

Current major event

Pandemic Influenza Severity Assessment (PISA) in EMR

The Eastern Mediterranean Regional Office of WHO, in collaboration with the Global Influenza Programme (GIP) of WHO/HQ and the Centers for Disease Control and Prevention (US-CDC), conducted a 4 day regional training workshop on determining influenza baselines and thresholds for Pandemic Influenza Severity Assessment (PISA) in Tunisia, Tunisia, from 1 to 4 October 2018. The workshop was attended by 30 participants from 15 countries in the region.

Editorial note

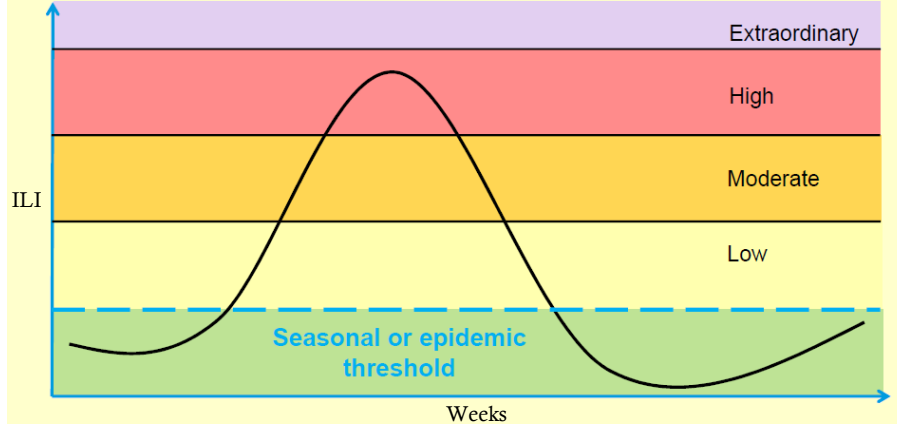
Pandemic Influenza Severity Assessment (PISA) is a tool that provides an evidence-based method for the comparison of current influenza activity to previous influenza seasons. Assessment of the influenza severity is important to provide useful information on the timing, urgency, intensity and scale of the needed response. PISA results can be communicated to the public and policy makers in order to take informed decisions, as influenza epidemics will continue to occur and are usually unpredictable.

The PISA tool should be used regularly and sustainably by the countries, not only during the time of epidemics. By applying this tool to measure influenza severity every year, Member States can be better prepared, assess and predict the severity in the next expected pandemic. PISA will ideally be used on a weekly basis, during a pandemic.

Main objective of this regional training workshop on determining influenza baselines and thresholds for PISA, held in Tunisia, was to build national capacities of Eastern Mediterranean Region (EMR) Member States to calculate influenza baselines and thresholds values from surveillance data and how to use these values to monitor, detect and describe the severity of influenza season.

There are three major indicators for PISA: transmissibility, seriousness of the disease and impact. The transmissibility means how ease the influenza virus can be transmitted from one person to another; seriousness of disease reflect the proportion of people who are really severely sick or are dying from influenza infections; and impact refers to societal impact or impact of pandemic influenza on

Seasonal and intensity thresholds for Pandemic Influenza Severity Assessment (PISA)



Parameters for assessing influenza severity

Indicator	Parameter
Transmissibility	<ul style="list-style-type: none"> proportionate ILI or incidence rates; composite of weekly ILI rates and weekly percentage positivity rates for influenza.
Seriousness	<ul style="list-style-type: none"> cumulative death: hospitalization ratio; cumulative ICU admission: hospitalization ratio.
Impact	<ul style="list-style-type: none"> weekly number of confirmed influenza cases admitted to ICU; or weekly number of confirmed influenza cases admitted to hospital.

healthcare system. In order to assess the influenza severity, four steps should be undertaken. Those steps include i) choose the parameters that will be used to assess severity indicators (*Please see the table*); ii) set the thresholds for each parameter; iii) apply the thresholds to assess severity; and iv) report the severity assessment findings.

PISA thresholds helps to compare current influenza season with previous seasons within one country or across different countries. There are two major uses for PISA thresholds settings- (i) indicate when the epidemic or season has begun or ended and (ii) define the activity levels of influenza parameters.

During the workshop, participants from 15 countries have learned and practiced on how to calculate the influenza baselines and thresholds for PISA and Burden of Disease (BoD). It is expected that following this training workshop, the participating countries would use its influenza surveillance data to calculate influenza baselines, alert and epidemic thresholds which in turn will determine seasonality of influenza. Influenza epidemics are unpredictable events but such thresholds will help the countries to monitor and early detect a bad influenza season as well as measure its severity.

Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **Diphtheria** in Yemen.

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)]

Ebola virus disease (EVD): 2018

Democratic Republic of Congo (DRC) [274 (174), 63.5%]

Rift Valley fever : 2018

Kenya [95 (11), 11.6%]

Uganda [23 (8), 34.8%]

Cholera: 2017-2018

Somalia [6 446 (43), 0.7%]

Yemen [1 261 855 (2 685), 0.2%]

Tanzania [4 256 (82), 1.9%]

Diphtheria: 2018

Yemen [2 690 (154), 5.7%]

Bangladesh [8 262 (44), 0.5%]

MERS: 2012-2018

Saudi Arabia [1 886 (729), 38.7%]

West Nile fever: 2018

Tunisia [221 (2), 0.9%]