Recommendations pertaining to the use of viral vaccines: influenza

Review of influenza activity — 2002

National Institute for Communicable Diseases (Gauteng Area)

The 2002 influenza season was quiet with comparatively low school absenteeism, showing only a short peak rising above the mean absentee rate calculated over a 5-year period. However, this was ascribed to the start of the winter school holidays, and diarrhoeal disease. A total of 130 isolations of influenza virus were made from specimens sent to the National Institute for Communicable Diseases during the course of the year. The majority 76 (58%) were influenza B, 49 (38%) were influenza A H1N1/H1N2, and only 5 (4%) were influenza A H3N2. Although isolates were made from the middle of April to the middle of September, the bulk (90%), were made between the middle of June and the end of August.

Recommendations

Vaccine formulation

The following strains have been recommended by the World Health Organisation for the 2003 Southern hemisphere influenza season:

- A/Moscow/10/99 (H3N2)-like strain
- A/New Caledonia/20/99 (H1N1)-like strain
- B/Hong Kong/330/2001-like strain.

The actual viral strains recommended for the vaccine for each component are as follows:

- A/Moscow/10/99 (H3N2)-like strain
- A/New Caledonia/20/99 (H1N1)-like strain
- B/Hong Kong/330/2001-like strain

The actual viral strains recommended for the vaccine for each component are as follows:

- A/Panama/2007/99 (RESVIR-17) for the A/Moscow/10/99-like strain
- A/New Caledonia/20/99 (IVR-116) for the A/New Caledonia/20/99-like strain
- B/Shangdong/7/97 (or B/Brisbane/32/2002) for the B/Hong Kong/330/2001-like strain

Vaccines should contain 15 µg of each haemagglutinin antigen in each 0.5 ml dose.

Indications

- Persons (adults or children) who are at high risk for influenza and its complications because of underlying medical conditions and who are receiving regular medical care for conditions such as chronic pulmonary and cardiac disease, chronic renal diseases, diabetes mellitus and similar metabolic disorders, and individuals who are immunosuppressed (including HIV-infected persons with CD4 counts above 200/ml).
- Residents of old-age homes, chronic care and rehabilitation institutions.
- Children on long-term aspirin therapy.
- Medical and nursing staff responsible for the care of high-risk cases.
- Adults and children who are family contacts of high-risk cases.
- All persons over the age of 65 years.
- Women who would be in the second or third trimester of pregnancy during the influenza season. Pregnant women with medical conditions placing them at risk for influenza complications should be immunised at any stage of pregnancy.
- Any persons wishing to protect themselves from the risk of contracting influenza, especially in industrial settings, where large-scale absenteeism could cause significant economic losses.

Dosage

- Adults: Whole or split-product or subunit vaccine: 1 dose IM
- Children (< 12 years) Split-product or subunit vaccine: 1 dose IM
- Children < 9 years who have never been vaccinated should receive 2 doses 1 month apart
- Children < 3 years of age should receive half the adult dose on two occasions separated 1 month apart

Contraindications

- Persons with a history of severe hypersensitivity to eggs.
- Persons with acute febrile illnesses should preferably be immunised after symptoms have disappeared.
- The vaccine should be avoided in the first trimester of pregnancy unless there are specific medical indications - see above indication No. 7.

Timing

Vaccines should be given sufficiently early to provide protection for the winter. A protective antibody response takes about 2 weeks to develop.

Chemoprophylaxis

In cases where vaccine has not been administered, consideration should be given to the use of supplementary chemoprophylaxis with amantadine in certain high-risk individuals, e.g. patients with chronic lung and heart diseases. Amantadine should be administered in a dosage of 200 mg daily in 2 divided doses for the duration of the epidemic activity, i.e. approximately 6 - 12 weeks. The dosage should be reduced in persons with renal disease and persons over the age of 65 years.

Department of Health