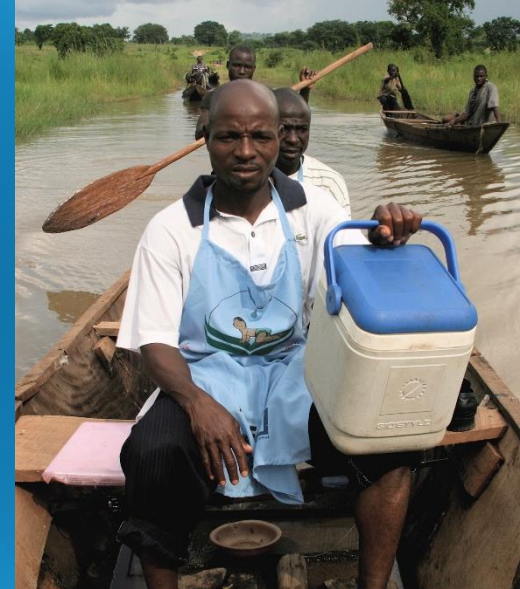


Module 2. Clinical diagnosis, surveillance and laboratory investigation

Unit B. Specimen collection & transport

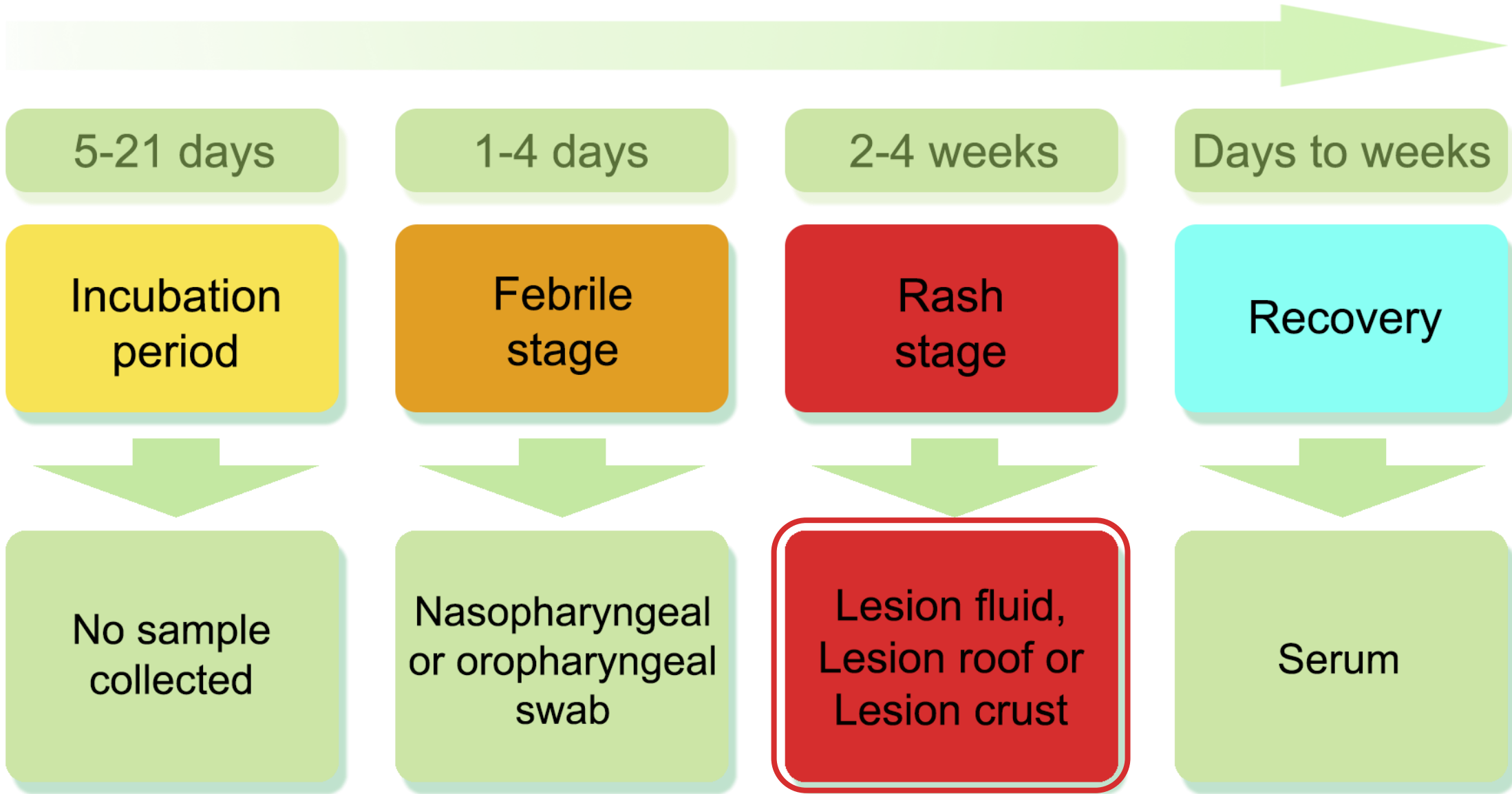


World Health
Organization



By the end of this unit...

- ✓ List specimens appropriate for monkeypox diagnosis
- ✓ Explain how specimens are collected
- ✓ Describe how specimens are stored, packaged, and transported



- **IPC = Infection Prevention and Control**
 - Personal protective equipment (PPE)
 - Hand hygiene
 - Environmental decontamination



- Prepare labels in advance with the
 - patient's name
 - case or surveillance number
 - place of origin
 - date of sampling, and
 - type of specimen.
- Cross-check that information on tubes and **case investigation forms** match





Dry polyester transport swabs

OR



Dry swab

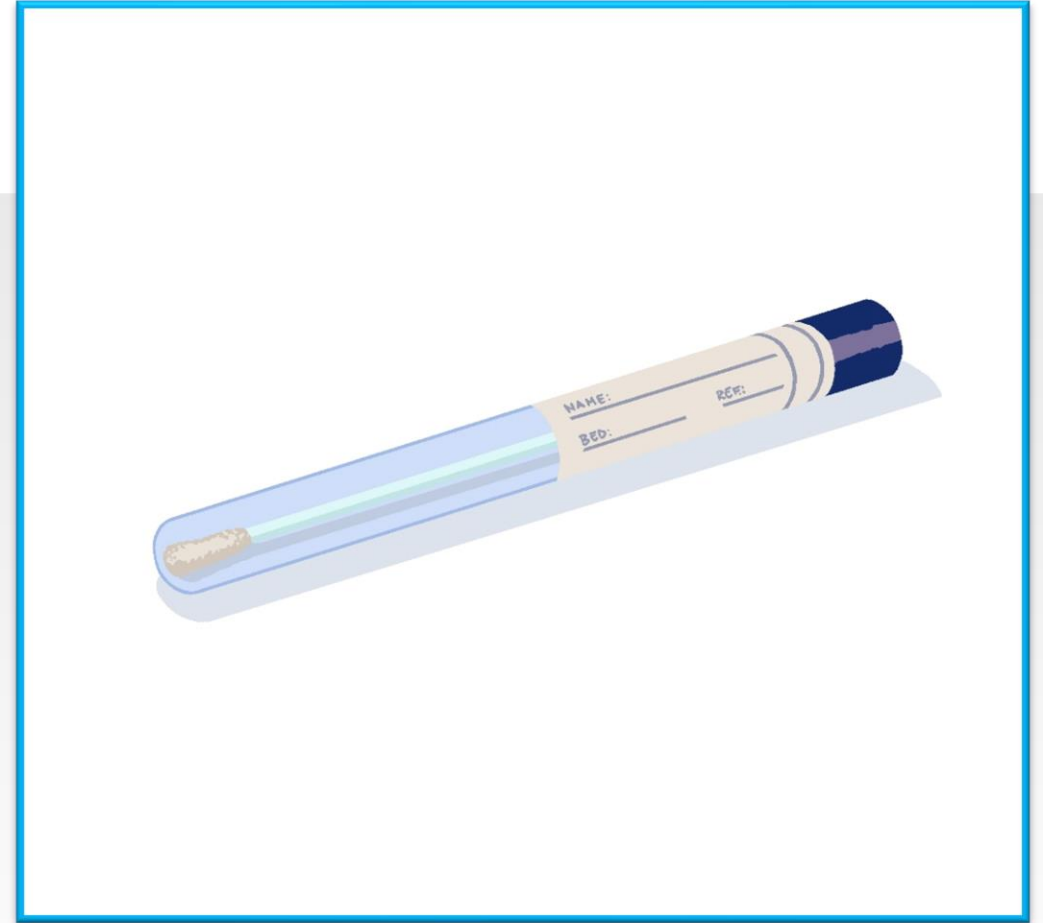
+



Screw-capped plastic tube with O-ring



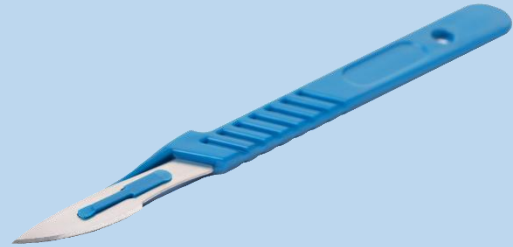
Brush tissue



Put swab in container



Alcohol wipe



Disposable
scalpel or
plastic
scraper



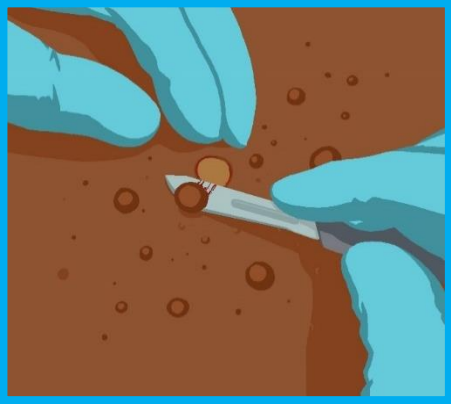
Dry polyester
transport
swabs



Screw-
capped
plastic tube
with O-ring



Sanitize lesions



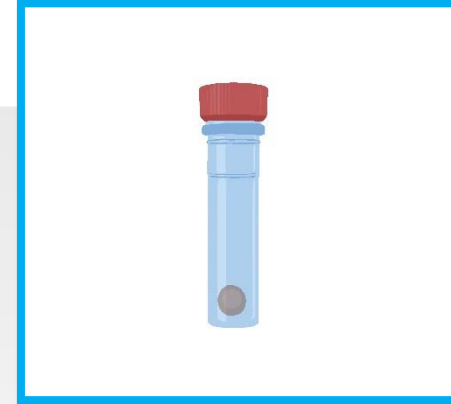
Remove
lesion roof



Brush
lesion base



Put swab in
container



Put roof in
container



Alcohol wipe



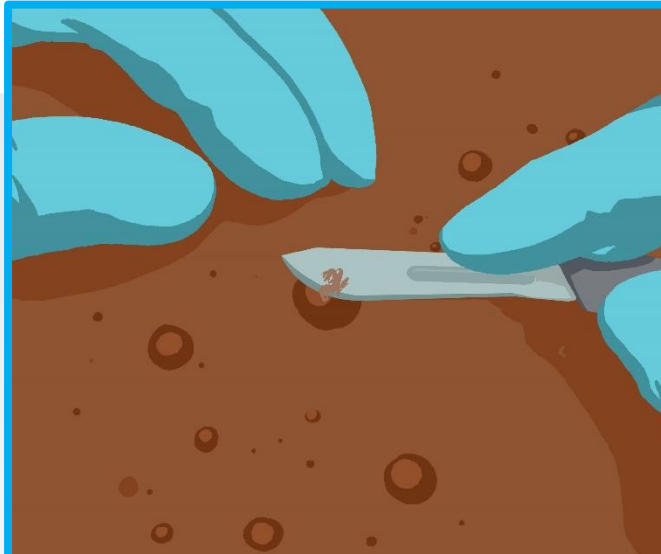
Sterile scalpel,
lancet, plastic
scraper, curette
or needle



Screw-capped
plastic tube
with O-ring



Sanitize lesions



Remove crusts



Put crust in
container



Alcohol wipe



**Sterile
Syringe and
needle**



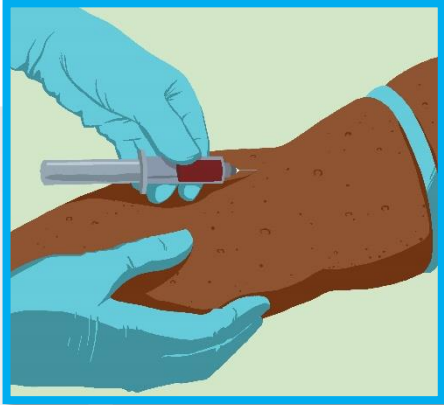
**Serum
separator
tubes**



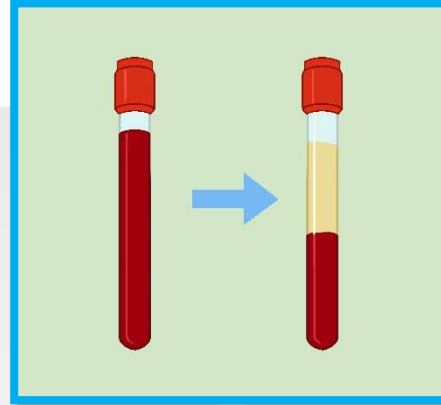
**Screw-
capped
plastic tube
with O-ring**



Sanitize collection area



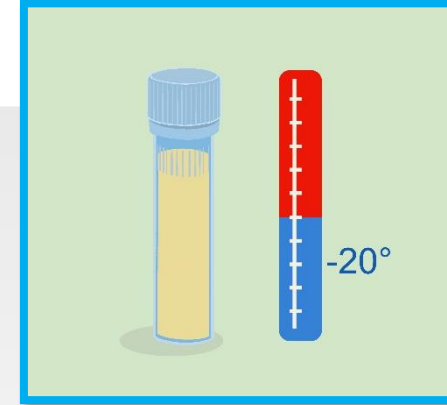
Draw blood



Allow to clot and centrifuge

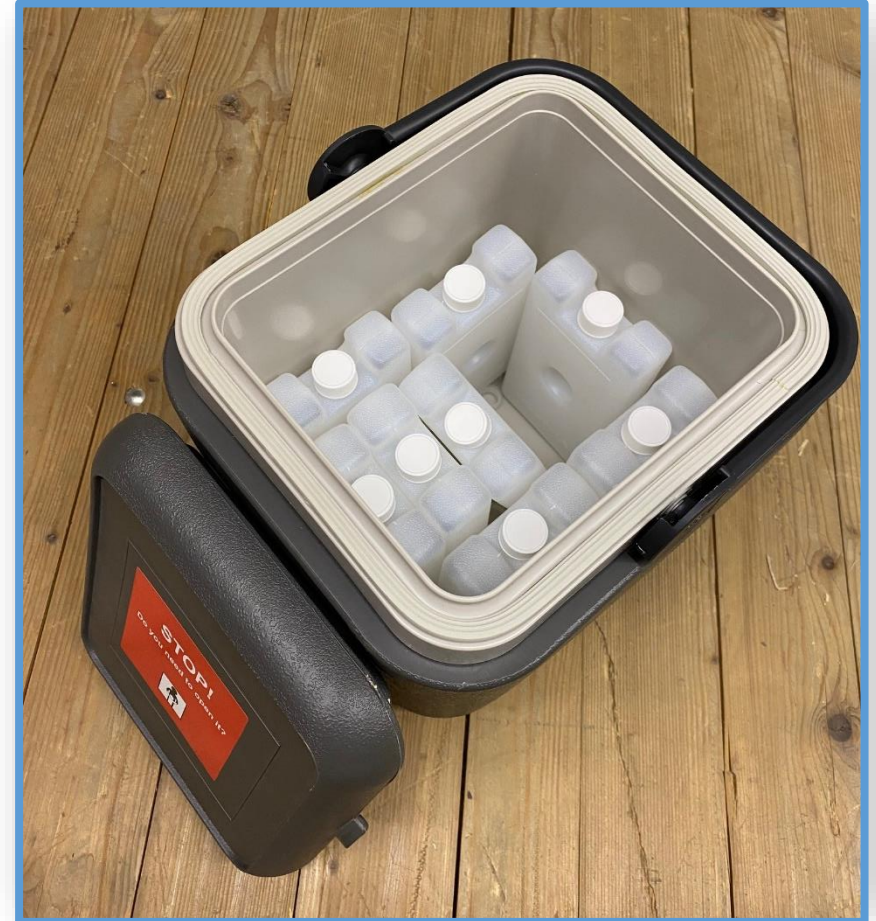


Transfer serum into vials



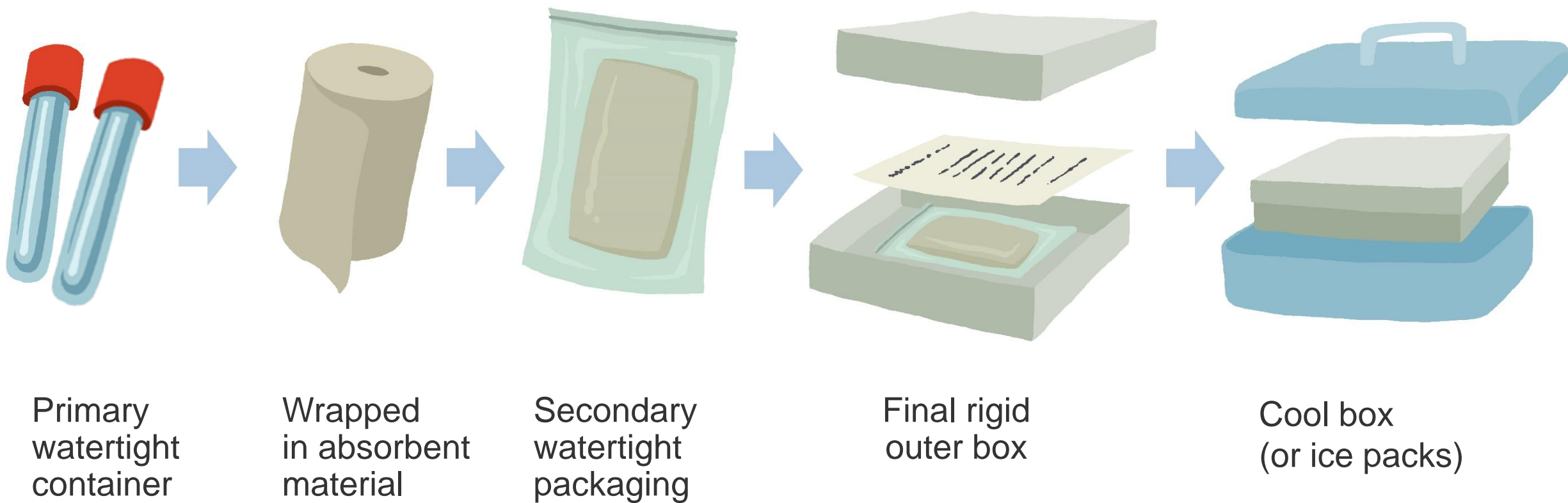
Store tube at -20°C

- Keep specimens **cold** (+4°C) during transport
- Store in a **freezer** (-20 °C) or reliable **refrigerator** with daily temperature monitoring
- Store separately from **vaccines, medicine and food**

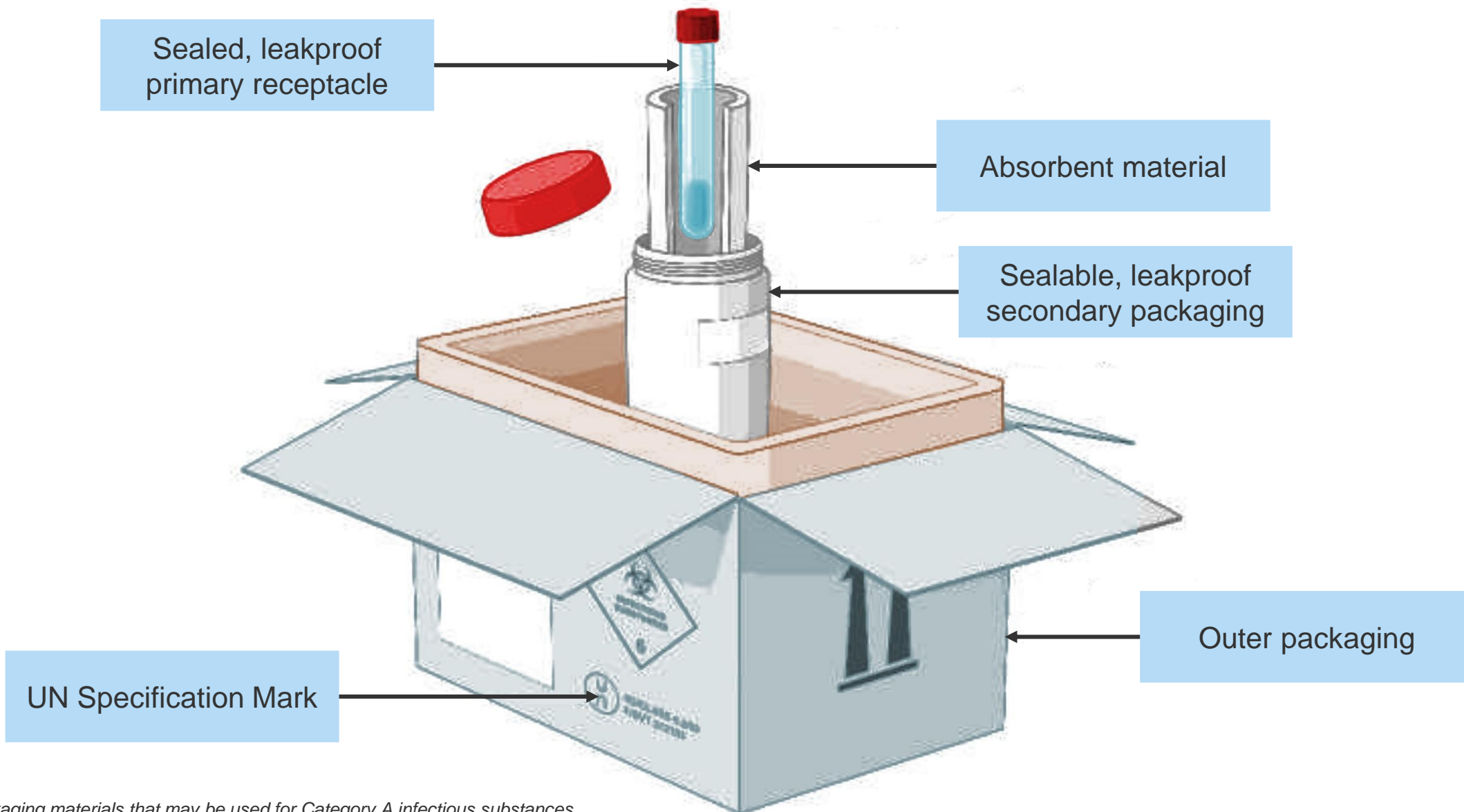


WHO/C. Pontlevoy

Basic triple packaging system



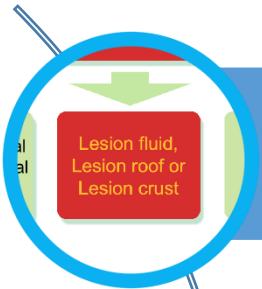
Triple packaging for monkeypox specimens



Example of triple packaging materials that may be used for Category A infectious substances

- In accordance with **national surveillance and laboratory guidelines**
- Using the **fastest mode of transport**
- With **trained drivers or riders**
- Temperature: at **4°C**





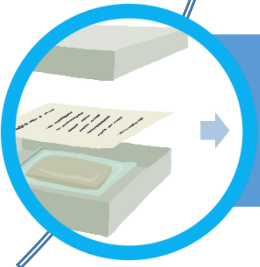
Which specimens to collect



How to collect specimens



IPC for specimen collection



Specimen packaging and transport

- WHO - Guidelines for the collection of clinical specimens during field investigation of outbreaks: [link](#)
- WHO - Guidance on regulations for the transport of infectious substances 2021-2022: applicable as from 1 January 2021: [link](#)
- WHO - How to safely ship human blood samples from suspected Ebola or Marburg cases within a country by road, rail and sea-interim guidance: [link](#)
- WHO - Health Security Learning Platform (EISST) - Infectious substances shipping training: [link](#)