

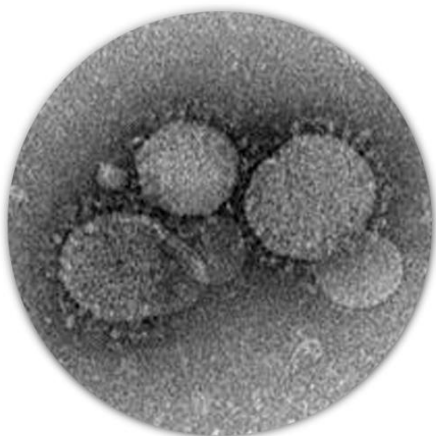
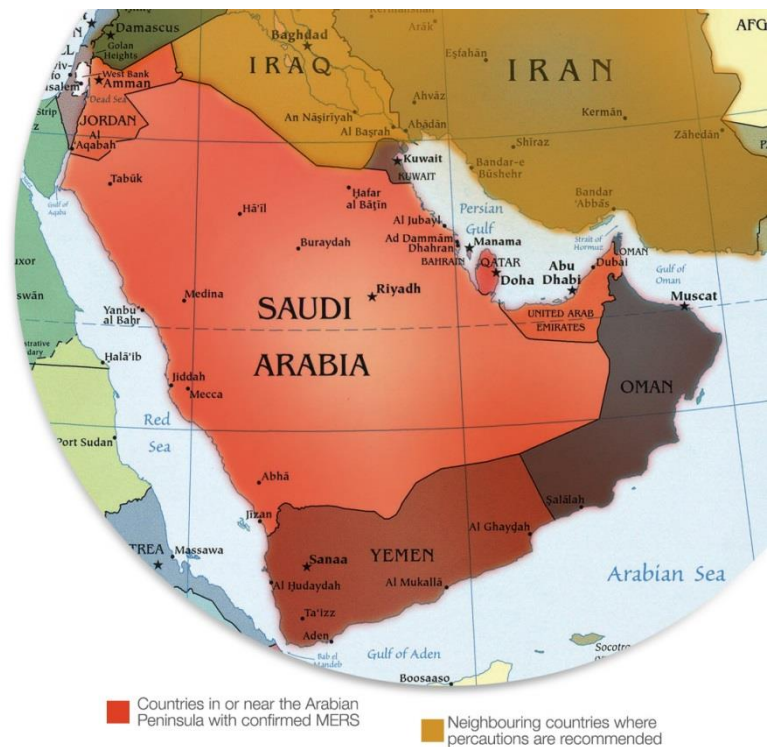
3rd October 2018

Advisory on Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

Middle East Respiratory Syndrome (MERS) is a viral respiratory illness that was first reported in Saudi Arabia in 2012. It is caused by a coronavirus called MERS-CoV. Most people who have been confirmed to have MERS-CoV infection developed severe acute respiratory illness. They had fever, cough, and shortness of breath.

The Middle East respiratory syndrome coronavirus (MERS-CoV) is a new member of the beta group of coronavirus, *beta-coronavirus*, lineage C. It is a positive-sense, single-stranded RNA virus.

Research studies support that camels serve as the primary source of the MERS-CoV infecting humans, while bats may be the ultimate reservoir of the virus. MERS-CoV is distinct from SARS, the common-cold coronavirus and known endemic human beta-coronaviruses.



Since it surfaced in 2012, 27 countries have reported 2258 cases of MERS CoV as of 1 October 2018. The case fatality case (death rate) is about 30%.

Approximately 80% of human cases have been reported by Saudi Arabia where people get infected through contact with infected dromedary camels or infected people. Cases identified outside the Middle East are usually travelers who were infected in the Middle East and then travelled to areas outside the Middle East. On rare occasions, outbreaks have occurred in areas outside the Middle East.

The largest known outbreak of MERS outside the Arabian Peninsula occurred in the Republic of Korea in 2015 and was associated with a traveler returning from the Arabian Peninsula.



On 9 September 2018, it reported another imported case of a 61 year-old male Korean national who visited Kuwait on business from 16 August to 6 September 2018.

WHO expects that additional cases of MERS-CoV infection will be reported from the Middle East and that sporadic cases will continue to be exported to other countries by individuals who have acquired the infection after exposure to infected animals, animal products or human cases.

No cases of MERS-CoV have been detected in Singapore thus far. The risk of an outbreak in our community also remains low as sustained human-to-human transmission of the virus has not been reported.

FREQUENTLY ASKED QUESTIONS

What is MERS?

Middle East Respiratory Syndrome (MERS) is a viral respiratory illness. MERS is caused by a coronavirus called “Middle East Respiratory Syndrome Coronavirus” (MERS-CoV).

What is MERS-CoV?

MERS-CoV is a beta coronavirus. It was first reported in 2012 in Saudi Arabia. MERS-CoV used to be called “novel coronavirus,” or “nCoV”. It is different from other coronaviruses that have been found in people before.

What is the source of MERS-CoV?

We don’t know for certain where the virus came from. However, it likely came from an animal source. Camels and bats have been implicated as natural reservoir for the virus.

What are the countries with laboratory-confirmed MERS cases?

Countries in the Arabian Peninsula with MERS Cases:

Bahrain, Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, United Arab Emirates (UAE), and Yemen

Countries outside of the Arabian Peninsula with travel-associated MERS cases: Algeria, Austria, China, Egypt, France, Germany, Greece, Italy, Malaysia, Netherlands, Philippines, Republic of Korea, Thailand, Tunisia, Turkey, United Kingdom (UK), and United States of America (USA)

Is MERS-CoV the same as the SARS virus?

No. MERS-CoV is not the same coronavirus that caused Severe Acute Respiratory Syndrome (SARS) in 2003.



What are the symptoms of MERS?

Most people who got infected with MERS-CoV developed severe acute respiratory illness with symptoms of fever, runny nose, sore throat, cough, and shortness of breath. Gastrointestinal symptoms, including diarrhoea, have also been reported.

It is not always possible to identify patients with MERS-CoV early symptoms are non-specific.

The virus appears to cause more severe disease in people with weakened immune systems, older people, and those with such chronic diseases as diabetes, cancer and chronic lung disease.

Does MERS-CoV spread from person to person?

MERS-CoV has mostly spread from ill people to others through close contact, such as providing unprotected care to an infected person. The observed non-sustained human-to-human transmission has occurred mainly in health care settings, such as hospitals.

Community-acquired human infections with MERS-CoV have occurred from direct or indirect contact with infected dromedary camels.

Human-to-human transmission can be stopped with adequate infection prevention and control measures.

The risk of an outbreak in our community remains low as sustained human-to-human transmission of the virus has not been reported.

How is MERS-CoV transmitted?

The virus is primarily spreads through airborne and droplet transmission such as through coughing.

Is there a vaccine against MERS-CoV?

Currently, there is no vaccine against MERS-CoV.

Can I still travel to countries in the Arabian Peninsula or neighbouring countries where MERS cases have occurred?

Yes. WHO does not recommend that anyone change their travel plans because of MERS.

When visiting a farm or a barn, general hygiene measures, such as regular hand washing before and after touching animals, avoiding contact with sick animals, and following food hygiene practices such as avoid consuming unpasteurised milk, and undercooked meats and eggs, should be adhered to. Travellers are advised to follow standard precautions, such as hand washing and avoiding contact with people who are ill.

Prior to overseas travel, you are also encouraged to refer to the MOH web page on MERS-CoV for the latest Health Advisory.



What preparation should be taken before travel?

- Protect yourself with your annual flu vaccinations, especially those travelling to or planning to travel to affected countries. This will help prevent infection by influenza (flu), which may have symptoms similar to MERS, leading to unnecessary anxiety, inconveniences and investigations.
- In addition to flu vaccination, travellers to Middle East and Umrah and Haj pilgrims should be vaccinated against meningitis.
- Persons aged 65 years and above or with chronic medical conditions should also get vaccinated against pneumococcal infections.
- Persons with pre-existing medical conditions such as diabetes, and chronic heart and lung diseases, should consult a family physician for assessment as to whether making the trip is medically advisable.



What if I recently travelled to countries in the Arabian Peninsula or neighbouring countries and got sick?

- If you develop a **fever** and symptoms of respiratory illness, such as **cough** or **shortness of breath**, **within 14 days after travelling from Arabian Peninsula and its neighboring countries or countries with reported cases of MERS**, you should minimise contact with others, put on a surgical mask to reduce exposure and proceed to Tan Tock Seng Hospital or KK Women's and Children's Hospital (for children under 16 years of age) for further evaluation, testing and follow up.
- If you are unsure of your symptoms, but suspect that you may be infected with MERS-CoV, you should put on a surgical mask and seek advice and medical attention from your family physician promptly. You should inform the doctor of the areas that you have travelled to and any possible encounter with ill contacts.



What happens when a case of MERS is suspected?

All suspected and confirmed cases will be isolated and managed under strict airborne infection control precautions. If a case is detected, MOH will conduct contact tracing when appropriate, and all close contacts will be placed under quarantine.



Is there a laboratory test?

There are two tests currently available, through:

1. Collecting a respiratory sample and using a test called PCR to determine if a person has active infection with the virus
2. Blood sample to detect antibodies to MERS-CoV that would indicate a person had a recent infection.

MOH and healthcare institutions remain vigilant to test for MERS-CoV where clinically indicated, such as in patients with serious respiratory illness and a compatible travel history.

What treatment is available?

Currently, there is no specific treatment for MERS. Medical care is supportive and to help relieve symptoms. Therefore, prevention is better than cure.

How can I stay healthy and protect myself?

1. Wash your hands often with soap and water for 20 seconds, and help young children do the same. If soap and water are not available, use an alcohol-based hand sanitiser.
2. Avoid touching your eyes, nose, and mouth with unwashed hands.
3. Clean and disinfect frequently touched surfaces, such as toys and doorknobs.
4. Cover your nose and mouth with a tissue when you cough or sneeze then throw the tissue in the trash.
5. Avoid close contact, such as kissing, sharing cups, or sharing eating utensils, with sick people.
6. Avoid consuming unpasteurised milk, and undercooked meat and eggs.
7. Other general advices to stay healthy:
 - Eat a healthy diet.
 - Ensure adequate hydration.
 - Have adequate sleep and rest.
 - Exercise regularly.
 - Have your annual flu vaccination – especially high-risk groups such as people with pre-existing heart and lung disease, immunocompromised patients and the elderly.



ADVICE TO OUR VALUED CORPORATE CLIENTS

We encourage the Human Resource Department to contact our respective Raffles Medical Group Account Manager for further information and assistance.

While there is NO vaccination against MERS-CoV, vaccinations against influenza and pneumococcal infection will help prevent these common infections which have similar symptoms as MERS-CoV.

We strongly advise all employees to be updated on their annual flu vaccinations, especially those travelling to or planning to travel to affected countries.

In addition to flu vaccination, clients travelling to Middle East and Umrah should be vaccinated against meningitis. Persons aged 65 years and above or with chronic medical conditions should also get vaccinated against pneumococcal infections.

Surgical and N95 masks are also available at our clinics, while stocks last.

A photograph of a dark chalkboard with a wooden frame. The text "AN OUNCE OF PREVENTION IS BETTER THAN CURE" is written in white, bold, serif capital letters. The chalkboard is mounted on a light-colored wall, and its reflection is visible below it.

AN OUNCE OF
PREVENTION IS
BETTER THAN CURE



Hand Hygiene

Hand Rubbing and Washing Techniques At A Glance

Objective:

remove micro-organisms which may cause transmission of infections.



Hand Rub

Start by applying a palmful of sanitiser for hand rub



Hand wash

Wet hands before applying soap for hand wash



1. Rub hands palm to palm



2. Right palm over left dorsum and left palm over right dorsum



3. Palm to palm with fingers interlaced



4. Backs of fingers to opposing palms with fingers interlocked



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



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



7. Rotational rubbing of right wrist and vice versa



Hand wash

For hand wash, rinse off soap completely and dry hands thoroughly after washing



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WEARING AND REMOVING YOUR N95 RESPIRATOR CORRECTLY

(Cone Mask)

WEARING THE RESPIRATOR



- Step 1:** Select the correct respirator size which you were fitted.
- Step 2:** Place your palm through the loops of your respirator and cup it over your face.



- Step 1:** Position the respirator to cover the nose and chin.
- Step 2:** With one hand holding the respirator, use the other hand to place the first strap onto the crown of the head (above the ears), then place the second strap onto the back of the neck.



- Step 1:** Using two fingers of both hands, press down the metal piece according to the contour of your nose bridge.

NEVER PINCH THE METAL PIECE!

POSITIVE PRESSURE FIT CHECK



- Step 1:** With both hands over the respirator, exhale strongly to check for leakage around it.
- Step 2:** Leakage is evident when your hair moves during the strong exhale. If wearing glasses, fogging of the glasses indicate leakage.
- Step 3:** If air leak is noted, adjust respirator, straps, and nose piece before testing again.

REMOVING THE RESPIRATOR



- Step 1:** With both hands, slowly lift the bottom strap from around your neck up and over your head.
- Step 2:** Lift off the top strap. Do not touch the respirator.

RESPIRATOR IN CORRECT POSITION*



RafflesHospital

*Change respirator when it's moist





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