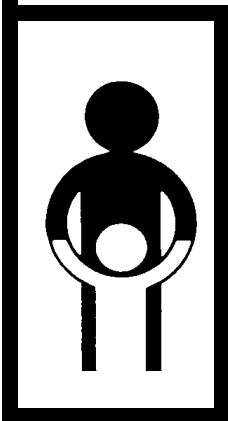


Module 9:

After a session

*Revision 1 deletes existing paragraphs 3.1-3.3 on page 3 and incorporates new text to reflect changes in policy regarding the handling of multi-dose vials of vaccine. These changes are issued as WHO/EPI/TRAM/98.01-11 Corr.2 dated 23 April 1999.



GLOBAL PROGRAMME FOR VACCINES AND IMMUNIZATION

EXPANDED PROGRAMME ON IMMUNIZATION



World Health Organization, Geneva, 1998

Immunization in practice

Module 9: After a session

(WHO/EPI/TRAM/98.09)

Corrigendum 2

Module 9 is affected by recent changes in policy regarding the handling of multi-dose vials of vaccine, as described below.

3. Taking care of vaccines

On page 3, delete the second paragraph, “ WHO issued the following statement on its new opened vial policy in March 1995 and following three paragraphs 3.1, 3.2, 3.3, right up to the last sentence ending “... and used before any others during the next session.”

Replace paragraphs 3.1, 3.2, and 3.3 with the following:

3.1 Liquid vaccines - OPV, DPT, TT, DT, Td, hepatitis B, and liquid formulations of Hib

You may use opened multi-dose vials of liquid vaccines from which one or more doses have been removed following standard sterile procedures, in the next immunization session, *if all of the following conditions are met:*

- a) The expiry date has not passed; and
- b) The vaccine has not been contaminated; and
- c) The vials have been stored under appropriate cold chain conditions; and
- d) The VVM on the vial, if attached, has not reached the discard point.

3.2 Freeze-dried vaccines - BCG, measles, yellow fever, and freeze-dried formulations of Hib

You must discard freeze-dried vaccines six hours after reconstitution or at the end of the immunization session, whichever comes sooner.

3.3 All vaccines

You must discard an opened vial of any vaccine (including single dose and multi dose, liquid and freeze dried) immediately if any of the following conditions applies:

- Sterile procedures have not been followed; or
- You see evidence of contamination, such as floating particles in the vaccine; or
- You just suspect that the vaccine has been contaminated.

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About this module

This module, providing instructions on what to do after an immunization session, covers the following matters:

- **completing an immunization tally sheet;**
- **cleaning and sterilizing reusable syringes and needles;**
- **taking care of vaccines;**
- **disposing of used equipment;**
- **special tasks on completing an outreach session.**

1. Completing an immunization tally sheet

Health workers should keep a tally of each immunization they give, as specified in Module 11.

At the end of an immunization session, count the number of 0s deleted on the tally sheet for the day in question. This indicates the total number of immunizations you have given with each vaccine by dose.

Use daily tally sheets to prepare monthly reports to supervisors.

2. Cleaning and sterilizing reusable syringes and needles

You should have enough syringes and needles for there needs to be one sterile syringe and one sterile needle per injection during a session. The following considerations apply if you have reusable syringes and needles:

- The **best** practice is to **clean** and **sterilize** them immediately after each session.
- It is **acceptable** to clean them at the end of each session, load the sterilizer, and sterilize them the next morning.

If you have been working at an outreach site you may be able to store sterilizing equipment there and train local people to use it and keep sterilized syringes and needles in a sterile environment between sessions.

- Sterilizing **DURING** sessions is not recommended. This should only be done if you do not have enough reusable syringes and needles for a whole session.

It takes 20 minutes to sterilize injection equipment and an additional period is required for it to cool before use. Consequently, if you sterilize during a session you may have to stop immunization activities for an hour or more.

Remember that if you need to sterilize during an outreach session you must have a steam sterilizer, a stove and other equipment.

Further information on sterilization equipment and its use is given in Module 4.

You must use one sterile syringe and one sterile needle for each injection.

The best practice is to have sufficient sterile syringes and needles to allow you not to sterilize during a session.

3. Taking care of vaccines

In the past all vaccine vials that had been opened for an immunization session were thrown away at the end of the session, regardless of the type of vaccine or the number of doses left in the vials. Recent research has shown that this is not necessary for all vaccines.

3.1 Liquid vaccines - OPV, DPT, TT, DT, Td, hepatitis B, and liquid formulations of Hib

You may use opened multi-dose vials of liquid vaccines from which one or more doses have been removed following standard sterile procedures, in the next immunization session, *if all of the following conditions are met:*

- a) The expiry date has not passed; **and**
- b) The vaccine has not been contaminated; **and**
- c) The vials have been stored under appropriate cold chain conditions; **and**
- d) The VVM on the vial, if attached, has not reached the discard point.

3.2 Freeze-dried vaccines - BCG, measles, yellow fever, and freeze-dried formulations of Hib

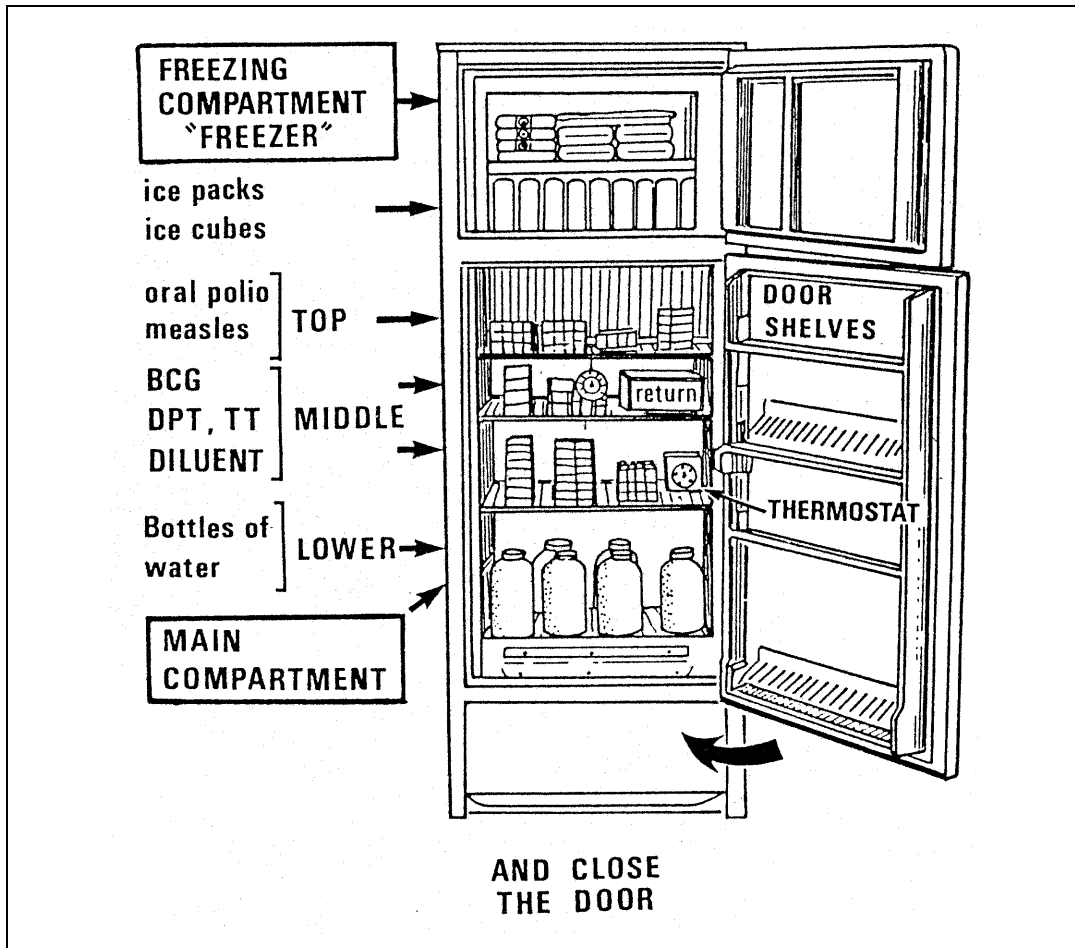
You must discard freeze-dried vaccines six hours after reconstitution or at the end of the immunization session, whichever comes sooner.

3.3 All vaccines

You must discard an opened vial of any vaccine (including single dose and multi dose, liquid and freeze dried) immediately if any of the following conditions applies:

- Sterile procedures have not been followed; or
- You see evidence of contamination, such as floating particles in the vaccine; or
- You just suspect that the vaccine has been contaminated.

Figure 9-A: Vaccine refrigerator, highlighting the "returned" box



Remember:

If the vaccine vial monitor on a vial shows that the vaccine inside has been exposed to unacceptably high temperatures, dispose of the vaccine.

Dispose of BCG, measles and yellow fever vaccines if they have not been used within six hours of reconstitution.

Dispose of DPT vaccine, hepatitis B vaccine and tetanus toxoid if they have been frozen.

4. Disposing of used equipment

If you have single-use syringes and needles they must be destroyed by burning as described in Module 4.

Wrap empty vials, other vials and rubbish in newspaper or other paper. Then either bury or burn them if the local government does not collect them.

5. Special tasks on completing an outreach session

After an outreach session you have tasks that are additional to those following a session at a fixed site, as described below.

5.1 Packing the vaccine carrier

- Check the ice packs to make sure that the ice has not melted.
- Pack only unopened vaccines.

Note: You cannot use opened vaccines of any kind after an outreach session.

- Put empty vials and opened vials in a separate container to carry them back to the health centre for disposal.

5.2 Leaving the outreach site

- Collect your rubbish and take it back to the health centre.
- Do not leave empty or opened vials at the site.
- Do not leave any syringes or needles at the site. As soon as they have been used, single-use syringes and needles should be placed in a disposal container and this should be taken back to the health centre.

Figure 9-B: Collecting rubbish



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- Clean the site.
 - Return tables, chairs and other equipment to their owners.
 - Thank the local people who have helped to organize the session and remind them when you will return.

5.3 Returning unopened vaccines to the refrigerator

Note: You may use unopened vials that you have taken on outreach only if the ice packs in your vaccine carrier are still frozen when you return to the health centre.

- If the ice packs are still frozen, put unopened vials in the “returned” box in the refrigerator so that they will be used first during the next session.
- If the ice in the ice packs has melted, discard all the vaccines EXCEPT for any in vials carrying vaccine vial monitors that have not changed colour. Return these vaccines to the refrigerator for use during the next session.
- Put the ice packs from the carrier into the freezer, and check and record the temperature of the refrigerator.

5.4 Cleaning the vaccine carrier

After taking care of its contents, wipe the carrier with a damp cloth and check it for cracks. Repair any cracks with tape and leave the carrier open to dry.

Remember:

Do not leave ANY syringes and needles at an outreach site.

Take ALL your rubbish back to the health centre.

Leave the outreach site clean and tidy.