

Current major event

Integrated surveillance of influenza and other respiratory viruses with epidemic and pandemic potential

The occurrence of future pandemics or epidemics caused by emerging or re-emerging high-impact respiratory viruses is virtually inevitable, and the causal agent remains hard to predict. The need to integrate SARS-CoV-2 testing and surveillance into existing influenza surveillance systems became very clear during the current pandemic. It is therefore essential to implement and advocate for an integrated surveillance approach to detect emerging respiratory viruses and encourage the greater use of the existing influenza platform.

Editorial note

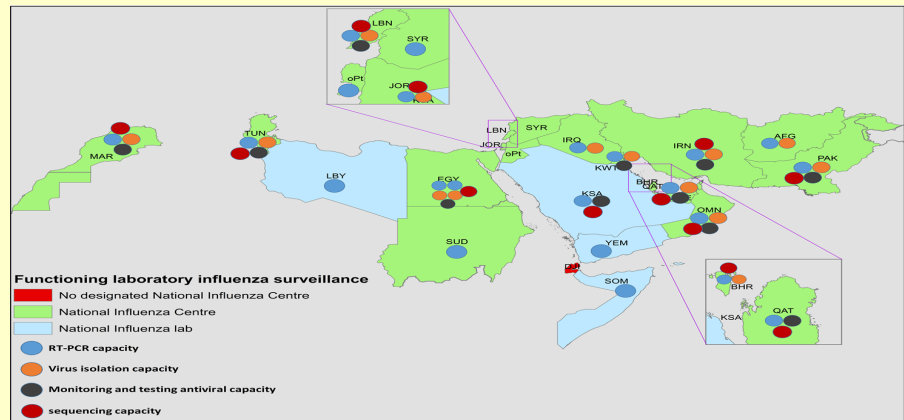
The COVID-19 pandemic has demonstrated the ability of non-influenza viruses to cause global pandemics. It exposed global weaknesses in trying to respond effectively to the emergence of new viral pandemics, this while influenza continues to pose its own pandemic threat.

As bacterial aetiologies of upper and lower acute respiratory tract infections have declined globally, mainly due to the availability of vaccines and treatment, seasonal and emerging respiratory viruses have gained greater prominence. Respiratory syncytial virus (RSV) disease is recognized as the predominant cause of lower respiratory tract infections in infants and young children.

Influenza has served as a model pathogen against which countries have developed, tested and sustained capacities including for pandemic preparedness planning. For the COVID-19 pandemic, the foundation of capacities built for influenza, including the Global Influenza Surveillance and Response System (GISRS), supported global efforts for pandemic preparedness, readiness and response, which can be applied to other respiratory viruses with epidemic and pandemic potential. The integration of surveillance for such viruses along with influenza is a necessity for better epidemic and pandemic preparedness. Revised interim guidelines for the end-to-end integration of SARS-CoV-2 and influenza sentinel surveillance have now been published by WHO (see box).

As of February 2022, 21 countries in the Region have laboratory capacity for the detection of influenza through Rt-PCR (see map), while 19 have functional influenza sentinel surveillance. In addition, five countries participated in WHO-led pilot studies for integrated influenza and RSV

Status of influenza laboratory capacity in the Region (February 2022)



surveillance. Several countries used multiplex Rt-PCR for the simultaneous detection of influenza and SARS-CoV-2, while others screened sentinel surveillance samples for a broader array of respiratory viruses and bacteria. In light of the varying capacities that exists in the Region, a formal process of integration must be explicitly developed. WHO has been working with countries to develop a roadmap to further expand GISRS into GISRS+, with an emphasis on achieving strong integrated surveillance for influenza and a range of other respiratory viruses with epidemic and pandemic potential.

To support this formal process of integration, the WHO Regional Office has formulated a draft operational framework which was presented and discussed during a regional consultative meeting on 28 February 2022. The proposed goal of this framework is to “provide an efficient system built from existing influenza foundations to achieve integrated surveillance to a range of respiratory viruses with epidemic or pandemic potential in the EMR”. Initial emphasis is given to integrated influenza and SARS-CoV-2 surveillance and the expansion to other respiratory viruses will follow a stepwise approach consistent with country-specific capacity.

Update on outbreaks

in the Eastern Mediterranean Region

COVID-19 in 22 EMR countries

Current public health events of concern

[cumulative N° of cases (deaths), CFR %]

Coronavirus disease 2019 (COVID-19): 2019–2022

Afghanistan	[174 582 (7623), 4.4%]
Bahrain	[525 171 (1458), 0.3%]
Djibouti	[15 550 (189), 1.2%]
Egypt	[489 876 (24 197), 4.9%]
Iran (Islamic Republic of)	[7 089 892 (137 948), 1.9%]
Iraq	[2 308 191 (25 050), 1.1%]
Jordan	[1 654 677 (13 882), 0.8%]
Kuwait	[623 159 (2545), 0.4%]
Lebanon	[1 077 242 (10 142), 0.9%]
Libya	[497 958 (6299), 1.3%]
Morocco	[1 161 586 (16 015), 1.4%]
occupied Palestinian territory (oPt)	[651 125 (5577), 0.9%]
Oman	[384 818 (4249), 1.1%]
Pakistan	[1 514 258 (30 265), 2%]
Qatar	[358 253 (670), 0.2%]
Saudi Arabia	[747 436 (9008), 1.2%]
Somalia	[26 400 (1359), 5.1%]
Sudan	[61 599 (4863), 7.9%]
Syrian Arab Republic	[54 963 (3095), 5.6%]
Tunisia	[1 005 167 (27 922), 2.8%]
United Arab Emirates	[882 884 (2301), 0.3%]
Yemen	[11 777 (2138), 18.2%]