BC Centre for Disease Control
An agency of the Provincial Health Services Authority

Quadrivalent Influenza Vaccine (QIV) Fact Sheet – 2014/15

1. What are quadrivalent influenza vaccines?

Quadrivalent influenza vaccines (QIV) protect against the same three strains of influenza virus as the trivalent influenza vaccine (TIV) but also against a 2nd strain of influenza B virus. These vaccines are being gradually introduced in Canada. There are two lineages of influenza B viruses. The quadrivalent influenza vaccines were developed because in the past decade, the influenza B strain component in the available trivalent vaccine(s) has been mismatched to the circulating strain of influenza B in about half of the seasons. While the B strain contained in the trivalent vaccine contains some cross protection against the second B influenza virus lineage, the degree of this cross protection is uncertain.

2. Are quadrivalent influenza vaccines recommended over trivalent influenza vaccines, and will be these be available in the publicly funded program in 2014/15?

The National Advisory Committee on Immunization (NACI) does not preferentially recommend quadrivalent influenza products over trivalent influenza products at this time. In its 2014/15 influenza vaccine statement, NACI concluded that QIV is likely to provide the greatest benefit to pediatric populations. However, decisions about how these vaccines will be used in publicly funded programs are pending, and no quadrivalent vaccines will be used in these programs in the 2014/15 season.

3. Which quadrivalent influenza vaccine products are authorized for use in Canada, and which will be available for the private market in 2014/15?

Flulaval Tetra™ , Fluzone® Quadrivalent and FLUMIST® Quadrivalent are the three quadrivalent influenza vaccine products authorized for use in Canada. The first two of these are inactivated split-virion vaccines which do not contain an adjuvant and are administered via the IM route. FLUMIST® Quadrivalent is a live attenutated intranasal vaccine.

Of these three approved products, only Fluzone® Quadrivalent is expected to be marketed in Canada on the private market in 2014/15. Additional information regarding these products can be found in the respective product monographs:

Flulaval Tetra™ (GlaxoSmithKline)
http://www.gsk.ca/english/docs-pdf/product-monographs/FluLaval-Tetra.pdf

Fluzone® Quadrivalent (Sanofi Pasteur Inc.)
http://www.sanofipasteur.ca/sites/default/files/sites/default/files/pictures/450-FluzoneQIV-PM-E.pdf

Flumist® Quadrivalent (AstraZeneca)
Available upon request from AstraZeneca

4. Who can receive quadrivalent inactivated influenza vaccine?

Quadrivalent inactivated influenza vaccine (QIIV) can be administered to individuals six months of age and older.

5. Who should not receive quadrivalent inactivated influenza vaccine?

As with trivalent inactivated influenza vaccine (TIIV), QIIV cannot be administered to:

- Individuals less than six months of age
- Those who have had a severe allergic reaction to any QIIV vaccine component or to influenza vaccine
- Individuals who have developed Guillain-Barré syndrome within 8 weeks of receipt of a previous dose of influenza vaccine without another cause being identified

6. Can quadrivalent inactivated influenza vaccine be used for pregnant women?

Yes, QIIV can be administered to pregnant women. However QIIV is not preferentially recommended over TIIV in this population. It is recommended that all pregnant women, at any stage of pregnancy, receive inactivated influenza vaccine. The trivalent influenza vaccine will be available for this indication at no charge in the 2014/15 season.

7. Are quadrivalent influenza vaccines safe?

Yes. These vaccines have undergone the same testing as other vaccines approved for use in Canada. The safety profile for quadrivalent influenza products is similar to trivalent influenza products in Phase III trials, with similar rates of adverse events to trivalent formulations. Quadrivalent vaccines were introduced more broadly for use in the USA in the 2013/14 season and results of passive surveillance conducted by VAERS and the Vaccine Safety Datalink were presented at the Advisory Committee on Immunization Practices meeting (http://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2014-06/Influenza-03-Cano.pdf) in June 2014, without any new safety concerns identified.

REFERENCES:

National Advisory Committee on Immunization (NACI). An Advisory Committee Statement (ACS). Statement on Seasonal Influenza Vaccine for 2014-2015 [Internet]. Ottawa: Public Health Agency of Canada; 2014. Available from http://www.phac-aspc.gc.ca/naci-ccni/index-eng.php#rec

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