

RSV Reference Laboratory Terms of Reference for the WHO Strategy for Global Respiratory Syncytial Virus Surveillance Project based on the Influenza Platform. Phase 2

Background

Respiratory syncytial virus (RSV) is an important viral respiratory pathogen, causing acute and sometimes fatal lower respiratory tract infections in infants, young children and the elderly. With rapid progress in the development of RSV vaccines, it is expected that a vaccine will be available in the near future. In light of the significant public health impact of this virus, there is a critical need to develop and standardize RSV surveillance, and to provide evidence-based support for vaccination policies at the national, regional and global levels. Such evidence should include the documentation of RSV epidemiology, seasonality and virology, and identification of high-risk groups.

Two WHO consultations were held with both RSV and influenza scientists and public health experts in March 2015 and February 2016. After these consultations, a consensus was reached to establish global RSV surveillance based on the existing influenza surveillance platform, the WHO Global Influenza Surveillance and Response System (GISRS). It was agreed that an integrated virological and epidemiological RSV surveillance system should be launched in representative countries from all six WHO regions. Laboratories in these countries are referred to as RSV laboratories. It was also agreed that selected laboratories with technical expertise, capacity and experience on RSV be designated to provide technical guidance on the virological component of RSV surveillance. These specialized laboratories, referred to as “RSV Reference Laboratories” will function in the WHO global RSV surveillance according to WHO terms of reference for RSV Reference Laboratories. Additional Reference Laboratories may be designated as the WHO global RSV surveillance expands.

General conditions

RSV Reference Laboratories:

- work under the coordination of the WHO GIP;
- fulfil the terms of reference using financial support provided only by governmental or other non-commercial sources;
- assume full responsibility for complying with their respective national biosecurity and biosafety regulations on the understanding that such regulations and rules shall, at a minimum, meet the relevant and current WHO standards, and
- appropriately acknowledge, in presentations and publications, the contributions of collaborators, including RSV laboratories and countries participating in the WHO global RSV surveillance.

General activities

RSV Reference Laboratories:

- serve as a technical resource to WHO and national RSV laboratories as time and resources permit;
- guide RSV sequencing standardization activities and act as reference laboratories to support sequencing of specimens from participating countries
- guide the development and use of RSV genomic database platform
- guide the updating of RSV nomenclature for the RSV project and within the international community
- monitor national RSV laboratories in quality assessments of their assays for detection, typing and sequencing;
- prepare and distribute RSV diagnostic reagents and external quality assessment panels in coordination with WHO and as agreed with WHO, as time and resources permit;
- analyse the performance of national RSV laboratories on external quality assurance (EQA) panels and submit timely feedback and reports to national RSV laboratories and WHO;
- provide training and support to national RSV laboratories on laboratory techniques, as time and resources permit; and

maintain and strengthen active communication and collaboration with national RSV laboratories and WHO to ensure that up-to-date information is exchanged.