QUESTION 5 Infectious Diseases
Which of the following is the strongest contraindication to the administration of influenza vaccine?
A. Egg anaphylaxis.
B. Previous local reaction to influenza immunization.
C. Recent pneumococcal immunization.
D. Pregnancy.
E. Immunodeficiency.

Influenza
Acute respiratory illness caused by influenza A or B viruses
- Influenza A undergo periodic changes in the antigenic characteristics of their envelope glycoproteins, the hemagglutinin and neuraminidase
- 3 major subtypes of hemagglutinins (H1, H2 and H3) and 2 subtypes of neuraminidases (N1 and N2)

Recommendations
In Australia, use inactivated vaccine
Recommended for
1) > age 65
2) Aboriginal and Torres Strait Islander aged > 50
3) Children and adults with chronic conditions - diabetes, cancer, cardiovascular disease, kidney disease, immune deficiency disorders and respiratory illness
4) Hospital workers
5) Residents of NH + long-term care facilities
6) contacts of high risk patients

Contraindications
- Anaphylaxis to hens’ eggs
- Individuals who develop Guillain-Barre syndrome within 6 weeks after a previous influenza immunization

Pregnancy
- influenza is associated with excess complications and death in pregnant woman
- 2006 ACIP report recommended influenza vaccination of pregnant woman regardless of stage of pregnancy and of women who will be pregnant during the influenza season.
- no adverse fetal effects demonstrated
- maternal systemic reactions rare

HIV infection
- Recommends vaccine for HIV infected patients
- those with CD4 counts > 400 microL appear to be able to make antibody
- 2nd dose of vaccine does not seem to generate a response in those who do not make an following the 1st immunization
- RCT in 102 HIV infection pt- significant reductions in resp symptoms and in lab confirmed symptomatic influenza
- LAIV appears safe in pts with CD4 counts > 200

Immunosuppressed
- Inactivated influenza vaccine can be administered safely to patients with immunosuppression
- do not appear to exacerbate chronic neurologic diseases such as multiple sclerosis

Answer: A

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1 Up to date: Influenza vaccine
www.fightflu.com.au