

**PREPAREDNESS AND RESPONSE
IN THE WAKE OF OUTBREAK OF
NOVEL CORONA VIRUS**



**HEALTH DEPARTMENT
GOVERNMENT OF SINDH**

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NOVEL CORONA VIRUS (2019-NCOV)

INTRODUCTION

A novel coronavirus (2019-nCoV) is a new corona virus that has not been previously identified. Public health officials and partners are working hard to identify the source of the "2019-nCoV". Corona viruses are a large family of viruses, some causing illness in people and others that circulate among animals, including camels, cats and bats. This outbreak started in the month of December 2019, as an unknown cluster of respiratory illnesses originated from Wuhan City, China.

On 31 December 2019, WHO was alerted to several cases of pneumonia in Wuhan City, Hubei Province of China. The virus did not match any other known virus. This raised concern because when a virus is new.

One week later, on 7 January, Chinese authorities confirmed that they had identified a new virus. The new virus is a corona virus, which is a family of viruses that include the common cold, and viruses such as SARS and MERS. This new virus was temporarily named "2019-nCoV." Because this is a corona virus, which usually causes respiratory illness, W.H.O. has advised to people on how to protect themselves and those around them from getting the disease.

PREPAREDNESS AND RESPONSE

In this context a meeting was held under chair of Minister Health to discuss and find out the possible ways to address the issues in case of corona virus outbreak. Another consecutive meeting was also held under chair of Secretary Health to develop the strategies and implement the decisions taken.

Following actions are taken by Health Department, Government of Sindh:

1. The Advisory and Case Definition on Pneumonia Outbreak due to Corona Virus to all MSs, DHOs, Directors other health stake holders was issued.

2. The Airport Health Authority was coordinated and accordingly letters were written to take precautionary measures and screening of travellers and prompt report to health department in case of any suspect case.
3. The Health Department has Declared main focal points at JPMC, AKU, Civil and DUH Ojha Campus.
4. Livestock & Fisheries Department, Government of Sindh was coordinated and requested for alertness and taking precautionary measures on its part , as it is a Zoonotic disease.
5. University Board, College and School Education Departments were requested to creating awareness to students and teachers for adopting such precautionary measures.
6. Health Department, being the focal department, has made the official correspondence with the port & shipping authorities to take precautionary measures and screening of travelers and prompt report to health department in case of any suspect case.
7. It has been Designated an ambulance at Jinnah Airport Karachi and Keamari Port for transporting the suspected/confirmed cases towards the designated Isolation wards.
8. The meetings were held with all stake holders under chair of Minister Health for sensitizing the disease and develop coordinated mechanism among all stake holders. The all stake holders have to take necessary measures at all level to address the issue.
9. Sensing the gravity of the situation, PDSRU, Directorate General Health Services Sindh, Hyderabad (Phone No. 022-9240106) & RDSRU, Directorate Health Services, Karachi (Cell No. 0333-2863477) were declared liaison / coordinating units to work round the clock.
10. The "Isolation Wards" in six tertiary care hospitals and other hospitals throughout the province have been established for suspected/confirmed cases of the novel Corona-virus.
11. It has been provided "Personal Protective Equipment (PPE)" to designated hospitals and Jinnah Airport for protection of health care providers.
12. As far as the safety of the public community is concerned, the all out efforts have been taken to create awareness among masses through media and published

Awareness News Advertisements for general public regarding precautionary measures in print media.

13. The Health department has declared focal person for coordination and monitoring the whole process under the supervision of Special Secretary (Public Health) Health Department. Accordingly, Dr. MB Raja Dharejo, Deputy Secretary (PH), (Cell No. 0334-4094772) and Dr. Zafar Mehdi, Technical Officer, Health department are nominated as Focal Person of Health department in case of any query and media briefing.

ADVISORY ON PNEUMONIA OUTBREAK DUE TO NOVEL CORONAVIRUS

The Health Department has, Government of Sindh, has issued advisory on Pneumonia outbreak due to Novel Corona virus.

A recent surge of pneumonia cases, associated with the novel coronavirus, has been reported in China. The Chinese authorities have notified more than 1500 confirmed human infections and cases have also been reported from Thailand, Japan, and South Korea. This situation has urged the neighboring countries to enhance their surveillance and vigilance for response in case of detection. The NIH is accordingly monitoring the situation and will keep all stakeholders updated.

The objective of this advisory is to alert and sensitize the health staff at border posts as well as in healthcare institutions of Pakistan to stay vigilant about any suspected cases coming from affected areas for an early detection. The information about the illness is summarized below:

Infectious Agent:

This pneumonia like illness is caused by a novel Coronavirus named by CDC-US as “2019-nCoV” of the family of Coronavirus.

Occurrence of cases:

According to the preliminary epidemiological investigation, most cases have either worked at or were handlers and frequent visitors to the Huanan Seafood and Meat wholesale Market in Wuhan City, Hubei Province, China.

Mode of Transmission:

Recent evidences are highly suggestive that this is a zoonotic disease and primary cause of infections in human is through contact with infected animals, and animal products (needs to be confirmed). Substantial evidence is also suggestive of human to human transmission resulting in secondary infections (confirmed by Chinese authorities).

Clinical Picture:

Limited information is available to characterize the spectrum of clinical illness associated with 2019-nCoV. The observed clinical signs and symptoms of this illness include fever, cough, and difficulty breathing. Chest radiographs show invasive pneumonic infiltrates in both lungs.

The following should be suspected and investigated:

1. A person with severe acute respiratory infections (SARI) with history of fever and/or cough and/or difficulty breathing and with history of travel to Wuhan or any other affected area of China within last 15 days prior to symptom onset
2. An individual with acute respiratory illness of any degree of severity with any of the following exposures; a. Close physical contact with a suspected or confirmed case while the case was symptomatic, in affected areas of China b. Direct contact with infected animals, seafood, meat or any other animal products in the markets of Wuhan City China, within 14 days before onset of illness.

Prevention & Treatment:

No vaccine or specific treatment for 2019-nCoV infection is yet available. The patient care is mainly supportive. Ensure hand hygiene and cough etiquette for prevention and personal protection.

Measures to be taken at all Health Facilities:

Generally the same as for seasonal Influenza.

- Ensure the standard precautions including hand hygiene and cough etiquette followed by using personal protective equipment (PPE).
- Cover nose and mouth with a face mask during examination of suspected persons.
- Ensure hand hygiene after contact with respiratory secretions.
- Clean and disinfect frequently touched surfaces and objects, such as doorknobs.

Laboratory Diagnosis and NIH Support:

- Sample from suspected pneumonia caused by new coronavirus case should be collected by trained technician with full preventive measures using appropriate PPEs
- Recommended samples for testing are respiratory sample nasopharyngeal and throat swab sample transported (in one tube) viral transport media (VTM), and all sample should be referred to the national reference lab, NIH, Islamabad.
- Test on patient sample present an extreme biohazard risk and should only be conducted under maximum biological containment conditions.

ESTABLISHMENT OF ISOLATED WARDS AND SCREENING POINTS:

The screening point at Jinnah International Airport and Isolation wards have been established in the following hospitals.

S No.	Isolated wards/Screening Points	PREPARDNESS AND RESPONSE
01.	SCREENING POINTS	<p>A. Karachi Airport (2 Counter at International arrival with 1 x thermal scanner and 2 x thermal guns. Medical Staff: 4x Shifts (1x Dr, 1x Supervisor & 5x nursing staff). Isolation room at intl arrival and further shifting to JPMC. 2 Ambulances of CAA 1 Ambulance of health dept. No setup at any Railway Station and port) and Sea Port</p> <p>B. Karachi Airport has thermal scanner and gun C. Both Portal of entry are covered by Central Health Establishment. Providing services 24/7 in three shifts D. Although PPE is available but need support E. A director of Central Health Establishment serve as a monitor of the mechanism F. An ambulance from JPMC and AMAN are designated or transportation of patient</p>
02.	ISOLATION WARDS IN HOSPITALS	<p>Sindh Health department has establish isolation ward in nine tertiary care hospitals. The detail of hospitals along with capacity of beds in isolation ward is as under:</p> <ol style="list-style-type: none"> 1. Agha khan hospital 2. JPMC Karachi: (JPMC has constituted A RRT. The hosp has received PPEs From WHO-12 From Pvt sources-100 Designated Isolation areas earmarked. 10 x severely ill patients can be catered. 12 x moderately ill patients can be catered. Severe required ventilators whereas as moderate doesn't. Awareness pamphlet published. Mock Exercise / drill was carried out on 30 Jan to 1 Feb 2020.)

		<p>3. DUH, Ojha campus Karachi (no response)</p> <p>4. Civil hospital Karachi (Civil hospital Karachi has also established isolation rooms. But number. Of rooms are not confirmed)</p> <p>5. Liaquat university hospital Hyderabad (Designated Isolation areas earmarked. 12 x severely ill patients can be catered. 32 x moderately ill patients can be catered 04 Doctors & 06 Paramedics are assigned Awareness pamphlet published. Mock Exercise / drill was carried out)</p> <p>6. PMCH Nawabshah (Designated Isolation areas earmarked. 06 x severely ill patients can be catered. 10 x moderately ill patients can be catered 02 Doctors & 04 Paramedics are assigned. Awareness pamphlet published. Mock Exercise / drill was carried out)</p> <p>7. Civil hospital Mirpurkhas (Designated Isolation areas earmarked. 03 x severely ill patients can be catered. 01 Doctors & 02 Paramedics are assigned. Awareness pamphlet published. Mock Exercise / drill was carried out)</p> <p>8. GMMMC, Sukkur (Designated Isolation areas earmarked. 6 x severely ill patients can be catered. 02 Doctors & 04 Paramedics are assigned. Awareness pamphlet published. Mock Exercise / drill was carried out on 30 Jan to 1 Feb 2020.)</p>
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		<p>9. CMCH, Larkana (Designated Isolation areas earmarked. 10/12 severely ill patients can be catered. 02 Doctors & 04 Paramedics are assigned. Awareness pamphlet published. Mock Exercise / drill was carried out</p>
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SOP FOR HOSPITALS:

The administration of Civil hospitals shall apply following standard precautions for handling suspected/confirmed patients. Standard precautions include hand and respiratory hygiene, the use of appropriate personal protective equipment (PPE) according to risk assessment, injection safety practices, safe waste management, proper linens, environmental cleaning and sterilization of patient-care equipment.

The following respiratory hygiene measures are used:

- ✓ The administration shall ensure that all patients cover their nose and mouth with a tissue or elbow when coughing or sneezing;
- ✓ A medical mask to patients with suspected 2019-nCoV infection shall be offered while they are in waiting/public areas or in cohorting rooms; perform hand hygiene after contact with respiratory secretions.
- ✓ HCWs should apply the WHO’s My 5 Moments for Hand Hygiene approach before touching a patient, before any clean or aseptic procedure is performed, after exposure to body fluid, after touching a patient, and after touching a patient’s surroundings.

- Hand hygiene includes either cleansing hands with an alcohol-based hand rub (ABHR) or with soap and water; among patients, clean and disinfect it between use for each individual patient (e.g., by using ethyl alcohol 70%);
- HCWs should refrain from touching eyes, nose or mouth with potentially contaminated gloved or bare hands;
- Avoid moving and transporting patients out of their room or area unless medically necessary. Use designated portable X-ray equipment and/or other designated diagnostic equipment. If transport is required, use predetermined transport routes to minimize exposure for staff, other patients and visitors, and have the patient using a medical mask;
- Ensure that HCWs who are transporting patients perform hand hygiene and wear appropriate PPE as described in this section;
- Notify the area receiving the patient of any necessary precautions as early as possible before the patient's arrival;
- Routinely clean and disinfect surfaces which the patient is in contact;
- Limit the number of HCWs, family members and visitors who are in contact with a suspected and confirmed 2019-nCoV patient;
- Maintain a record of all persons entering the patient's room, including all staff and visitors.

AWARENESS CAMPAIGN:

The Health Department of Government of Sindh has released some advertisement in all leading news papers with regard to Novel Corona virus for awareness of masses of Sindh. The people of Sindh have been requested to adopt precautionary measures in daily life.

Moreover, the DHO of the all districts of Sindh have been directed to create awareness among masses while conducting walk, seminars and affixing some pan flex in hospitals.