

Standard Operating Procedure

Title: Storage and handling of human samples suspected of measles or rubella infection

Purpose

To handle and store human samples suspected of containing measles or rubella virus.

Scope

This protocol is limited to human serum samples suspected of containing measles or rubella virus. Please refer to the risk assessments for measles and rubella containing materials.

General laboratory safety guidelines are to be followed during this work.

Materials and equipment

- Human serum samples in microcentrifuge tubes
- Freezer box

Personal protective equipment (PPE) and containment

PPE such as lab coats and gloves should be worn at all times in the laboratory. All work with potentially infectious material and human samples must be performed in a biosafety containment level 2 cabinet. All centrifuging and vortexing must be performed within the BSCL2 cabinet. Wash hands after removing gloves.

Any breach of the skin (scratch, cut, wound) needs to be protected from contact with biological agents. Cover open wounds, cuts, scratches, and grazes with waterproof dressings and gloves. If you exhibit any open wounds (broken skin) in areas that cannot be covered by dressings or clothing, re-evaluate the work in process. Suggestions for mitigating the exposure in the case of broken skin that cannot be covered include, for example where the wound is on the face, work with a full-face shield; work in the BSC, or have someone else do the work.

Storage

- 1.1 Label sample tubes and freezer box.
- 1.2 Aliquot (if necessary) serum samples into labelled tubes and store in freezer box.
- 1.3 Store at -80 °C

Using samples

- 2.1 Remove samples from freezer and thaw in a BSCL2 cabinet.
- 2.2 Wipe around the lid with 70% ethanol before opening.
- 2.3 Pipette necessary amount of sample.
- 2.4 Avoid re-freezing of serum samples (aliquot, if necessary before freezing; see 1.2)

Disposal and decontamination

- 3.1 Discard of any unused serum by mixing with 1% sodium hypochlorite solution (make fresh).
- 3.2 Wipe down all work surfaces with 70% ethanol.