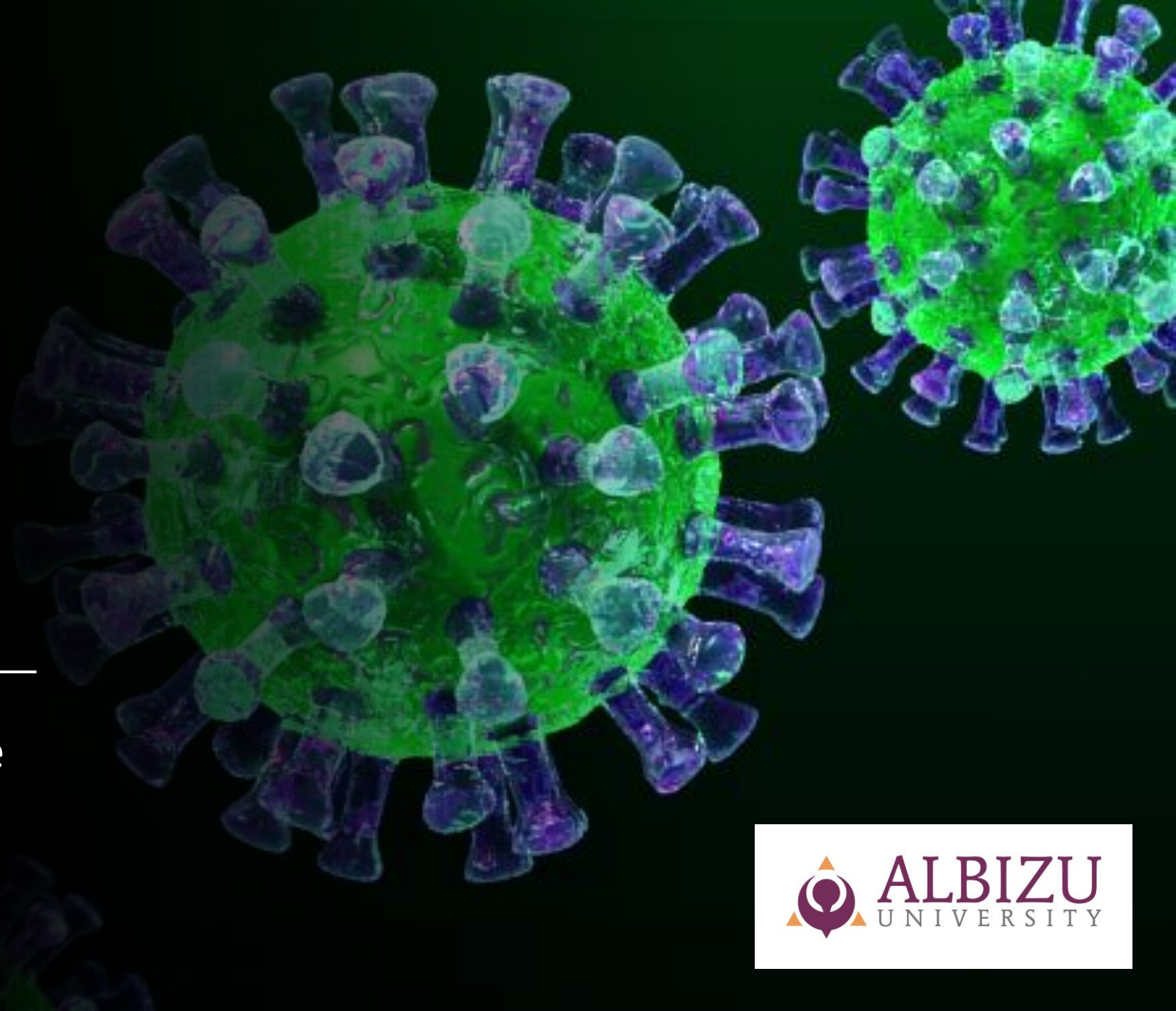
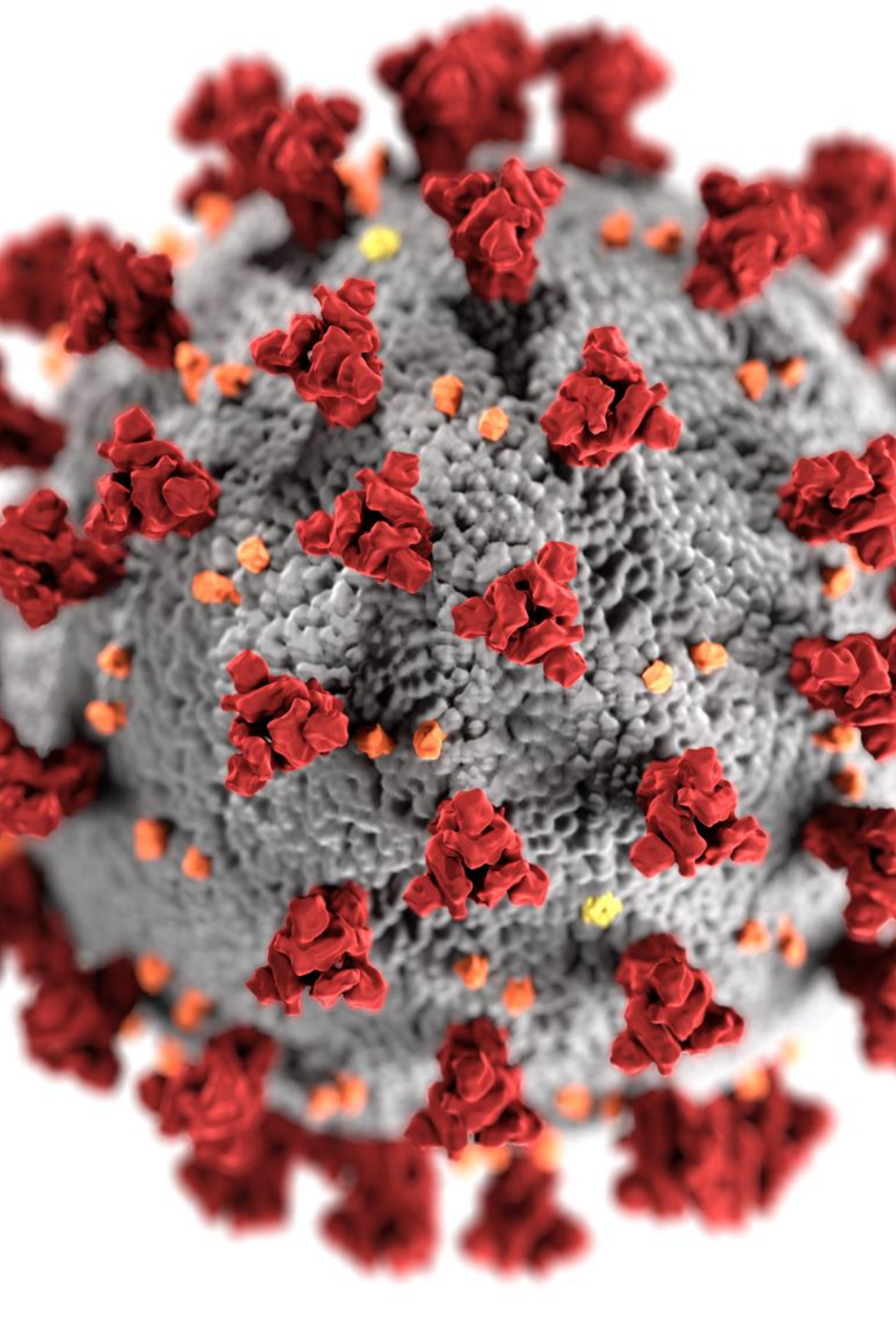


# Novel Coronavirus 2019 (COVID-19)

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Background and Disease  
Management





# Coronavirus Background

Coronaviruses (CoV) are a family of viruses, some cause:

- Respiratory diseases
- Gastrointestinal diseases

Respiratory diseases can cause:

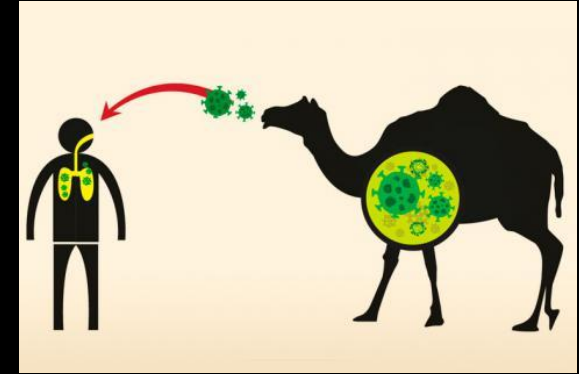
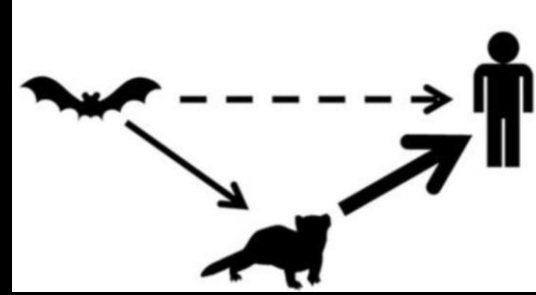
- Common cold
- Pneumonia
- Middle East Respiratory Syndrome (MERS-CoV)
- Severe Acute Respiratory Syndrome (SARS-CoV)
- **Novel Coronavirus 2019 (COVID-19)**

Has a sphere shape, composed of:

- Genetic material
- Cover or membrane
- Spike-shaped proteins (giving the appearance of a crown)

# Background

- Coronaviruses can spread from animals to people (zoonotic transmission) through spillover.
- Spillover: when a reservoir organism (animal) of a pathogen (virus or bacteria) become in contact with a new host (human).
  - SARS - China 2003 (bats and genet cat)
  - MERS - Saudi Arabia 2012 (dromedary camels)
  - **COVID-19** - Wuhan, China 2019 (associated with shellfish and living animals in markets)



# COVID-19

## Signs and Symptoms

- Symptoms can range from mild to severe:
  - Mild:
    - Fever
    - Cough
    - Breathing difficulty
  - Severe
    - Pneumonia
    - Kidney failure

## Transmission

- People infected with COVID-19 can transmit it to:
  - Immediate caregivers or people around
  - Healthcare staff
- Transmission:
  - Droplets suspended in the air after the infected person speaks, coughs or sneezes.
  - Surfaces previously contaminated by the infected person.
- Elders and people with heart diseases, diabetes or lung diseases are at greater risk of infection.

# Diagnosis

- Method of diagnosing:
  - Polymerase Chain Reaction Test (PCR)
- This test identifies the genetic footprint and type of virus.

# Treatment

- Currently, there is **no treatment** or medication for COVID-19.
- Currently, there is **no vaccine** for COVID-19.
- Only medical care is provided to control and reduce symptoms.
- Treatment and vaccine against COVID-19 is under development.

# Prevention and Hygiene Methods

Cover your mouth and nose with disposable tissues or the inside area of your elbow, when you cough or sneeze.

Avoid close contact with people who are sick or have symptoms.

Appropriate use of masks and personal protective equipment (disposable gloves, face goggles, disinfectants, others)

Wash your hands regularly with soap and water for at least 20 seconds or use hands sanitizer with 70% or more ethyl alcohol.

# Prevention and Hygiene Methods

Avoid touching your mouth, nose or eyes without having previously washed your hands.

Avoid unnecessary contact with animals or wash your hands after contact with animals and / or their waste.

Cook animal products thoroughly before consume.

If you have symptoms associated with COVID-19, you should seek medical attention immediately.

If you travel, you must share your travel history with your employer, doctor and/or healthcare provider.

# What should you do if you traveled or will travel to countries on COVID-19 alert?

- The essential step in planning a trip is to verify the travel notices of the destination where you are going.
- There are 4 levels of travel prevention designated by the US Department of State:
  - Level 1: Take normal precautions
  - Level 2: Increase prevention measures
  - Level 3: Reconsider traveling
  - Level 4: Do not travel
- If you traveled to a country with a level 3 or level 4 alert, you must remain in isolation for a period of 14 days and you should immediately contact your health care provider if you begin to feel symptoms.



# Where can I access for more information?

- General information on COVID-19:
  - [www.paho.org/coronavirus](http://www.paho.org/coronavirus)
- WHO interactive world map with daily updated statistics:
  - <https://who.maps.arcgis.com/apps/opsdashboard/index.html#/c88e37cfc43b4ed3baf977d77e4a0667>
- Masks management:
  - [https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-\(ncov\)-infection-presenting-with-mild-symptoms-and-management-of-contacts](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts)
- COVID-19 online course (3 hours):
  - <https://openwho.org/courses/introduction-to-ncov>
- MERS
  - [https://wwwnc.cdc.gov/eid/article/26/2/19-0697\\_article](https://wwwnc.cdc.gov/eid/article/26/2/19-0697_article)
- SARS
  - <https://www.who.int/ith/diseases/sars/en/>
- Passenger handling in entry ports:
  - <https://www.who.int/publications-detail/management-of-ill-travellers-at-points-of-entry-international-airports-seaports-and-ground-crossings-in-the-context-of-covid--19-outbreak>
- Travel alert information:
  - <https://travel.state.gov/content/travel/en/traveladvisories/traveladvisories.html/>

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