Emerging Viral Infections and Disease: **Focus on monkeypox**

Diagnosis- Diagnostic tests and appropriate handling and shipment of biological specimens

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Laboratory diagnosis and genomics of human monkeypox in the African region

Recommended specimens for MPXV detection:
- Fluid from skin lesions (swab)
- Swabs of lesion surface
- Roofs from more than one lesion, or lesion crusts.

Recommended methods for MPXV detection:
- Real-time PCR
  - MPXV primers OR
  - Clade specific primers

Available detection kits in the marketplace for MPXV detection#
- Shanghai Zi Bio-Tech Co. Life river Monkeypox Virus Real time PCR kit^*
- Tib Molbiol, LightMix Modular Monkeypox + 1-step RT polymerase^*
- RADI Monkey Detection Kit
  - validated by INRB
- Bioperfectus Monkeypox Virus PCR kits (Jiangsu Bioperfectus Technologies Co., Ltd)
  - validated by NCDC
  - Central African clade & West African clade detectable

# No kits EUL and not endorsed or recommended by WHO
* selected for procurement following desk review of all available options
^ being validated by selected laboratories

Most current samples belong to what is being called Clade IIb, a sub-lineage of Clade II. Not a recent divergence
Shipment of human monkeypox specimens

Recommended specimens for MPXV detection:
- Fluid from skin lesions (swab)
- Swabs of lesion surface
- Roofs from more than one lesion, or lesion crusts.
- Collected in sealed containers

Recommended method for MPXV detection: PCR

CLASSIFY
Classification of MPXV specimens is:
- **Class 6** Toxic and Infectious Substances:
  - **6.2** Infectious Substances
    - Category A - UN2814
    - Category B - UN3373

Follow WHO Guidance for Infectious Substance Shipping

PACKAGING: Always Triple Package

**Guidance on regulations for the transport of infectious substances, 2021-2022**
https://www.who.int/publications/i/item/9789240019720

If SHIPPING by AIR:
FOLLOW SPECIFIC PACKAGE INSTRUCTIONS for
Category A - P620 and Category B - P650
Questions?