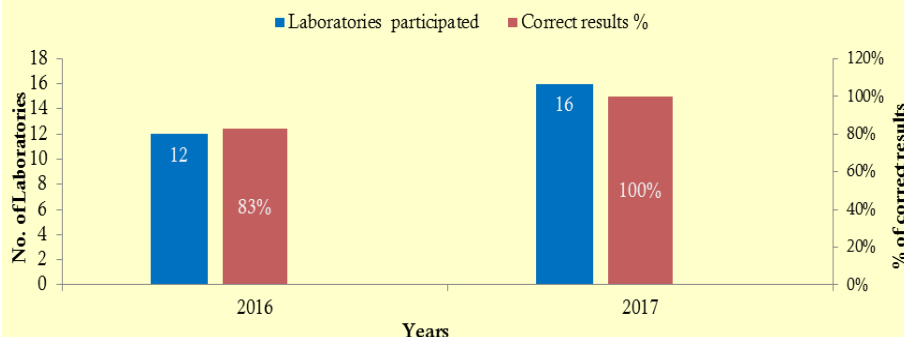## Current major event

EQAP Results for NICs in 2017

In 2017, 18 laboratories from the Eastern Mediterranean Region (EMR) were invited to participate to the External Quality Assessment Programme (EQAP) Panel 16 for the Detection of Influenza Viruses by RT-PCR. It included, all the 16 National Influenza Center (NICs) and two national Influenza laboratories. Among those laboratories, 16 participated and received samples between April and May while all returned correct results before the closing date for analysis achieving an overall score of 100% with all correct results for seasonal and non-seasonal influenza viruses.

Editorial note

The WHO external quality assessment programme (EQAP) for influenza virus subtype A detection by polymerase chain reaction (PCR) was initiated in 2007 and aims to promote quality assurance and enhance the ability of laboratories globally for influenza virus detection and subtyping by PCR. The project is coordinated by WHO's Global Influenza Programme, with implementation by the H5 Reference Laboratory and National Influenza Centre at the Centre for Health Protection, Hong Kong Special Administration Region (SAR), China and with support from collaborating centers on influenza, other H5 reference laboratories and WHO Regional Offices. The EQAP has evolved over the years, with its scope being extended to seasonal influenza A, influenza B and other non-seasonal influenza A viruses reported in human infection. In 2017, the project laboratories received a panel of circulating influenza specimens (Panel-16) to identify seasonal and non-seasonal influenza including avian influenza A(H5N1), A(H5N6) and A(H7N9).

By comparison, in 2017, all the participating laboratories returned results before the closing date for analysis while in 2016 only 12 of the 16 laboratories reported on time and were included in the analysis. The performance of the participating laboratories increased in 2017, with 100% (16/16) laboratories returning all correct results in Panel 16, compared to 83.3% (10/12) for Panel 15 in 2016. The performance of participants EMR laboratories for identifying seasonal influenza A (H1N1)pdm09, A(H3) and influenza B

Performance of laboratories participating in the External Quality Assessment Programme (EQAP), Panel 15-16 (2016-2017)

Composition of panel 16 (2017) for the WHO EQAP

Sample N°	Influenza viruses	Virus (Clade)
V01-2017	A/H5N6	A/Chicken/Hong Kong/16-02206-5/2016 (2.3.4.4)
V02-2017	A/H1pdm09	A/Hong Kong/735/2016
V03-2017	A/H5N1	A/Hong Kong/6841/2010 (2.3.2.1)
V04-2017	B (Victoria)	B/Hong Kong/510/2016
V05-2017	A/H5N1	A/Hong Kong/6841/2010 (2.3.2.1)
V06-2017	A/H7N9	A/Hong Kong/793/2016
V07-2017	A/H3	A/Hong Kong/2236/2016
V08-2017	B (Yamagata)	B/Hong Kong/505/2016
V09-2017	A/H5N6	A/Chicken/Hong Kong/16-02206-5/2016 (2.3.4.4)
V10-2017	Negative	Negative

was excellent with over 100% (16/16) reporting correct result for each of these samples compared to Panel 15 where the performance was 100% (12/12) for A (H1N1)pdm, 83% (10/12) for A(H3N2) and 100% (12/12) for Influenza B. The correct reporting rate also increased for the detection of non-seasonal influenza viruses from 93% to 100 % demonstrating competency of the laboratory staff performing influenza PCR testing for non-seasonal and seasonal influenza viruses that affect humans.

The results of the Panel 16 of EQAP conducted in 2017, showed that, in general, molecular detection capabilities were good across the Region. In addition, the laboratory capacity to diagnose influenza infections by real-time PCR in the Region has also grown. Nevertheless, an effort must also be made now to maintain this improved performance of the laboratories and sustain the capacities to detect both seasonal, non-seasonal and novel influenza virus.

Update on outbreaks
in the Eastern Mediterranean Region

MERS in Saudi Arabia; cholera in Somalia; cholera in Yemen; dengue in Pakistan.

Current public health events of international concern
[cumulative N° of cases (deaths), CFR %]

Avian influenza: 2006-2017

Egypt (A/H5N1)	[359 (122), 34%]
Egypt (A/H9N2)	[4 (0)]

Avian influenza A (H7N9): 2013-2017

China	[1,564 (612), 39.1%]

Chikungunya: 2016-2017

Pakistan	[8,217 (0)]

Cholera: 2016-2017

Somalia	[77,783 (1,159), 1.5%]
Yemen	[900,312 (2,188), 0.24%]

Plague: 2017

Madagascar	[1,801 (127), 7.1%]

Dengue fever: 2017

Pakistan	[107,866 (66), 0.1%]

MERS: 2012-2017

Saudi Arabia	[1,734 (675), 38.9%]

Wild poliovirus: 2014-2017

Pakistan	[5 (0)]
Afghanistan	[9 (0)]

Zika virus infection: 2015-2017

84 countries and territories have reported transmission so far.