

Questions and Answers

A(H3N2) component of the recommended composition of influenza virus vaccines for use in the northern hemisphere 2019-20 influenza season and development of candidate vaccine viruses for pandemic preparedness

21 March 2019

- 1. What is the A(H3N2) component recommended for northern hemisphere 2019-2020 influenza season?**
- 2. Why was there a delay in selecting the A(H3N2) virus component of 2019-20 influenza vaccines?**
- 3. Is this the first time that a WHO recommendation for one component of seasonal vaccine was postponed?**
- 4. Will it be possible to avoid such postponement in the future?**
- 5. What is the risk of delay of the supply of influenza vaccines for the upcoming northern hemisphere season?**
- 6. What is WHO GISRS doing to mitigate the risk of delayed vaccine supply and availability?**
- 7. What are countries expected to do to mitigate the risk?**

- 1. What is the A(H3N2) component recommended for northern hemisphere 2019-2020 influenza season?**

An A/Kansas/14/2017 (H3N2)-like virus was recommended for influenza vaccines for use in the northern hemisphere 2019-2020 season. This recommendation was announced by WHO on 21 March 2019 at:

https://www.who.int/influenza/vaccines/virus/recommendations/2019_20_north/en/

- 2. Why was there a delay in selecting the A(H3N2) virus component of 2019-20 influenza vaccines?**

Influenza A(H3N2) viruses have resented an increasing challenge for vaccine virus selection due to frequent changes in the virus and difficulties in generating candidate vaccine viruses for use in manufacturing. Experts at the WHO Consultation, which took place from 19-21 February 2019, reviewed various sources of data including virus surveillance, antigenic characterization, and virus fitness forecasts, and identified multiple co-circulating influenza A(H3N2) virus groups. The proportion of viruses in one antigenically distinct group was

rapidly increasing in some countries, prompting a delay in the selection of the A(H3N2) vaccine component to allow time for monitoring virus circulation and characterisation of potential vaccine viruses.

3. Is this the first time that a WHO recommendation for one component of seasonal vaccine was postponed?

It is not the first time such a postponement has occurred. At the time of the WHO influenza vaccine consultation in February 2003, an antigenically distinguishable group of A(H3N2) viruses (A/Fujian/411/2002-like) had emerged and was increasing in prevalence, but the extent and speed of the increase was unclear and an appropriate candidate vaccine virus was not available at the time. Therefore, the recommendation on the A(H3N2) component of the vaccine was postponed and announced in March 2003.

4. Will it be possible to avoid such postponement in the future?

Although postponement of a decision is very rare, there may be occasions when it cannot be avoided.

5. What is the risk of delay of the supply of influenza vaccines for the upcoming northern hemisphere season?

Seasonal influenza vaccine production is a complicated just-in-time process with intrinsic risks and challenges, affected by many factors, such as the yield of candidate vaccine viruses and the availability of potency reagents. Through joint efforts from all players involved in the process of influenza vaccine development, production and delivery, including WHO Collaborating Centres (CCs) and WHO Essential Regulatory Laboratories (ERLs) of the Global Influenza Surveillance and Response System (GISRS), national regulatory agencies and vaccine manufacturers, the risk of delayed vaccine supply and availability will be minimised as much as possible.

6. What is WHO GISRS doing to mitigate the risk of delayed vaccine supply and availability?

WHO CCs, ERLs and reassorting laboratories are working intensively to develop, characterise and make available a selection of candidate vaccine viruses (CVVs) for vaccine manufacturers to enable selection of the highest yielding viruses for production. WHO ERLs are committed to producing potency reagents for the A(H3N2) component in a timely manner. The WHO Global Influenza Programme (GIP) is facilitating and coordinating key stakeholders and ensuring smooth communication of the latest developments to vaccine manufacturers and other interested bodies.

7. What are countries expected to do to mitigate the risk?

Seasonal influenza vaccine campaign planning should continue routinely. It is recommended that countries prepare for a potential scenario of delay (maximum of 2-4 weeks) in vaccine supply and the possible extension of times allotted for vaccination programmes, meanwhile continue to conduct health education to ensure smooth vaccination program in the upcoming season.