Ph. Office: 0164-2742900
Fax- 2742901
Ph 0164-5002000

Adesh Institute of Medical Sciences & Research
Barnala Road Bathinda

Ref. No: AIMSR/MS Admn/MS/ **Date:** **09** Mar 2020

HsOD
All Clinical Deptt
AIMSR, Bathinda

SOP :Observation of standard precautions in COVID 19 Ward

1. COVID 19 is ten bedded isolation ward has been established in Emergency area . First cubicle is designated as FLU CORNER for designated medical officers to examine all suspected cases reporting directly or referred from other OPDs . All the staff and consultants and workers working in Isolation ward to observe Standard Precautions given in subsequent paras .

2. The use of standard precautions is the primary strategy for minimizing the risk of transmission of microorganisms in healthcare facilities. Standard precautions are to be followed for all patients, irrespective of their infection status. These are to be used to avoid contact with blood, body fluids, secretions and excretions regardless of whether contaminated grossly with blood or not; non-intactskin; and mucous membrane. The key components of standard precautions are

(a) Hand hygiene
(b) Personal protective equipment
(c) Respiratory hygiene and cough etiquette
(d) Prevention of injuries from sharps
(e) Safe handling of patient-care equipment
(f) Principles of asepsis
(g) Environmental infection control
(h) Patient placement
(i) Environmental cleaning
(j) Linen and laundry
(k) Waste disposal

3. Hand Hygiene .

(a) Apply a palmful of alcohol-based hand rub and cover all surfaces of the hands. Rub hands until dry
(b) The technique for hand rubbing is illustrated on the chart placed in COVID 19 ward
(c) When washing hands with soap and water, wet hands with water and apply the amount of product necessary to cover all surfaces. Rinse hands with water and dry thoroughly with a

single-use towel. Use clean, running water whenever possible. Avoid using hot water, as repeated exposure to hot water may increase the risk of dermatitis . Use a towel to turn off tap/faucet Dry hands thoroughly using a method that does not recontaminate hands.

(d) Make sure towels are not used multiple times or by multiple people

(e) The technique for handwashing is illustrated on the chart attached as **Appendix 'A' .**

(f) Liquid, bar, leaf or powdered forms of soap are acceptable. When bar soap is used, small bars of soap in racks that facilitate drainage should be used to allow the bars to dry

4. Personal protective equipment(PPE KIT)

(a)PPE includes gloves, aprons and gowns, facial protection, footwear and hair cover or cap.

(b) Personal protective equipment (PPE) refers to physical barriers, which are used alone or in combination, to protect mucous membranes, airways, skin and clothing from contact with infectious agents. PPE should be used by

(i) HCWs who provide direct care to patients and who may come in contact with blood, body fluids, excretions, and secretions

(ii) Support staff including cleaners, and laundry staff in situations where they may have contact with blood, body fluids, secretions, and excretions.

(iii) Laboratory staff, who handle patient specimens;

(iv) Family members who provide care to patients and are in a situation where they may have contact with blood, body fluids, secretions and excretions;

(v) HCWs in a haemodialysis unit, because of the high risk of transmission of blood-borne infections during the various activities associated with haemodialysis and handling of equipment; and Patients in a haemodialysis unit, in the form of a barrier over clothing during cannulation and decannulation, central line connection, disconnection/ dressing change.

(c) When putting on PPE

(i) PPE must be put on in the proper order as it cannot be modified while in the patient-care area. An observer should check the integrity of the PPE, making sure it is well adjusted, and write the name and role of the person as well as the time of entry into the high-risk zone on the apron.

(ii) The sequence of removal of PPE should be in the reverse order of putting on the PPE. Eye protection should be put on in a way that it can be taken off as late as possible during the PPE removal process.51

(iii) Information and posters about PPE, demonstrating the sequence for wearing and removing PPE should be posted in all patient-care areas.

PPE should be put on and taken off in correct sequence and disposed in accordance with the Biomedical Waste Management and Handing Rules 2016, 2018.

(d) **. Remove PPE and Perform Hand Washing After Completing Care and Leaving the Room**

(i) As with contact precautions, wash your hands with warm soap and water upon leaving the patient's room.

(ii) There is not a standard distance that defines how far a droplet-borne pathogen may travel. Experts describe it as a "relatively short distance," such as three feet.

5. Gloves

a) Gloves should be worn as an additional measure, not as a substitute for hand washing.
b) Gloves are not required for routine care activities in which contact is limited to a patient's intact skin.
c) Wear gloves when touching blood, body fluids, secretions, excretions, mucous membranes, non-intact skin.
d) Change gloves between tasks and procedures on the same patient after contact with potentially infectious material.
e) If gloves become torn or heavily soiled and additional patient care tasks must be performed, then change them before starting the next task.
f) Remove gloves immediately after completion of care or a specified task, at point of use before touching non-contaminated items and clean environmental surfaces and before moving to another patient or using a mobile phone.
g) Perform hand hygiene immediately after removing gloves.

h) **Types and indications for wearing gloves** There are three types of gloves:

(i) Clean, non-sterile gloves should be worn: For examinations and non-surgical procedures; For handling items visibly soiled with blood, body fluids, secretions or excretions when the HCW has open skin lesions on the hands; and When the HCW has non-intact skin on the hands.
(ii) Sterile, single-use gloves should be used for aseptic procedures.
(iii) Heavy duty/ utility gloves should be used for decontamination of large equipment, cleaning of floors, walls, HCF furniture such as beds, etc. These gloves can be reused after cleaning.

7. Aprons and gowns

(a) International guidelines recommend that protective clothing (apron or gown) should be worn by all HCWs when:

(i) There is close contact with the patient, materials or equipment that may lead to contamination of skin, uniforms or other clothing with infectious agents; and
(ii) There is a risk of contamination with blood, body substances, secretions or

excretions (except sweat).

(iii) A clean non-sterile apron or gown is generally adequate to protect skin and prevent soiling of clothing during procedures and/ or patient-care activities that are likely to bring contact with blood, body substances, secretions or excretions (except sweat).

(iv) A fluid-resistant apron or gown should be worn when procedures are likely to generate splashing or sprays of blood or body substances and there is a risk that clothing may become contaminated with blood and body substances.

8. Footwear

(a) A closed footwear, which can be easily cleaned and disinfected, must be used whenever work processes or environments could cause foot injuries or spillageof blood or body fluids.

(b) Personal footwear should be changed when entering clean areas such as OTs, labour rooms, ICU.

(c) Shoe covers may be used over street shoes to protect clean areas from soil and dirt brought in by shoes.

9. Hair covers

Long hair must be secured with a rubber band and hair cover worn to protect the hair and to protect the patient from falling hair.

10 Safe handling of patient-care equipment

(a) Equipment that has been in contact with a patient should be disinfected or sterilized as appropriate before use for another patient.

(b) Equipment that has been soiled with blood or body fluids should be decontaminated and cleaned to prevent transfer of microorganisms to other patients and the environment.

(c) Cleaning of patient-care areas and equipment should be carried out by a team of dedicated personnel trained in the appropriate cleaning procedures. Responsibility and accountability for cleaning is under supervision of Infection Control Nurse (Ms Kulwinder kaur Deptt of ENT and DNS).

(d) Heavy duty or strong utility gloves must be worn during decontamination, cleaning and disinfection of instruments.

(e) Disposable patient-care equipment should not be reused and must be discarded into an appropriate container in accordance with the hospital waste management policy and the Biomedical Waste Management and Handling Rules 2016, 2018.

(f) Patient-care supplies (e.g. lotion, cream, soap) shall not be shared by patients.

11. Policy for cleaning, sanitation and disinfection has been issued separately

Disinfectants	Recommended use	Precautions
Sodium hypochlorite 1% in-use dilution; 5% solution to be diluted 1:5 in clean water	Disinfection of material contaminated with blood and body fluids	• Should be used in well-ventilated areas • Protective clothing required while handling and using undiluted • Do not mix with strong acids to avoid release of chlorine gas • Corrosive to metals
Bleaching powder 7g/L with 70% available chlorine	Toilets/bathrooms – may be used in place of liquid bleach if this is unavailable	Same as above
Alcohol (70%) isopropyl, ethyl alcohol, methylated spirit	Smooth metal surfaces, table tops and other surfaces on which bleach cannot be used	• Flammable, toxic – to be used in well-ventilated area, avoid inhalation • Keep away from heat source, electrical equipment, flames, hot surfaces • Allow it to dry completely, and avoid diathermy burns
Detergent with enzyme	Cleaning endoscopes, surgical instruments before disinfection is essential	

Source: Practical guidelines for infection control in healthcare facilities

for Adesh Institute of Medical Sciences & Research

(Medical Supdt)
AIMSR, Bathinda

Ph. Office: 0164-2742900
Fax- 2742901
Ph 0164-5002000

Adesh Institute of Medical Sciences & Research
Barnala Road Bathinda

Ref. No: AIMSR/MS Admn/MS/ **Date:** 09 Mar 2020

To
HsOD
All Clinical Departments
AIMSR, Bathinda

USE OF MASKS IN THE CONTEXT OF THE NOVEL CORONAVIRUS (2019-NCOV) OUTBREAK :WHO

1. Wearing a medical mask is one of the prevention measures to limit spread of certain respiratory diseases, including 2019-nCoV, in affected areas. However, **the use of a mask alone is insufficient to provide the adequate level of protection and other equally relevant measures should be adopted**. If masks are to be used, this measure must be combined with hand hygiene and other IPC measures to prevent the human-to-human transmission of 2019-nCov.

2. If **medical masks** are worn, appropriate use and disposal is essential to ensure they are effective and to avoid any increase in risk of transmission associated with the incorrect use and disposal of masks.

3. Correct procedure to apply Masks in health-care settings:

a) Place mask carefully to cover mouth and nose and tie securely to minimise any gaps between the face and the mask
b) While in use, avoid touching the mask
c) Remove the mask by using appropriate technique (i.e. do not touch the front but remove the lace from behind);
d) After removal or whenever you inadvertently touch a used mask, clean hands by using an alcohol-based hand rub or soap and water if visibly soiled
e) Replace masks with a new clean, dry mask as soon as they become damp/humid;
f) Do not re-use single-use masks;
g) Discard single-use masks after each use and dispose of them immediately upon removal.

(Cloth (e.g. cotton or gauze) masks are not recommended under any circumstance.)

Health Care Facilities

Individuals with respiratory symptoms should:

1 Wear a **medical mask** while waiting **in triage or waiting areas** or **during transportation** within the facility;

2 Wear a medical mask when **staying in cohorting areas dedicated to suspected or confirmed cases;**

3 Do not wear a medical mask when isolated in single rooms but cover mouth and nose when coughing or sneezing with disposable paper tissues. Dispose them appropriately and perform hand hygiene immediately afterwards.

Health care workers should:
1 Medical Mask .Wear a **medical mask** when entering a room where patients suspected or confirmed of being infected with 2019-nCoV are admitted and in any situation of care provided to a suspected or confirmed case;

2. N95 Mask when performing aerosol-generating procedures such as **tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy.**

for Adesh Institute of Medical Sciences & Research

(Medical Supdt)
AIMSR, Bathinda

Ph. Office: 0164-2742900
Fax- 2742901
Ph 0164-5002000
Adesh Institute of Medical Sciences & Research
Barnala Road Bathinda

Ref. No: AIMSR/MS Admn/MS/ **Date:** 09 Mar 2020

SOP on Duties of EMO / FLU Corner MO :AIMSR

1. All cases reporting with symptoms of common cold will be examined **at Flu corner** in Emergency Deptt by doctor detailed for the same .During working hours even if the patient reports in specialty/ super specialty OPDs of AIMSR Hospital , they will be referred to Emergency Deptt for triage . The purpose of triage is to recognize and sort all patients with SARI at first point of contact with health care system and consider nCOV as a possible etiology of SARI under certain conditions

2 **Immediate implementation of appropriate IPC measures (** infection prevention and control measures) EMO will initiate IPC which is a critical and integral part of clinical management of patients measures .

a) Give suspect patient a medical mask and direct patient to isolation room .
b) Keep at least 1meter distance between suspected patients and other patients.
c) Instruct all patients to cover nose and mouth during coughing or sneezing with tissue or flexed elbow for others.
d) Perform hand hygiene after contact with respiratory secretions

3.**Standard precautions** EMO will ensure application of Standard Precaution . Which include .

a) Hand hygiene
b) Use of PPE to avoid direct contact with patients' blood, body fluids, secretions (including respiratory secretions) and non-intact skin.
c) Standard precautions also include prevention of needle-stick or sharps injury; safe waste management
d) Cleaning and disinfection of equipment
e) Cleaning of the environment.

4. Early supportive therapy and monitoring

a) Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia, or shock: Initiate oxygen therapy at 5 L/min and titrate flow rates to reach target SpO2 ≥90% in non-pregnant adults and SpO2 ≥92-95 % in pregnant patients.

5. Collection of specimens for laboratory diagnosis

a) Guidance on specimen collection, processing, transportation, including related biosafety procedures, is attached as Appedix 'A'

Points to remember

• Collect blood cultures for bacteria that cause pneumonia and sepsis, ideally before antimicrobial therapy.

DO NOT delay antimicrobial therapy to collect blood cultures

• Collect specimens from BOTH the upper respiratory tract (URT; nasopharyngeal and oropharyngeal) AND lower respiratory tract (LRT; expectorated sputum, endotracheal aspirate, or bronchoalveolar lavage) for nCoV testing by RT-PCR. Clinicians may elect to collect only LRT samples when these are readily available (for example, in mechanically ventilated patients)

b) Use PPE for specimen collection . When collecting URT samples, use viral swabs (sterile Dacron or rayon, not cotton) and viral transport media. In a patient with suspected novel coronavirus, especially with pneumonia or severe illness, a single URT sample does not exclude the diagnosis, and additional URT and LRT samples are recommended. LRT (vs. URT) samples are more likely to be positive and for a longer period.

6. Case Classification*

Suspect case

Patients with severe acute respiratory infection (fever, cough, and requiring admission to hospital), **AND** with no other etiology that fully explains the clinical presentation **AND** at least one of the following:

(a) A history of travel to or residence in the city of Wuhan, Hubei Province, China in the 14 days prior to symptom onset, or patient is a health

care worker who has been working in an environment where severe acute respiratory infections of unknown etiology are being cared for.

(b) Patients with any acute respiratory illness **AND** at least one of the following:

(i) close contact with a confirmed or probable case of 2019-nCoV in the 14 days prior to illness onset,

or

(ii) visiting or working in a live animal market in Wuhan, Hubei Province, China in the 14 days prior to symptom onset,

or

(iii) worked or attended a health care facility in the 14 days prior to onset of symptoms where patients with hospital-associated 2019-nCov infections have been reported.

Probable case

A suspect case for whom testing for 2019-nCoV is inconclusive or for whom testing was positive on a pan-coronavirus assay.

Confirmed case

A person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms.

(Source: WHO: https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov))

7. **Discharge Policy of nCoV Case**

a) Clinical samples of any suspect/probable case* of nCOV will be sent for laboratory confirmation to designated laboratories.

b) The case will be kept in isolation at health facility till the time of receipt of laboratory results and given symptomatic treatment as per existing guidelines.

c) If the laboratory results for nCOV are negative, the discharge of such patients will be governed by his provisional/confirmed diagnosis and it is up to the treating physician to take a decision.

d) The case shall still be monitored for 14 days after their last contact with a confirmed 2019-nCoV case.
e) In case the laboratory results are positive for nCOV, the case shall be managed as per the confirmed case management protocol.

f) The case shall be discharged only after evidence of chest radiographic clearance and viral clearance in respiratory samples after two specimens test negative for nCOV within a period of 24 hours.

for Adesh Institute of Medical Sciences & Research

(**Medical Supdt)**
AIMSR, Bathinda

Duties of Residents in management of COVID -19

Role

- Will work in rotation duty of eight hours.
- Will assist Senior Clinical Assistants in managing the patients' documentation and data collection.
- Will take part in Academics whenever detailed by seniors
- Will attend all academic meetings
- Will attend Ambulance call whenever detailed

Responsible

- Will be responsible to Monitor at least 4 patients in the unit during duty hours
- Will be completely responsible to monitor vital parameter and to raise an alarm if the case demands.
- Will attend the rounds of Head, ICU consultant and consultant in charge
- Will assist seniors in the procedure, documentation and data collection
- Will be responsible for history taking and file maintenance of the given cases
- Will be responsible to carry out any other work of the unit arranged by Head of the unit or ICU consultant.
- Will complete all discharge/death summaries and keep the files up to date.
- Will be responsible to see that the mentioned treatment is being carried out by the paramedical staff.
- Will attend the patient during shifting for scan, to ward or to the other units.
- Will be responsible for taking all consents and other documentation as and when required.

Reporting

- Functional :- Will report to Head or ICU consultant
- Admin : DMS/MS

Ph. Office: 0164-2742900
Fax- 2742901
Ph 0164-5002000
Adesh Institute of Medical Sciences & Research
Barnala Road Bathinda

Ref. No: AIMSR/MS Admn/MS/ **Date:** 09 Mar 2020

Rapid Risk Assessment

(Min of Health and Welfare GOI)

What is risk assessment?

A systematic process for gathering, assessing and documenting information to assign a level of risk

Why to conduct risk assessment?

- Characterize the risk (low-moderate-high-very high)
- Support and direct decision-making
- Implement appropriate and timely control measures
- Support effective operational and risk communication
- Improve preparedness

Methods & Tools for Rapid Risk Assessment

SMART goals: simple, measurable, achievable, relevant and time-bound

- Minimum number of methods for common understanding
- Simple but not simplistic
- Appropriate to the people undertaking the risk assessment
- Appropriate to the timeframe required for action
- Examples of methods/tools for acute public health events.

Rapid Risk Assessment Process

- Assembling Risk Assessment team (multidisciplinary team)
- Formulating risk questions
- Undertaking Risk Assessment (components)
    1. Assess hazard/threat
    2. Assess exposure(s)
    3. Assess context (vulnerabilities and threat- specific factors that increase or decrease risk)
- Assigning level of risk.

Risk assessment components

1. Hazard/threat

(a) Hazard can be known or unknown
(b) If unknown, prioritise potential hazards (biological, chemical, physical and radionuclear hazards)

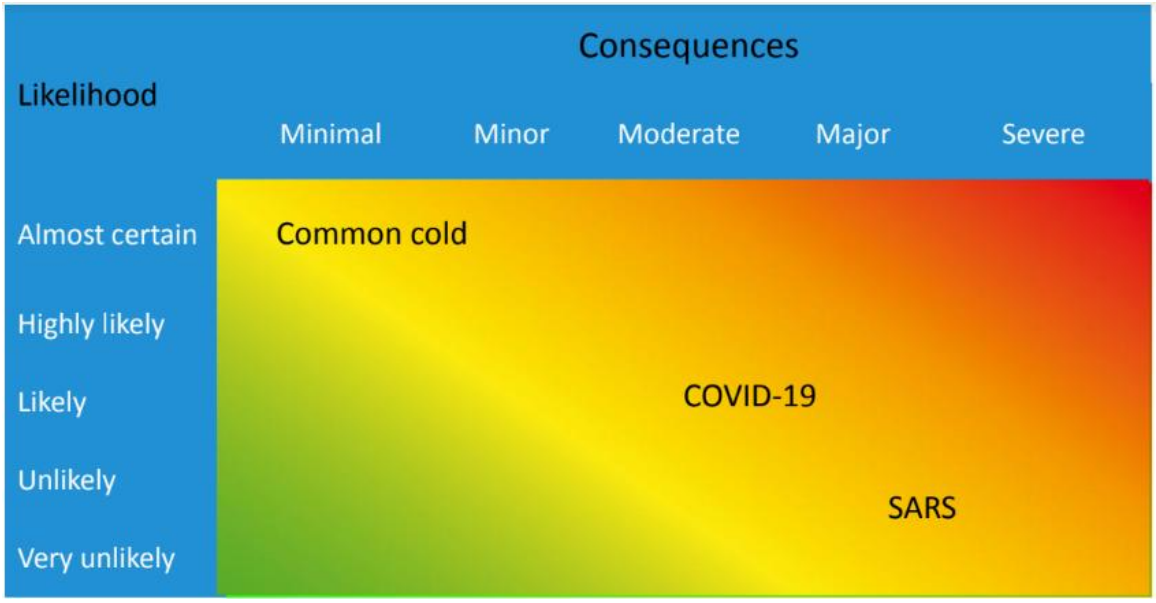
2. Exposure

(a) Number of people likely to have been exposed
(b) Number of people exposed likely to be affected

3. Context (capacity and control)

(a) Factors associated with social, health status, behaviour (population density and movement)
(b) Factors associated with health system
(Surveillance, diagnosis, treatment)
(c) Context (political, conflict, economical)

4. Documented evidence



Risk assessment – characterizing risk

	Risk level	Level of management to be undertaken
Green	Low	Manage through routine procedures.
Yellow	Moderate	Routine procedures may not be sufficient. Management responsibility must be specified; specific monitoring or procedures required.
Orange	High	Local capacity surpassed requiring next level of management, and perhaps government to assist. Establish command and control structure.
Red	Very high	Local capacity overwhelmed requiring highest level of management and government to assist (perhaps international). Activate Emergency Operations Centre (EOC).

Risk statement and limitations of RRA

1. Risk statement

• Make a concise statement about the level of risk and give evidence-based reasons using key information on likelihood of the event occurring and the impact the event will have

2. **Limitations**

• Make a brief statement about limitations of the risk assessment
• These limitations should be documented as they will also assist in decisions and follow-up actions

3. Recommendations

• Communicate timely and regularly
• Acknowledge uncertainty
• Understand stakeholders' perceptions
• Translate science into non-expert language

for Adesh Institute of Medical Sciences & Research

(Medical Supdt)
AIMSR, Bathinda