CORONAVIRUS DISEASE (COVID-19)

Update at ISeek Live Event
3 March  2020

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Outline of Presentation

• Overview of COVID-19 and Outbreak Situation
• Key Messages on Prevention All Should Know
• Measures Taken by the UN to Prevent Spread Amongst and By UN Personnel
• Questions
Overview of COVID-19 and Outbreak Situation
What Are Coronaviruses?

- A large family of viruses
- Commonly known to cause mild respiratory disease eg common cold – OC43, NL63, 229E, HKU1
- Two previously identified coronavirus have caused severe diseases
  - Severe Acute Respiratory Syndrome (SARS) coronavirus (8000 cases / 800 deaths)
  - Middle East respiratory syndrome (MERS) coronavirus (more sporadic cases through direct exposure, 2400 cases)
What Is Coronavirus Disease (COVID-19)?

- New virus that causes respiratory illness in people
- First identified during an investigation into an outbreak in Wuhan China
- Probably originally emerged from an animal source
- WHO case numbers as of March 2
- Older adults and people with underlying health conditions may be at increased risk for severe disease

- Situation is rapidly evolving and changing / not stable yet
- >80% of confirmed cases have mild infection
- 13-15% of confirmed cases require hospital care
- 1-3% of confirmed cases deaths

For latest situation report go to: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/
Study: Majority Of Coronavirus Cases Are Mild

COVID-19 case severity (as of February 11, 2020)

- Mild: 80.9%
- Severe: 13.8%
- Critical: 4.7%

n=44,672 confirmed COVID-19 cases in Mainland China
Source: Chinese Centre for Disease Control and Prevention
Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 02 March 2020
Coronavirus COVID-19 Global Cases by Johns Hopkins CSSE

Total Confirmed: 91,313

Confirmed Cases by Country/Region:
- Mainland China: 80,151
- South Korea: 5,186
- Italy: 2,036
- Iran: 1,501
- Others: 708
- Japan: 274
- France: 191
- Germany: 165
- Spain: 120
- Singapore: 108
- US: 105
- Hong Kong: 100
- Kuwait: 56


Data sources: WHO, CDC, ECDC, NHC, and DXY. Read more in this blog. Contact US.

Downloadable database: GitHub: Here. Feature layer: Here.

https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6
How a virus with a reproduction number (R0) of 2 spreads

Patient 0 infects two people

...And they each infect two people

...And they each infect two people

Etc.
How contagious is the coronavirus?

Average number of people infected by an individual with the following:

- **Measles**: 12-18
- **Smallpox**: 5-7
- **Polio**: 5-7
- **Mumps**: 4-7
- **HIV/AIDS**: 2-5
- **SARS-CoV**: 2-5
- **Influenza**: 2-3
- **2019 nCoV (new coronavirus)**: 1.4-2.5
- **Ebola**: 1.5-2.5

* Based on current WHO estimated as of 23 Jan 2019.
Source: WHO via Spiegel.de
Outbreaks: cases vs. deaths
as of Feb. 26

- COVID-19 (global)
- Influenza and pneumonia (Canada, 2018)
- Ebola
- SARS
- MERS

Cases
Deaths

Source: World Health Organization
What To Look Out For: Fatality Rate vs Transmissibility

The diagram compares the fatality rates and transmissibility of various diseases, including MERS, Bird flu, Ebola, Smallpox, SARS, Spanish flu, New coronavirus, Swine flu, Seasonal flu, Polio, Common cold, Chickenpox, and Measles. The x-axis represents the estimated range of how many people can be infected by each sick person, while the y-axis shows the fatality rate on a logarithmic scale. The New coronavirus is highlighted as being more contagious and potentially deadlier than other diseases.
What Are the Symptoms of COVID-19?

• Patients had mild to severe respiratory illness with symptoms of:
  – Fever
  – Cough
  – Shortness of breath

• Some patients with complications had pneumonia in both lungs

• Transmission predominantly through symptomatic persons

• Incubation period thought to be 2-14 days
Is There a Vaccine or Treatment?

• There is currently **no vaccine** to protect against COVID-19.
  – Currently several vaccines in development
  – Have to enter into human trials
  – If successful, may be available in 12-18 months

• There is **no specific antiviral** treatment.
  – Several undergoing clinical trials (eg Remdesivir)
  – Results may be out in weeks/months
  – Treatment is mainly supportive to relieve any symptoms.
WHO: Update on Research & Logistics

• **WHO’s Research Priorities:**
  – Simpler diagnostic test
  – Optimal treatment and best treatment protocols
  – Transmission and epidemiology

• **Update on Logistics Issues**
  – Demand for PPE 100 x higher than normal, prices 20X higher
  – Due to widespread inappropriate use outside of patient care
  – Global stockpiles depleted with 4-6 months backlog
  – Responders need 7-10% of market capacity to protect frontline HCW in China
  – WHO discouraging stockpiling in areas of low transmission
Epicurve of Outbreak: China vs Rest of World
Key Messages on Prevention All Should Know
Key Staff Messages: How can I Help Protect Myself?

- Avoid close contact with people who are sick
- Avoid touching your eyes, nose, and mouth with unwashed hands
- Wash your hands often with soap and water for at least 20 seconds. Use an alcohol-based hand sanitizer if soap and water are not available

Reduce your risk of coronavirus infection:
- Clean hands with soap and water or alcohol-based hand rub
- Cover nose and mouth when coughing and sneezing with tissue or flexed elbow
- Avoid close contact with anyone with cold or flu-like symptoms
- Thoroughly cook meat and eggs
- Avoid unprotected contact with live wild or farm animals

Wash your hands
- Wash your hands with soap and running water when hands are visibly dirty
- If your hands are not visibly dirty, wash them with soap and water or use an alcohol-based hand cleanser
Stop Touching Your Face!
Cover nose and mouth with a disposable towel or elbow when sneezing/coughing. Dispose off used towels in a closed bin and wash hands as above.
Key Staff Messages: What Should I Do If I Am Sick?

- Stay home when you are sick
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash
- Clean and disinfect frequently touched objects and surfaces
- Do not come to workplace until you are free of any symptoms

Protect others from getting sick

Cover mouth and nose with tissue, sleeve or elbow when coughing or sneezing

Throw tissue into closed bin after use

Clean hands after coughing or sneezing and when caring for the sick

Wash your hands

Wash your hands with soap and running water when hands are visibly dirty

If your hands are not visibly dirty, wash them with soap and water or use an alcohol-based hand cleanser
8 STEPS TO CLEAN YOUR HANDS

1. Palm to palm
2. Between fingers
3. Back of hands
4. Base of thumbs
5. Back of fingers
6. Fingernails
7. Wrist
8. Rinse and wipe dry
Performing Hand Hygiene - How to hand rub

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

1a. Apply a palmful of the product in a cupped hand, covering all surfaces;

1b. Rub hands palm to palm;

2. Right palm over left dorsum with interlaced fingers and vice versa;

3. Palm to palm with fingers interlaced;

4. Backs of fingers to opposing palms with fingers interlocked;

5. Rotational rubbing of left thumb clasped in right palm and vice versa;

6. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

7. Once dry, your hands are safe.
WHO Recommendation on Face Masks

- The WHO does **not** recommend the use of facemasks for the general public to prevent the spread of COVID-19.

- You do not need to use a facemask if you have no symptoms (unless mandated by local authorities).

**WEAR A MASK ONLY IF**

- You have a FEVER, COUGH OR RUNNY NOSE
- You are RECOVERING FROM ILLNESS
How to Wear a Surgical Mask Properly?

Measures Taken by the UN to Prevent Spread Amongst UN Personnel
Overall Preparedness, Planning and Coordination

• Close **liaison with the WHO**, key stakeholders and mission leadership

• Internal Outbreak Management and Response:
  – Formal UN **Crisis Management Team** convened under leadership of WHO
  – SEPT/COG activated for UNHQ preparedness
  – DOS Working Group activated
  – Division of Healthcare Management and Occupational Safety and Health technical lead

• **Business continuity plans** have been developed globally including in field missions to allow critical functions to be performed with reduced number of personnel

• Provided all Missions with:
  – **Updates and directives from USG** on mitigating measures
  – Comprehensive COVID-19 **Preparedness Checklist** for implementation
  – COVID-19 **Administrative Guidelines**
  – **Psychosocial contingency** planning guidelines for adaptation
  – Meeting guidance for organisers and participants
2019-NCoV Preparedness Checklist for All Duty Stations

NOVEL CORONAVIRUS (2019-nCoV) PREPAREDNESS AND RESPONSE: A CHECKLIST FOR UN DUTY STATIONS

BACKGROUND

This preparedness checklist, developed by the Division of Healthcare Management and Occupational Safety and Health (DHMOSH), provides an outline to all UN duty stations of the essential minimum elements of preparedness and response to a novel coronavirus (2019-nCoV) outbreak.

All duty stations globally should review and implement this 2019-nCoV preparedness checklist. Duty stations that already have their own disease specific preparedness and response plan in place may use the checklist to evaluate the completeness of their current plan. (Please note that depending on whether you have a local UN medical services or not, some of the elements may or may not be applicable to your duty station.)

All duty stations globally, regardless if such an outbreak is occurring locally or not, should review this checklist in accordance with plans and guidance from your local health authorities. For questions, please contact dos-dhmosh-public-health@un.org

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<td>□ Senior officials of the duty station should be briefed on the current 2019-nCoV outbreak situation globally, its possible outcomes and related resource requirements for preparedness.</td>
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<td>□ Ensure systems are in place for close coordination with relevant stakeholders and partners (e.g. WHO country office, national government, health authorities)</td>
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<td>□ UN country office/mission should convene either a formal outbreak committee or an equivalent committee (e.g. SMT/CMT) for management of the outbreak, or if the need should arise later.</td>
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<td>□ Personal Hygiene</td>
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<td>□ All UN personnel should have awareness about 2019-CoV prevention strategies including hand hygiene, respiratory etiquette (covering coughs and sneezes), social distancing (minimum 3 feet or 1 meter), signs and symptoms, staying away from ill persons and staying home when ill. If applicable, UN medical staff should actively educate and raise awareness amongst UN personnel. For more information, see <a href="https://shr.un.org/poage/novel-coronavirus-2019-nnov">https://shr.un.org/poage/novel-coronavirus-2019-nnov</a> handle.</td>
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<td>□ Infection Control</td>
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<td>□ UN personnel returning from outbreak areas should be advised to return to work only if they are completely free from any signs and symptoms. They should be advised to monitor their health daily for 14 days after travel and to seek medical attention should they develop any signs and symptoms.</td>
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<td>□ HR personnel and managers are encouraged to exercise flexibility around remote working arrangements in case asymptomatic staff want to self-quarantine and work from home for 14 days post travel.</td>
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<td>□ All individuals who are ill must be advised to stay at home and not come into the workplace if they develop symptoms. They should only return to work when free of symptoms and/or once cleared by a medical professional.</td>
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<td>□ UN medical staff should review, familiarize and be trained to don and doff the PPE needed for management of a 2019-nCoV outbreak. For more information, see <a href="https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-ncov-infection-is-suspected-20190125">https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-ncov-infection-is-suspected-20190125</a></td>
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**Health Precautionary Messages**

- Sensitization and awareness raising amongst staff – townhalls, all staff broadcast messages, iSeek articles
- UN peacekeepers – to add in mandatory WHO’s COVID-19 training course (under 30 min) during pre-deployment and also as part of in-mission training
UN Health Facilities

- **Multiple training sessions to CMOs and hospital commanders** via expert VTC webinars on infection prevention and control measures, PPE use, clinical management
- For all UN medical personnel - instituted **mandatory COVID-19 pre-deployment and in-mission WHO training courses** on how to manage critical care severe respiratory illness
- SOP and **workflow for initial diagnosis and management of suspect cases** provided
- **Isolation rooms** set up in all UN health facilities
- **PPE inventory and provision** through systems contract
- Review of both **UN, in-country and ex-country medical capacities and capabilities** to deal with severe respiratory infection cases needing critical care
- Liason with **air ambulances** companies and WHO on medevac in countries with no ICU capacity to manage severe cases
- Testing of cases to be guided by WHO and local authorities
United Nations Division of Healthcare Management and Occupational Safety and Health

Initial Clinical Management and Infection Prevention and Control Measures of Patients Suspected to Have COVID-19 Infection

1. IDENTIFY

Does the patient have fever (38°C), cough or shortness of breath?

**YES**

PLACE FACE MASK ON PATIENT

Within 14 days of symptom onset, did patient travel from China or have close contact with a COVID-19 patient?

**YES**

ROUTINE TRIAGE AND MANAGEMENT (INCLUDING STANDARD PRECAUTIONS FOR ALL PATIENTS AT ALL TIMES)

Evaluate for COVID-19 and determine if patient meets WHO Case Definitions for:

**Suspect Case**
A. Patient with severe acute respiratory infection (fever, cough, and requiring admission to hospital), AND with no other etiology that fully explains the clinical presentation AND a history of travel to or residence in China during the 14 days prior to symptom onset,

**OR**
B. Patient with any acute respiratory illness AND at least one of the following during the 14 days prior to symptom onset:
   i. Contact with a confirmed or probable case of COVID-19 infection, and/or
   ii. Worked in or attended a healthcare facility where patients with confirmed or probable COVID-19 acute respiratory disease patients were being treated.

**Probable Case:** A suspect case for whom testing for COVID-19 is inconclusive or is tested positive using a pan-coronavirus assay and without laboratory evidence of other respiratory pathogens.

**Confirmed Case:** A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

**NO**

PATIENT MEETS ONE OF WHO CASE DEFINITIONS

**NO**

PLACE FACE MASK ON PATIENT

2. ISOLATE

1. Use standard precautions for all patients at all times.
2. Place masked patient in adequately ventilated single room (where possible). All personnel entering room must also follow contact and droplet precautions and use the following personal protective equipment (PPE): gloves, gown, medical/surgical mask and eye protection (goggles or face shields). N95 masks can be used here in place of surgical masks.
3. Airborne precautions should be added for aerosol generating procedures and includes N95 mask and eye protection.

3. INFORM

1. Inform WHO Office and local health authorities.
3. Follow local health authority and WHO guidelines on specimen collection.
WHO Online Training Course Will Be Made Mandatory for UN Health Care Workers

WHO Critical Care Severe Acute Respiratory Infection Training

Course is available

Welcome to the WHO Critical Care Training Short Course for Severe Acute Respiratory Infection (SARI).

Self-paced
Language: English

Enroll me for this course
Travel and Meetings

• WHO does not recommend any specific travel restrictions. However, UN Medical Directors recommend evaluating criticality of proposed travel
• Do not travel if sick
• Be aware that local authorities may implement travel restrictions and health screening measures at any time
• All UN personnel should comply with any public health measures put in place by local authorities.

• If you must travel:
  – Avoid contact with sick people
  – Discuss travel with your healthcare provider. Older adults and those with underlying health issues may be at risk for more severe diseases
  – Avoid animals, animal markets, or products that come from animals that are uncooked
  – Wash your hands frequently
  – Monitor your health during and after travel
UN Personnel Returning from Affected Areas

- Need to follow host country regulations
- UN personnel returning from an affected area should self-monitor for 14 days post travel.
- Be watchful of signs and symptoms and seek medical attention immediately via phone to their physicians if ill
- To strictly stay home if ill
WHO Recommendations for “Close Contacts”

1. Providing direct care without proper personal protective equipment (PPE) for COVID-19 patients;
2. Staying in the same close environment of a COVID-19 patient (including workplace, classroom, household, gatherings).
3. Traveling together in close proximity (1 m) with a COVID-19 patient in any kind of conveyance within a 14-day period after the onset of symptoms in the case under consideration.

- Above should be quarantined for 14 days from last time they were exposed to COVID-19 lab confirmed patient
Be Prepared for ANY Emergencies!

- 2 week supply of food and water
- Supply of any prescription medication
- Non-prescription medicines like pain reliever, stomach remedies, cough and cold medicines, fluids with electrolytes and vitamins
- Keep copies of your health records
Coping with stress during the 2019-nCoV outbreak

It is normal to feel sad, stressed, confused, scared or angry during a crisis.
Talking to people you trust can help. Contact your friends and family.

If you must stay at home, maintain a healthy lifestyle - including proper diet, sleep, exercise and social contacts with loved ones at home and by email and phone with other family and friends.

Don't use smoking, alcohol or other drugs to deal with your emotions.
If you feel overwhelmed, talk to a health worker or counsellor. Have a plan, where to go to and how to seek help for physical and mental health needs if required.

Get the facts. Gather information that will help you accurately determine your risk so that you can take reasonable precautions. Find a credible source you can trust such as WHO website or, a local or state public health agency.

Limit worry and agitation by lessening the time you and your family spend watching or listening to media coverage that you perceive as upsetting.

Draw on skills you have used in the past that have helped you to manage previous life's adversities and use those skills to help you manage your emotions during the challenging time of this outbreak.
Dedicated Coronavirus Disease 2019 Website for UN Personnel


Novel Coronavirus (2019-nCoV)

Coronaviruses are a large family of respiratory viruses with some causing less-severe disease, such as the common cold, and others more severe disease such as Middle-East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Some transmit easily from person to person, while others do not.

The Division of Healthcare Management and Occupational Safety and Health (DHMOSH) recommends the following key preventive measures against 2019-nCoV.

1. Take steps to prevent illness with respiratory pathogens:
   - Avoid close contact with people suffering from acute respiratory infections such as with fever, cough and difficulty breathing.
   - Perform frequent hand-washing, especially after direct contact with ill people or their environment.
   - Individuals with symptoms of acute respiratory infection should practice respiratory hygiene/cough etiquette including:
     - Maintain your distance from others;
     - Cover your mouth and nose with a disposable tissue when coughing or sneezing;
     - Use the nearest waste receptacle to dispose of the tissue after use;
     - Perform hand hygiene (e.g., hand washing with non-antimicrobial soap and water, alcohol-based hand rub, or antiseptic handwash) after having contact with respiratory secretions and contaminated objects/materials.
   - Avoid close contact and unprotected with live or dead farm or wild animals.
   - When handling live products in areas where occupational exposure of person providing supply or transport handled products with live animals and
Social Stigma associated with COVID-19

A guide to preventing and addressing social stigma

Target audience: Government, media and local organisations working on the new coronavirus disease (COVID-19).

WHAT IS SOCIAL STIGMA?

Social stigma in the context of health is the negative association between a person or group of people who share certain characteristics and a specific disease. In an outbreak, this may mean people are labelled, stereotyped, discriminated against, treated separately, and/or experience loss of status because of a perceived link with a disease.

Such treatment can negatively affect those with the disease, as well as their caregivers, family, friends and communities. People who don’t have the disease but share other characteristics with this group may also suffer from stigma.

The current COVID-19 outbreak has provoked social stigma and discriminatory behaviours against people of certain ethnic backgrounds as well as anyone perceived to have been in contact with the virus.

WHY IS COVID-19 CAUSING SO MUCH STIGMA?

The level of stigma associated with COVID-19 is based on three main factors: 1) it is a disease that’s new and for which there are still many unknowns; 2) we are often afraid of the unknown; and 3) it is easy to associate that fear with ‘others’.
Solidarity, Not Stigma

- WHO has advised against any restrictions of international traffic and UN is aligned with that. Countries may elect to implement bans independently.

- Promote message of “Solidarity, Not Stigma”

- Do not show prejudice to people of specific race or nationality, because of fear of this new virus.

- Do not assume that someone of a specific race or nationality is more likely to have COVID-19.
Dr. Esther Tan (tan2@un.org)

Public Health Email Address
dos-dhmosh-public-health@un.org

Dedicated COVID-19 Website for UN Personnel