

## ASSESSMENT OF 30 MCQs

FPSC NO : 35

**MCQs on Vaccinations 2010 - What's Old, What's New**  
**Submission DEADLINE : 1 JULY 2010**

**INSTRUCTIONS**

- With effect from 1st April 2008, the College Assessment of 30 MCQs has gone paperless.
- To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal ([www.cfps2online.org](http://www.cfps2online.org))
- Attempt ALL the following multiple choice questions.
- There is only ONE correct answer for each question.
- The answers should be submitted to the College of Family Physicians Singapore via the College Online Portal before the submission deadline stated above.

**1. About scientifically proven serious reactions to vaccines, which of the following associations is CORRECT?**

- (A) Measles vaccine and urticaria.  
 (B) Rotavirus vaccine (Rotashield) and intussusception.  
 (C) Mumps and aseptic meningitis.  
 (D) Oral poliovaccine and tremors.  
 (E) MMR and autism.

**2. About vaccine advocacy, which of the following is a tool for advocating the use of vaccines?**

- (A) Generation of data on local burden of disease.  
 (B) Demonstration of safety of the vaccine to the population.  
 (C) Demonstration of efficacy of the vaccine to the population.  
 (D) Presentation of information to opinion leaders.  
 (E) All of the above.

**3. About vaccine advocacy, which of the following is a strategy to improve cost effectiveness of vaccines?**

- (A) Encouraging local production of vaccines.  
 (B) Evaluation of fewer doses.  
 (C) Evaluation of fractional dose regimen.  
 (D) Explore alternative cheaper regimens.  
 (E) All of the above.

**4. There are only four remaining countries where indigenous wild poliovirus have never been interrupted. Which of the following is one of the four countries?**

- (A) Afghanistan.  
 (B) Indonesia.

- (C) Myanmar.  
 (D) Cambodia.  
 (E) None of the above.

**5. One of the striking recent achievement of the Global Immunisation Vision and Strategy (GIVS) is the reduction of global measles mortality from an estimated 750,000 deaths in 2000 down to XXX deaths in 2007. What is XXX ?**

- (A) 597,000.  
 (B) 497,000.  
 (C) 397,000.  
 (D) 297,000.  
 (E) 197,000.

**6. The incidence rate of indigenous cases of acute hepatitis B has declined from 9.5 per 100,000 in 1985 to XXX per 100,000 in 2001. What is XXX?**

- (A) None.  
 (B) One.  
 (C) Two.  
 (D) Three.  
 (E) Four.

**7. What was the number of cases of diphtheria reported in 2000?**

- (A) None.  
 (B) One.  
 (C) Two.  
 (D) Three.  
 (E) Four.

- 8. What is the number of cases of pertussis reported in Singapore in 2007?**
- (A) 37.  
(B) 32.  
(C) 27.  
(D) 12.  
(E) 17.
- 9. Since 2004, the booster dose of MMR is given earlier than primary 6 because of an outbreak of measles occurring in students before they could receive the booster dose. It is now given at which level of primary school?**
- (A) Primary 5.  
(B) Primary 4.  
(C) Primary 3.  
(D) Primary 2.  
(E) Primary 1.
- 10. The main setback of the combined childhood vaccines is which of the following?**
- (A) Cost.  
(B) Inconvenience.  
(C) Side effects.  
(D) Acceptance.  
(E) Poor immunogenicity.
- 11. *Streptococcus pneumoniae* is a uncommon cause of which of the following infections?**
- (A) Meningitis.  
(B) Pneumonia.  
(C) Otitis Media.  
(D) Bacteremia.  
(E) Orchitis.
- 12. Which of the following statements regarding the pneumococcal conjugate vaccines is CORRECT?**
- (A) The first pneumococcal conjugate vaccine was a 10 valent vaccine based on North American data.  
(B) Serotypes 1 and 5 is common in Asia and is included in the 7 valent pneumococcal conjugate vaccine.  
(C) The 7 valent pneumococcal conjugate vaccine covers 65% of invasive pneumococcal infections for children under 5 years of age.  
(D) The 10 valent pneumococcal conjugate vaccine may protect against *Haemophilus influenzae* otitis media.  
(E) Increasing valency of the pneumococcal vaccines increases immunogenicity.
- 13. About the schedule for pneumococcal vaccination in Singapore, which of the following is CORRECT?**
- (A) Two doses before 6 months age with 1 booster dose after age 1 year.  
(B) Three doses before 6 months age with 1 booster dose after age 1 year.  
(C) One dose before 6 months age with 1 booster dose after age 1 year.  
(D) One dose after 6 months age with 1 booster dose after age 2 years.  
(E) None of the above.
- 14. Annual influenza vaccination should be recommended for which of the following groups?**
- (A) Children aged 6 months to 5 years.  
(B) Patients with chronic diseases including diabetes mellitus.  
(C) Health care workers.  
(D) Pregnant women in the second or third trimester of pregnancy.  
(E) All of the above.
- 15. Which of the following statements regarding seasonal influenza vaccine is CORRECT?**
- (A) The 2010 southern hemisphere trivalent vaccine does not contain the H1N1 strain.  
(B) Fever is a rare side effect of influenza vaccination.  
(C) Booster doses are required for children less than 9 years.  
(D) Should not be given to children below 1 year of age.  
(E) Should not be given to children with peanut allergy.
- 16. Which of the following statements on the efficacy of cervical cancer vaccines available in Singapore is CORRECT?**
- (A) They are expected to give 100% protection to the girls who are vaccinated.  
(B) They are expected to clear existing HPV infection.  
(C) They are highly effective with >95% efficacy in women tested not infected with HPV.  
(D) They are believed to slow down progression of CIN.  
(E) They are not effective against persistent infection to CIN2+.
- 17. Which of the following statements on the safety of cervical cancer vaccines in the trials done is CORRECT?**
- (A) Injection site reactions (pain, redness, swelling) are less frequent in the intervention group compared to the control group.  
(B) They are very safe vaccines to date.  
(C) Systemic adverse effects are less than the control group.  
(D) Pregnancy safety outcome worse than control group.  
(E) The Global Advisory Committee on Vaccine Safety refer to them as safe Vaccines and hence continued vigilance can be relaxed.

**18. Which of the following statements on cervical cancer vaccines in Singapore is CORRECT?**

- (A) A women's age is important in deciding if vaccine is needed.
- (B) An older women exposed to HPV has better response to the vaccine.
- (C) Older women cannot mount an immune response, hence is not protected.
- (D) Immunological response is better in younger women.
- (E) Suitability is NOT dependent on previous exposure or active infection.

**19. Which of the following statement about the response to the two cervical vaccines is CORRECT?**

- (A) Compared to GARDASIL, CERVARIX generates a weaker immunological response in the first 18 months following vaccination.
- (B) GARDASIL has shown low efficacy rate for skin wart protection.
- (C) A threshold the antibody level in the body to HPV, the greater is the expected protection against HPV infection.
- (D) Higher antibody titres in cervicovaginal mucus may be critical for protection of the cervix against HPV infection.
- (E) To-date, available data suggests GARDASIL is the more effective cervical vaccine.

**20. With regards to cervical cancer vaccination, which of the following statements is CORRECT?**

- (A) We should encourage it as it has high efficacy and safety reports.
- (B) We should avoid giving it to the older women as age is important limit.
- (C) We should wait for more polyvalent HPV vaccines to cover more cancers and other viral diseases before starting a vaccination program.
- (D) Active infection is a reason to give the vaccine.
- (E) All of the above.

**21. Which of the following statements regarding diseases caused by *Streptococcus pneumoniae* is CORRECT?**

- (A) Pneumococcal diseases are invasive in nature.
- (B) Pneumococcus resides in the nasopharynx reservoir and can spread to the surrounding mucosal tissue causing acute otitis media and sinusitis.
- (C) Pneumococcus is the most common cause of community acquired pneumonia (CAP) accounting for 40% of all cases.
- (D) Hospitalization rates for CAP in the elderly (>65 years) is very high at 86%.
- (E) Morbidity and mortality is constant in all age groups.

**22. Mr Tan, a 66-year-old diabetic sees you for routine consultation. You should discuss and recommend which of the following pneumococcal vaccines?**

- (A) A 7 valent pneumococcal conjugate vaccine.
- (B) A 10 valent pneumococcal conjugate vaccine.
- (C) A 13 valent pneumococcal conjugate vaccine.
- (D) A 14 valent pneumococcal polysaccharide vaccine.
- (E) A 23 valent pneumococcal polysaccharide vaccine.

**23. Which of the following pneumococcal serotype is present in BOTH the 7 valent and 23 valent pneumococcal vaccines?**

- (A) Serotypes 4, 6B, 9V, 14, 18C, 19F and 23 F.
- (B) Serotypes 1, 2, 3, 4, 9V, 14, and 23F.
- (C) Serotypes 1, 5, and 7F.
- (D) Serotypes 3, 6A, and 19A.
- (E) Serotypes 15B, 17F, 18C, 19A, 19F, 20 and 22F.

**24. The adult pneumococcal vaccination should be recommended for which of the following?**

- (A) 20-year-old HIV positive patient.
- (B) 40-year-old alcoholic.
- (C) 50-year-old patient with COPD.
- (D) 70-year-old with no chronic medical condition.
- (E) All of the above.

**25. Which of the following patients would you recommend revaccination if the adult pneumococcal vaccine was given more than 5 years ago?**

- (A) 20-year-old HIV positive patient.
- (B) 40-year-old alcoholic.
- (C) 50-year-old patient with COPD.
- (D) 70-year-old with no chronic medical condition.
- (E) All of the above.

**26. Which of the following statements is CORRECT? Influenza is an acute febrile respiratory illness:**

- (A) It is caused by influenza type A or type B viruses that occur in outbreaks and epidemics every year.
- (B) WHO is unable to predict the appropriate influenza viruses to be included in vaccines yearly
- (C) It is recommended that H1N1 be given separately from the 2010 vaccine for June.
- (D) It is not one of the recommended travel-related vaccines preventable illnesses.
- (E) There is only live attenuated influenza vaccine registered for use in Singapore.

**27. The target groups for seasonal influenza vaccination should include which one of the following?**

- (A) Persons aged 50 or older.
- (B) Pregnant women.
- (C) Anyone 6 months or older with chronic diseases e.g. asthma.
- (D) Healthcare workers, workers at long term care facilities and household contacts of persons in high risk group.
- (E) All of the above.

**28. Which of the following statements on Pandemic Influenza H1N1 is INCORRECT?**

- (A) There are no known published data on efficacy of H1N1 influenza vaccine.
- (B) Vaccines for H1N1 are produced in similar ways to seasonal flu vaccines.
- (C) ACIP recommends it in pregnant women and children 6 months to 24 years.
- (D) Infants and children aged 9 years or younger need only 1 dose of H1N1 vaccine.
- (E) ACIP recommends healthcare and emergency medical services personnel.

**29. Which of the following statements on Meningococcal vaccination is CORRECT?**

- (A) All travelers to Saudi Arabia during Hajj and Umrah are required to have a certificate of vaccination with tetravalent (A, C, Y, W-135) meningococcal vaccine.
- (B) This disease is of low risk except those travelling to affected areas such as sub-Saharan Africa between December to June.
- (C) It has a mortality of around 10% and 11-19% may suffer permanent sequelae.
- (D) Transmission is by respiratory droplet and commonest in recruits dormitories.
- (E) All of the above.

**30. Which of the following statements on Other travel related vaccine is INCORRECT?**

- (A) There are 2 types of Typhoid vaccine available in Singapore and the efficacy is about 50 to 80% of recipients.
- (B) Hepatitis A is recommended for all susceptible persons travelling or working in countries with intermediate or high endemicity of Hepatitis A infection.
- (C) 2 doses of Hepatitis A is sufficient to give short and long term protection.
- (D) Japanese B Encephalitis is a mosquito borne flaviviral encephalitis endemic in much of tropical East Asia. The inactivated vaccine is usually in 3 doses over 1 month.
- (E) Japanese B Encephalitis vaccine is recommended for use in children and adolescents.