

IPV Training Packet

Review Exercises

September 2014

Module 1: Introduction to the polio endgame rationale and IPV vaccine

Q1: Which of the following statements about poliomyelitis (polio) is false?

- a. Polio is caused by a virus that spreads from one person to another.
- b. Most infected people do not have symptoms.
- c. Poliovirus is usually spread by the fecal-oral route.
- d. Poliovirus infection is not very infectious.**
- e. Poliovirus causes permanent paralysis in one of every 200 infections.

Q2: IPV protects against all three serotypes of poliovirus without any risk of paralysis.

True/False.

Q3: Which of the following statements about IPV is true?

- a. IPV is one of the safest vaccines.
- b. IPV protects against all three serotypes of polio.
- c. IPV does not cause any paralysis.
- d. The introduction of IPV will strengthen immunization systems.
- e. All of the above.**

Q4: Select the main reasons for introducing IPV in the national immunization programme

- a. Reduce risks of an outbreak after type 2 OPV vaccine withdrawal (tOPV-bOPV switch)
- b. Help stop outbreaks quickly if type 2 virus is reintroduced
- c. Boost immunity against polio types 1 & 3 to protect populations and hasten eradication
- d. All of the above**

Q5: Most cVDPVs are type 1 (True/**False**)

Q6: It is important to continue to use OPV in achieving eradication (**True/False**)

Module 2: Inactivated poliovirus vaccine (IPV) attributes and storage requirements

Q1: IPV contains serotypes 1, 2, and 3 (**True/False**)

Q2: Which of the following are important attributes of IPV?

- a. It is a live virus vaccine
- b. It does not cause paralysis
- c. It may be administered at the same time as other childhood vaccines
- d. a+c
- e. b+c**
- f. All of the above

Q3: IPV can be used if it has been frozen, as long as the VVM is still light (**True/False**)

Q4: What side effects can occasionally occur after IPV administration?

- a. Pneumonia
- b. Paralysis
- c. Minor side effects like soreness and fever**

Q5: Vials that have earlier expiration dates and have VVM near stage 2 should be kept near the front of the refrigerator and used first. (**T/F**)

Q6: IPV should be stored in a refrigerator between +2°C and +8°C. **True/False.**

Q7: According to the Earliest Expiry First Out Principle, vaccines with later expiration dates should be stored in the front of the fridge. **True/False.**

Q8: IPV is packaged in what form?

- a. Liquid vaccine ready for injection**
- b. Lyophilized vaccine to be mixed with diluent

Module 3: Inactivated poliovirus vaccine eligibility

Q1: When should IPV be administered?

- a. At the first DTP/OPV visit at 6 weeks of age
- b. Between the first and second DTP/OPV visits (8 weeks of age)
- c. At the third DTP3/OPV visit (14 weeks of age)**
- d. At each DTP/OPV visit (6, 10, and 14 weeks of age)

Q2: IPV can be safely administered to children with HIV or other immunodeficiency disorders? **True/False.**

Q3: Which of the following are strategies to estimate a child's DOB if a written record is unavailable?

- a. Look for a record of the child's birth in the health center.
- b. Examine the child for developmental signs like the ability to sit unsupported.
- c. Ask if the caretaker recalls any cultural events close to when the child was born.
- d. All of the above.**

Q4: In an EPI schedule that currently includes OPV, the introduction of IPV should replace OPV. **True/False.**

Module 4: IPV vaccine administration

Q1: IPV is sensitive to which of the following:

- a. Heat but not freezing temperatures.
- b. Freezing temperatures but not heat.
- c. Neither heat nor freezing temperatures.
- d. **Both heat and freezing temperatures.**

Q2: What should you do if you suspect a vial of IPV may have been frozen?

- a. Perform the "shake test."
- b. **Discard the vial.**
- c. Place it at +2°C to +8°C until it thaws.

Q3: The vaccine vial monitor (VVM) on the vaccine vial shows whether a vaccine has been

- a. Frozen in the past
- b. **Exposed to high temperatures**
- c. Nearing expiration date
- d. a+b
- e. All of the above
- f. none of these

Q5: How should multiple vaccines be administered to an infant in one session?

- a. Do not give IPV and other injectable vaccines at the same visit.
- b. **Give oral vaccines first, then inject the infant with each injectable vaccine separately.**
- c. Mix all injectable vaccines into the same syringe.

Q6: What is the preferred route of administration and injection site of IPV?

- a. Oral.
- b. **Intramuscular into the thigh.**
- c. Intramuscular into the upper arm.
- d. Intradermal into the upper arm.
- e. Subcutaneous into the upper arm.

Q7: IPV vaccine should be given in the same thigh as the PCV vaccine and Pentavalent vaccine can be given in the other thigh. (T/F)

Q8: OPV and Rotavirus vaccine should not be administered at the same visit (True/False)

Q9: Which of the following is **not** an appropriate way to avoid vaccine wastage?

- a. Ensure cold chain is functioning well, so vaccine is maintained at proper temperature
- b. Use vaccines that are close to expiring before those with later expiry dates
- c. **Wait until at least 3 children are present for vaccination before opening a multi-dose vial**
- d. Draw up exactly 0.5 mL for each injection

Module 5: Recording and monitoring uptake of Inactivated Polio vaccine (IPV)

Q1: What information is provided by the immunization card?

- a. Child's date of birth
- b. Vaccines already received
- c. Vaccines needed for the future
- d. Next appointment for vaccination
- e. **All of the above**

Q2: A child's caretaker should bring the child's immunization card to every visit at the health center. **True/False.**

Q3: Which of the following statements about immunization cards is true?

- a. **Immunization cards are currently being updated to include a space for the IPV dose to be recorded separately from OPV doses.**
- b. If an immunization card does not have a space to record IPV, the health worker does not have to write it down.
- c. The IPV dose can be recorded as "polio" rather than "IPV."
- d. OPV and IPV do not need to be recorded separately.

Q4: Health workers should use reminder cards or community volunteers to follow up with infants who were expected to receive IPV and any other missing vaccines. **True/False.**

Q5: It is ok to fill out the immunization cards of the children waiting for vaccination while the vaccines are being drawn up. (True/**False**)

Module 6: Inactivated poliovirus vaccine AEFI monitoring

Q1: Which of the following statements about AEFIs is false?

- a. AEFI stands for "Adverse Event Following Immunization."
- b. **AEFIs caused by programme errors are not preventable.**
- c. An AEFI is a medical incident that is believed to be caused by immunization.
- d. IPV is one of the safest vaccines in use and not associated with serious AEFIs.

Q2: Which of the following is not a characteristic of serious AEFIs?

- a. May result in death
- b. May be caused by the body's reaction to a particular vaccine component
- c. **Does not need to be reported**
- d. May require hospitalization

Q3: IPV does not carry a risk of vaccine-associated polio. **True/False.**

Q4: Health workers only need to report serious AEFIs. **True/False.**

Q5: Which of the following is not required in an AEFI report?

- a. Manufacturer, lot number, and expiration date of the vaccine.
- b. Description of adverse events.
- c. Medical and treatment history.
- d. **All of these are required in an AEFI report.**

Module 7: Inactivated polio vaccine (IPV) and multiple injections communication with caregivers

Q1: Health workers should strongly advocate for IPV to caregivers. **True/False.**

Q2: Health workers have an important role in parent/caregiver acceptance of IPV. **True/False.**

Q3: Which two of the following statements about discussing the safety of IPV with parents/caregivers are false?

- a. **Health workers should use technical medical terms for explain accurately..**
- b. Health workers should explain that IPV is one of the safest vaccines in humans.
- c. **Health workers should not discuss IPV safety with caregivers.**
- d. Health workers should explain that combining IPV and OPV protects children more than just one vaccine would.

Q4: Which of the following statements about giving a child multiple injections is false?

- a. Giving a child multiple vaccinations protects children from serious diseases as soon as possible.
- b. Giving multiple vaccinations means fewer visits to the health center for caregivers.
- c. **Multiple injections will cause many side effects .**
- d. Certain measures should be taken by the health worker to minimize pain for the child during injections.

Q5: IPV can be given with any routine childhood vaccinations, without interfering with effectiveness (**True/False**)

Q6: If parents are not comfortable with multiple injections, the health worker should not try to convince them that it is safe to receive more than one injection at the visit, because they might stop coming for vaccination (**True/False**)

OPV and IPV Matching

Directions: Each phrase describes IPV, OPV, or both IPV and OPV. Identify the type of vaccine described.

IPV

- 1. Delivered by intramuscular injection into the thigh
- 2. Packaged in 10-dose, 5-dose*, or single-dose vials
- 3. An inactivated (killed) vaccine
- 4. Not associated with paralysis—one of the safest vaccines in humans
- 5. Freeze sensitive—cannot be frozen
- 6. Schedule: one dose at age > 14 weeks

OPV

- 1. Delivered by droplets into the mouth
- 2. Packaged in (how is OPV packaged?)
- 3. A live, attenuated (weakened) vaccine
- 4. Can very rarely cause paralysis
- 5. Can be frozen
- 6. Schedule: three doses at 6, 10, and 14 weeks/2, 4, 6 months

Both IPV and OPV

1. Should be recorded on immunization card
2. Protect against polio infection

*not WHO-prequalified yet but probably will be after 2014