In February 2016, WHO has recommended influenza viruses for inclusion in the seasonal influenza vaccines for the countries of northern hemisphere for 2016-17. These recommendations are based on the antigenic and genetic analysis of the circulating seasonal influenza viruses shared by the countries with WHO through the Global Influenza Surveillance and Response System (GISRS).

Editorial note
Immunization against influenza is considered to be an essential public health intervention to control both seasonal epidemic and pandemic influenza.

The WHO’s recommendations provide guidance for the countries and the vaccine manufacturers on the seasonal influenza virus to be included in the human influenza vaccines against seasonal influenza during the winter. The regulatory agencies make the final decision about which influenza strains may be used in influenza vaccine to be licensed in their country. In contrast to many other vaccines, influenza vaccines strains are updated frequently to contain representative circulating viruses as human influenza virus evolve continuously.

Usually, seasonal influenza vaccine comprise of three different virus types (i.e., are trivalent) and include influenza A (H1N1), A (H3N2) and influenza B viruses. In the period between September 2015 and March 2016, influenza virus circulation was active in the countries of the Eastern Mediterranean Region (Please see above). During this period, the influenza A(H1N1)pdm09 virus was predominant in many countries and co-circulated with influenza A(H3N2). Influenza B virus was also circulating in some countries like Egypt, Morocco and Tunisia.

During last winter season, a number of countries in the Region experienced a surge of seasonal influenza cases which was predominantly caused by influenza A (H1N1)pdm09 virus. These countries included Islamic Republic of Iran, Jordan, occupied Palestine territory (oPt), Pakistan and Syria. In addition, influenza A (H3N2) was predominant most of the winter season in Yemen causing a similar surge of seasonal influenza cases.

With the enhancement of surveillance system for severe acute respiratory infection (SARI) in the Region, the detection of seasonal influenza cases has increased substantially over the last few years. An increasing body of knowledge has also been generated through these systems on the patterns of circulating seasonal influenza viruses as well as the seasonality and risk factors of the influenza-associated illnesses that require hospitalizations.

The countries, in the Region, can now use the available body of evidence on the epidemiology of influenza to introduce seasonal influenza vaccines as part of its control strategy to prevent seasonal surge. Introducing the vaccines for seasonal influenza targeting the highest risk age groups can minimize morbidity and mortality attributed to influenza.

### Recommended Seasonal Influenza Vaccine for use in 2016-17

**Trivalent vaccine:**
- an A/California/7/2009 (H1N1)pdm09-like virus;
- an A/Hong Kong/4801/2014 (H3N2)-like virus;
- a B/Brisk/60/2008-like virus.

**Quadrivalent vaccine**
- The above three viruses and
- a B/Phuket/3073/2013-like virus.

### Update on outbreaks in the Eastern Mediterranean Region

**MERS-CoV** in Saudi Arabia; Undiagnosed viral haemorrhagic fever in Sudan

### Current public health events of international concern

- **Avian Influenza: 2006-2016**
  - Egypt (A/H5N1) [346 (117), 33.8%]  
  - Egypt (A/H9N2) [3 (0)]
- **MERS-CoV: 2012-2016**
  - Saudi Arabia [1277 (549), 42.9%]
  - Jordan [39 (12), 31%]
  - Oman [7 (3), 42.8%]
  - UAE [78 (11), 14.1%]
  - Kuwait [3 (1), 33.3%]
  - Republic of Korea [186 (36), 19.3%]
  - Qatar [14 (5), 35%]
  - Iran [6 (2), 33.3%]

- **Ebola Virus Disease: 2014-2016**
  - Guinea [3804 (2536), 66.6%]
  - Liberia [10675 (4809), 45%]
  - Sierra Leone [14124 (3956), 28%]

- **Viral Haemorrhagic Fever (of unknown aetiology)**
  - Sudan [561 (101), 26.3%]

- **Wild poliovirus: 2014-2016**
  - Pakistan [367 (0)]
  - Afghanistan [50(0)]

- **Lassa fever: 2015-2016**
  - Nigeria [159 (82), 51.5%]
  - Benin [7 (3), 32.3%]