1.1 Strategic Objective 2. Managing health intelligence on vaccine-preventable diseases and immunization

Strategic objective 2 (SO2) is focusing on health intelligence needed to support the Strategic Goal of Accelerated Control and Elimination of Vaccine-Preventable Diseases (VPD) and to strengthen immunization programmes. SO2 includes 4 focus areas: i) VPD surveillance, which includes epidemiological and laboratory surveillance; ii) laboratory capacity and networks that address building and maintaining laboratory capacity at country level or through international networks; iii) monitoring and evaluation (M&E), which address the need to identify suitable programme performance indicators and collect quality data through various sources to monitor them; and iv) data for action which emphasize the need to analyze and disseminate all the information collected through surveillance and M&E to guide decision making as adequate at all levels. SO2 also contributes to strengthen overall health system and supports efforts towards Universal Health Coverage (UHC) by providing information to identify underserved populations as well as successful service delivery approaches; some Expanded Programme on Immunization (EPI) indicators are included in UHC, International Health Regulations (IHR) and Sustainable Development Goal (SDG) monitoring frameworks. SO2 also contributes to strengthen health security through detection of outbreaks, critical information to guide response, and identification of risks for VPDs transmission.

For M&E some of the strategic directions in 2021-2030 are: to improve quality of data, with disaggregation at subnational level, through approaches that could be undertaken by EPI or in coordination with other health system stakeholder, including integration of EPI data in broader health information systems, and capacity building of health workforce on data-related capacities relevant to each level; engage EPI in understanding and shaping national eHealth strategies and support implementation of Information and Communication Technology (ICT) solutions adequate to country context.

For data for action some of the strategic directions in 2021-2030 are: to build capacity of health workforce on epidemiology and data analysis through approaches that could include pre-service training, on-the-job training, continuous education opportunities; build capacity for critical appraisal of data by systematically including analysis of available data in programme performance reviews and evaluations; conduct regularly national risk assessments and develop improvement plans accordingly; high-level advocacy and support the national authorities to conduct evidence-based decision making processes, and secure funding and resources to implement mitigating measures/actions as suggested by data.
1.2 VPD surveillance systems: regional goal 2030 and strategic direction

Based on findings from VPD surveillance reviews, observations during outbreak response, analysis of data reported to WHO, and a survey conducted in 2017 survey, all countries in WPR have a surveillance system for measles, rubella and polio, but not all have systems for other VPDs; systems often do not comply with minimum requirements for quality surveillance, as defined by WHO guidelines. While some countries are integrating surveillance for different diseases, VPDs surveillance is often fragmented, vertically organized, leading to excessive cost and workload, and data discrepancies. Overall, across countries in WPR there is large variability of VPD surveillance maturity and performance. Capacity for surveillance is often limited and resources are inadequate. Strategic directions to address these challenges in 2021-2030 include: expansion of quality surveillance to additional VPDs (polio/acute flaccid paralysis, measles, rubella, congenital rubella syndrome, diphtheria, neonatal tetanus and Japanese encephalitis in all countries and additional VPDs based on country context); ensure that integration or optimization of use of resources for VPD surveillance is achieved for one or more of surveillance functions (i.e. specimen transportation, data management, surveillance review, etc.); ensure adequate legal/regulatory frameworks and allocate adequate resources; build capacity through effective pre-service and on-the-job training, including mentoring programmes, distance learning, Field Epidemiology Training Programs (FETP); strengthen laboratory support capacity, particularly for bacterial diseases; support development of ICT solutions adequate to each country context; ensure availability, dissemination and use of surveillance data for action at all levels.

1.3 VPD laboratories and networks: regional goal 2030 and strategic direction

WPRO/EPI coordinates five regional VPD laboratory networks consisting of 500 public health laboratories for polio (43) since 1992, measles and rubella (385) since 2001, Japanese encephalitis (20) since 2009, rotavirus (32) and invasive bacterial-vaccine preventable diseases (20) since 2010. These VPD laboratory networks are facing challenges including, still depending on WHO support; reduced funding that may affect elimination and eradication programmes; funds allocated for specific surveillance programmes; lack of integrated VPD surveillance systems; high workload during outbreaks (e.g., measles), and risk of complacency in polio laboratories due to the absence of poliovirus.

A regional strategy aims to maintain functional and sustainable laboratory surveillance for VPDs through (i) providing technical and financial support to VPD laboratories of priority countries; (ii) implementing Quality Management System (QMS) continuously; iii) promoting the shift of funding from specific diseases to integrated VPD surveillance to allow testing for differential diagnosis; and (iv) improving epidemiological and laboratory surveillance collaboration for VPDs in routine and outbreak situations; applying correct case definition criteria; collecting adequate specimens, and using appropriate laboratory resources.