Date: 15 May 2013

Based on the WHO Interim guidance, 6 May 2013

**Infection prevention and control precautions when caring for patients with probable or confirmed novel coronavirus (nCoV) infection:**

a. **Isolation precautions:**
   i. Place patients with probable or confirmed nCoV infection in adequately ventilated single rooms or Airborne Infection Isolation Rooms (AIIR); which are ideally situated in an area that is clearly segregated from other patient-care areas.
   ii. When single rooms are not available, put patients with the same diagnosis together.
   iii. If this is not possible, place patient beds at least 1 meter apart.

b. **Staff, family members and visitors:**
   i. Limit the number of HCWs, family members and visitors in contact with a patient with probable or confirmed nCoV infection.
   ii. To the extent possible, assign probable or confirmed cases to be cared for exclusively by a group of skilled HCWs to reduce opportunities for unintended infection control breaches that could result in unprotected exposure with increased risk of ARI transmission.
   iii. Family members and visitors in contact with a patient should be limited to those essential for patient support and should be informed about the risk of transmission and trained on the use of the same infection control precautions as HCWs who are providing routine care. Further training may be needed in settings where hospitalized patients are often cared for by family members.

c. **Use of Personal Protective Equipment (PPE):**
   In addition to Standard Precautions, all individuals, including visitors and HCWs, when in close contact (within 1 m) or upon entering the room of patients with probable or confirmed nCoV infection should always:
   i. Wear a medical mask.
   ii. Wear eye protection (i.e. goggles or a face shield).
   iii. Wear a clean, non-sterile, long-sleeved gown; and gloves (some procedures may require sterile gloves).
iv. Perform hand hygiene before and after contact with the patient and his or her surroundings and immediately after removal of PPE.

d. Infection prevention and control precautions for aerosol-generating procedures:

i. Additional precautions should be observed when performing aerosol-generating procedures, which may be associated with an increased risk of infection transmission, in particular, tracheal intubation, tracheotomy, non-invasive ventilation and manual ventilation before intubation.

ii. Additional precautions needed when performing aerosol-generating procedures:

1. Wear a disposable particulate respirator, i.e. N95 or higher respirator (always check the seal when putting on a particulate respirator).

2. Wear eye protection (i.e. goggles or a face shield);

3. Wear a clean, non-sterile, long-sleeved gown and gloves (some of these procedures require sterile gloves);

4. Wear an impermeable apron for some procedures with expected splashes of high fluid volumes that might penetrate the gown;

5. Perform procedures in an adequately ventilated area; i.e. minimum of 6 to 12 air changes/hour in facilities with a mechanically ventilated room and at least 60 liters/second/patient in facilities with natural ventilation.

6. Limit the number of persons present in the room to the absolute minimum required for the patient’s care and support;

7. Perform hand hygiene before and after contact with the patient and his or her surroundings and after PPE removal.

e. Patient-care equipment:
i. If possible, use either disposable equipment or dedicated equipment (e.g. stethoscopes, blood pressure cuffs and thermometers). If equipment needs to be shared among patients, clean and disinfect it between each patient use.

f. Patient movement and transport:
   i. Avoid the movement and transport of patients out of the isolation room or area unless medically necessary. The use of portable X-ray equipment and other important diagnostic devices may make this easier. If transport is required, use routes of transport that minimize exposures of staff, other patients and visitors.
   ii. Notify the receiving area of the patient's diagnosis and necessary precautions as soon as possible before the patient’s arrival.
   iii. Clean and disinfect patient-contact surfaces (e.g. bed) after use.
   iv. Ensure that HCWs who are transporting patients wear appropriate PPE and perform hand hygiene afterwards.

g. Medical waste management:
   i. Manage medical waste in accordance with routine procedures.

h. Cleaning, Disinfection, and/or Sterilization of patient-care equipment & linen:
   i. Ensure that cleaning, disinfection and/or sterilization procedures are followed consistently and correctly.
   ii. Manage laundry, food service utensils in accordance with routine procedures.

i. Cleaning and disinfection of the environment:
   i. Cleaning environmental surfaces with water and detergent and applying commonly used disinfectants (such as hypochlorite) is an effective and sufficient procedure.

j. Collection and handling of laboratory specimens:
   All specimens should be regarded as potentially infectious, and HCWs who collect or transport clinical specimens should adhere strictly to Standard Precautions to minimize the possibility of exposure to pathogens.
   i. Ensure that HCWs who collect specimens wear appropriate PPE.
ii. Ensure that personnel who transport specimens are trained in safe handling practices and spill decontamination procedures.

iii. Place specimens for transport in leak-proof specimen bags (secondary container) that have a separate sealable pocket for the specimen (i.e. a plastic biohazard specimen bag), with the patient’s label on the specimen container (primary container), and a clearly written request form.

iv. Ensure that health-care facility laboratories adhere to appropriate biosafety practices and transport requirements according to the type of organism being handled.

v. Notify the laboratory as soon as possible that the specimen is being transported.

**Duration of isolation precautions for novel coronavirus (nCoV) infection:**

The duration of infectivity for nCoV infection is unknown. Also little information is currently available on viral shedding and the potential for transmission of nCoV.

- While Standard Precautions should continue to be applied always, additional isolation precautions should be used during the duration of symptomatic illness and continued for 24 hours after the resolution of symptoms.

- Patient information (e.g. age, immune status and medication) should also be considered in situations where there is concern that a patient may be shedding the virus for a prolonged period.