, and vaccine delivery; developed in-depth knowledge and expertise; and learned valuable lessons about reaching the most vulnerable and hard-to-reach populations on earth.

To guide the necessary preparations for this coming era, several streams of work are now in progress, including the development of a polio Post-Certification Strategy. This strategy is being developed to define the global technical standards that will be needed in order to sustain a polio-free world after global certification of wild poliovirus eradication.

Development of the Strategy began in 2017 by the Global Polio Eradication Initiative (GPEI), and is being elaborated in consultation with global and regional partners, scientific experts, donors, and other stakeholders. In December 2017, it will be discussed at the meeting of the GPEI Polio Oversight Board, then in January 2018 it will be considered by the WHO Executive Board, and by the World Health Assembly in May 2018.

The Post-Certification Strategy has three goals:
- Contain poliovirus sources: Ensure potential polioviruses are properly controlled or removed.
- Protect populations: Withdraw the oral live attenuated polio vaccine from use and immunize populations against unanticipated polio events
- Detect and respond: Promptly detect any poliovirus reintroduction and rapidly respond to prevent transmission

The strategy will also identify ‘Enabling and Cross-Cutting Areas’, which will specify options for integrating ongoing polio functions—for example, governance and management, monitoring, and research activities—into other institutions or organizations.

Further details on the Post-Certification Strategy are available here.

Information about the overall planning process for the transition away from resources of the GPEI is available here.
Past Meetings/Workshops

Launch of the Global National Immunization Technical Advisory Group Network

Hayatee Hasan, WHO Headquarters

Location: Berlin, Germany

Date: 28-29 June 2017

Participants: National Immunization Technical Advisory Group (NITAG) members and secretariats from 26 countries across the six WHO regions.

Purpose: To endorse the Global National Immunization Technical Advisory Group Network (GNN) strategic document and officially launch the network.

Details: The second Global National Immunization Technical Advisory Group Network (GNN) meeting was jointly organized by WHO, the Robert Koch Institute, US Centers for Disease Control (CDC) and Prevention and Agence de Médecine Preventive—Health Policy and Institutional Development Center (AMP-HPID).

In line with the recommendations from the Strategic Advisory Group of Experts (SAGE) on immunization on the importance of regional and global NITAG collaboration, the GNN members are working towards the GVAP target to have functional NITAGs in all Member States by 2020.

This commitment was formalized through the endorsement of the strategic document and the signing of the GNN certificate by all members. This was followed by an inauguration ceremony where Karin Knufmann-Happe, Director General for Health Protection at the German Federal Ministry of Health congratulated the participants for launching the Global NITAG Network.

NITAG members and partners use this annual meeting as an opportunity to share lessons learned, inspire action through a variety of success stories and discuss ways to address challenges. This second edition promoted the voices of NITAG members around the world.

Read the Strategic Document of the Global NITAG Network.
Call for nominations

WHO African Region Immunization Technical Advisory Group

The WHO Regional Office for Africa is soliciting proposals for nominations for current vacancies on its Regional Immunization Technical Advisory Group (RITAG). Nominations are required to be submitted no later than 04 September 2017. Nominations will be carefully reviewed by the RITAG membership selection panel which will propose the selection of nominees for appointment to the WHO Regional Director for Africa.

The RITAG serves as the principal advisory group to the WHO Regional Office for Africa for strategic guidance on vaccines and immunization. The RITAG reports directly to the WHO Regional Director for Africa and advises the Regional Director on overall regional policies and strategies, ranging from vaccine and technology research and development, to delivery of immunization services and linkages between immunization and other health interventions. Its remit is not restricted to childhood immunization but extends to all vaccine-preventable diseases as well as all age groups.

All members are acknowledged experts with an outstanding record of achievement in their own field and an understanding of the immunization issues covered by the RITAG. They have a responsibility to provide WHO with high quality, well-considered advice and recommendations.

Members will be selected on the basis of their qualifications, experience, and ability to contribute to the accomplishment of the RITAG objectives. They are appointed to serve for an initial term of three years, renewable once. Consideration is given to ensuring appropriate geographical representation and gender balance.

The RITAG normally meets twice a year rotating between the WHO Regional Office in Brazzaville, Congo and a country in the region. In addition, members may be asked to contribute to RITAG working groups, and will be fully engaged in the preparation of each meeting.

Please submit your nominations along with a letter of support by e-mail. Self-nominations as well as nominations suggested by third party individuals or organizations will be accepted. Nominees will be asked to confirm their interest, availability and commitment to serve on RITAG, to provide a curriculum vitae, a letter of motivation highlighting what their contribution to RITAG could be, and a completed declaration of interests form before their nomination will be considered by the selection panel.

Please share this request with anyone who may be interested in nominating an individual to serve as a member of this Group.

French and Portuguese versions are also available.

Call for expressions of interest in serving as member of the European Regional Verification Commission for Measles and Rubella Elimination (RVC)

Catharina de Kat, WHO Europe

The European Regional Commission for Verification of Measles and Rubella Elimination (RVC) was established in 2011 to fulfill the essential tasks of measuring progress, advocating for prioritization of elimination efforts and ultimately verifying that measles and rubella have been eliminated in countries and in the European Region. As its secretariat, WHO Europe is calling for expressions of interest from qualified experts to complete and complement the RVC.

For more information, you can click on this link.

To apply, please send a letter of interest by 30 September 2017.
Resources

New Global Vaccine Action Plan indicators portal and website

The Global Vaccine Action Plan (GVAP) indicators portal provides access to annual data on progress against the indicators in the Monitoring Evaluation and Accountability Framework. The portal presents graphs and data visualizations by indicator, allows users to access the analysis developed every year under the GVAP Secretariat report, integrates useful resource materials on immunization coverage and performance indicators.

The Global Vaccine Action Plan (GVAP) webpage hosted under the Immunization website has been recently updated. The new version aims to enhance access to the GVAP news and reports, immunization coverage facts and figures.

The GVAP Indicators Portal can be accessed from the GVAP website or through the direct link.

To visit the GVAP website go to this link.

WHO issues updated hepatitis B vaccines position paper

Hayatee Hasan, WHO Headquarters

In a revised position paper on hepatitis B vaccines published in the Weekly Epidemiological Record, WHO provided updated information on hepatitis B vaccines and their storage, transport and deployment.

The recommendations concern the target groups for vaccination and the appropriate schedules. In particular, the recommendations stress the importance of vaccination of all infants at birth as the most effective intervention for the prevention of hepatitis B virus-associated disease worldwide.

Reaching all children with at least 3 doses of hepatitis B vaccine should be the standard for all national immunization programmes.

National strategies to prevent perinatal transmission should ensure high and timely coverage of the birth dose through a combination of strengthened maternal and infant care at birth with skilled health workers present to administer the vaccine, and innovative outreach strategies to provide vaccine for infants born at home.

WHO recommends hepatitis B vaccination of persons at high risk of hepatitis B virus infection in older age groups and catch-up vaccination of unvaccinated groups if the necessary resources are available.

Read the updated hepatitis B vaccines position paper.
WHO issues addendum to the yellow fever vaccine position paper

Hayatee Hasan, WHO Headquarters

In an addendum to the yellow fever (YF) vaccine position paper published in the Weekly Epidemiological Record, WHO provided guidance on the use of fractional dose YF vaccination in the context of YF vaccine supply shortages.

Recent outbreaks have highlighted the critical importance of strong routine YF immunization programmes and mass vaccination campaigns in line with the WHO Eliminate Yellow Fever Epidemics (EYE) Strategy for the prevention of YF outbreaks.

A fractional YF vaccine dose can be used as part of an emergency response to an outbreak if there is a shortage of full-dose YF vaccine that exceeds the capacity of the global stockpile. This is not intended to serve as a longer-term strategy or to replace established routine immunization practices.

Administration of fractional dose YF vaccine constitutes an off-label use of the vaccine. Preference should be given to YF vaccine products for which immunogenicity and safety data are available on a fractional dose administered subcutaneously or intramuscularly.

As soon as the YF vaccine supply situation can meet the immediate need, the use of fractional dose YF vaccination should be replaced by standard full-dose YF vaccination.

Read the addendum to the WHO position paper on yellow fever vaccine.
## Calendar

### 2017

#### August

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<tr>
<td>20-26</td>
<td>AFRO VPD Surveillance &amp; Lab Network Meeting</td>
<td>Johannesburg, South Africa</td>
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<tr>
<td>28-1Sep</td>
<td>Regional Committee for Africa</td>
<td>Victoria Falls, Zimbabwe</td>
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#### September

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<tr>
<td>6-10</td>
<td>Regional Committee for South-East Asia</td>
<td>Malé, Maldives</td>
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<tr>
<td>7-8</td>
<td>Measles &amp; Rubella Initiative partners’ meeting</td>
<td>Washington DC, USA</td>
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<tr>
<td>11-14</td>
<td>Regional Committee for Europe</td>
<td>Budapest, Hungary</td>
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<tr>
<td>12-14</td>
<td>AFRO Central EPI Managers’ meeting</td>
<td>Malabo, Equatorial Guinea</td>
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<tr>
<td>12-15</td>
<td>6th Annual meeting Regional Verification commission for Measles Elimination in the Western Pacific</td>
<td>Beijing, China</td>
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<tr>
<td>25-29</td>
<td>Regional Committee for the Americas</td>
<td>Washington DC, USA</td>
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<tr>
<td>26-28</td>
<td>AFRO West EPI Managers’ meeting</td>
<td>Accra, Ghana</td>
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<tr>
<td>26-29</td>
<td>7th VPD laboratory network meeting for polio and measles</td>
<td>Manila, Philippines</td>
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#### October

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<tr>
<td>2-3</td>
<td>Global Framework for Research on Rotavirus vaccines</td>
<td>Geneva, Switzerland</td>
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<tr>
<td>9-12</td>
<td>Regional Committee for the Eastern Mediterranean</td>
<td>Islamabad, Pakistan</td>
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<tr>
<td>9-13</td>
<td>Regional Committee for the Western Pacific</td>
<td>Brisbane, Australia</td>
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<tr>
<td>11-12</td>
<td>Sixth Global Vaccine Safety Initiative (GVSI) Meeting</td>
<td>Kuala Lumpur, Malaysia</td>
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<td>16-20</td>
<td>Fifteenth TechNet Conference</td>
<td>Cascais, Portugal</td>
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<td>17-19</td>
<td>Meeting of the Strategic Advisory Group of Experts (SAGE) on Immunization</td>
<td>Geneva, Portugal</td>
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<td>23-25</td>
<td>Polio committee meeting</td>
<td>TBD</td>
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<tr>
<td>24-25</td>
<td>EURO National EPI Programme Managers’ meeting</td>
<td>Budva, Montenegro</td>
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<tr>
<td>26-27</td>
<td>EURO Technical Advisory Group of Experts (ETAGE)</td>
<td>Budva, Montenegro</td>
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#### November

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<th>Date</th>
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<tr>
<td>7-8</td>
<td>EMRO Regional Working Group</td>
<td>TBD</td>
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<tr>
<td>10-24</td>
<td>Joint EURO MR Surveillance &amp; Lab Network Meeting</td>
<td>Belgrade, Serbia</td>
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<tr>
<td>11-14</td>
<td>EMRO National EPI Managers’ meeting</td>
<td>Amman, Jordan</td>
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<tr>
<td>13-17</td>
<td>Global Rotavirus and IB-VPD Surveillance Network Meetings</td>
<td>Geneva, Switzerland</td>
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<td>15-16</td>
<td>EMRO RITAG</td>
<td>Amman, Jordan</td>
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<tr>
<td>21-23</td>
<td>AFRO E&amp;S Regional Working Group</td>
<td>Addis Ababa, Ethiopia</td>
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Links

Organizations and Initiatives

American Red Cross
   Child Survival

Agence de Médecine Préventive
   Africhol
   EpiVacPlus
   LOGIVAC Project
   National Immunization Technical Advisory Groups Resource Center
   SIVAC

Centers for Disease Control and Prevention
   Polio
   Global Vaccines and Immunization

Johns Hopkins
   International Vaccine Access Center
   VIEW-hub

JSI
   IMMUNIZATIONbasics
   Immunization Center
   Maternal and Child Health Integrated Program (MCHIP)
   Publications and Resources
   Universal Immunization through Improving Family Health Services (UI-FHS) Project in Ethiopia

PAHO
   ProVac Initiative

PATH
   Better Immunization Data (BID) Initiative
   Center for Vaccine Innovation and Access
   Defeat Diarrheal Disease Initiative
   Vaccine Resource Library
   Malaria Vaccine Initiative
   RHO Cervical Cancer

WHO
   Sabin Vaccine Institute
   Sustainable Immunization Financing
   UNICEF
   Immunization
   Supplies and Logistics
   USAID
   Maternal and Child Health Integrated Program
   WHO
   Department of Immunization, Vaccines & Biologicals
   New and Under-utilized Vaccines Implementation
   ICO Information Centre on HPV and Cancer
   Immunization financing
   Immunization service delivery
   Immunization surveillance, assessment and monitoring
   SIGN Alliance

Other
   Coalition Against Typhoid
   Confederation of Meningitis Organisations
   Dengue Vaccine Initiative
   European Vaccine Initiative
   Gardasil Access Program
   Gavi the Vaccine Alliance
   International Association of Public Health Logisticians
   International Vaccine Institute
   Measles & Rubella Initiative
   Multinational Influenza Seasonal Mortality Study
   Network for Education and Support in Immunisation (NESI)
   TechNet-21
   Vaccines Today

UNICEF Regional Websites

Immunization (Central and Eastern Europe)
Immunization (Eastern and Southern Africa)
Immunization (South Asia)
Immunization (West and Central Africa)
Child survival (Middle East and Northern Africa)
Health and nutrition (East Asia and Pacific)
Health and nutrition (Americas)

WHO Regional Websites

Routine Immunization and New Vaccines (AFRO)
Immunization (PAHO)
Vaccine-preventable diseases and immunization (EMRO)
Vaccines and immunization (EURO)
Immunization (SEARO)
Immunization (WPRO)

Newsletters

Immunization Monthly update in the African Region (AFRO)
Immunization Newsletter (PAHO)
The Civil Society Dose (GAVI CSO Constituency)
TechNet Digest
RotaFlash (PATH)
Vaccine Delivery Research Digest (Uni of Washington)
Gavi Programme Bulletin (Gavi)
The Pneumonia Newsletter (Johns Hopkins Bloomberg School of Public Health)