MIDDLE EAST RESPIRATORY SYNDROME (MERS-CoV)

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The Reader Will Be Able To…

• List three signs of MERS-CoV.

• Recall three ways MERS-CoV can be transmitted.

• Describe three ways MERS-CoV can be prevented.

• Identify three ways to prevent the spread of MERS-CoV.
What Is Middle East Respiratory Syndrome (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 was first reported in 2012 in Saudi Arabia.

Source: NBC News
What Is A Coronavirus…

- Coronaviruses are a large family of viruses that includes viruses that may cause a range of illnesses in humans, from the common cold to SARS.

- Viruses of this family also cause a number of animal diseases.

- This particular strain of coronavirus has not been previously identified in humans.

- There is very limited information on transmission, severity and clinical impact with only a small number of cases reported thus far.

Source: WHO
What Is A Coronavirus…

- These viruses usually cause mild to moderate upper-respiratory tract illnesses.

- Coronaviruses may also infect animals.

- Most of these coronaviruses usually infect only one animal species or, at most, a small number of closely related species.

Source: washing.edu
Where Did MERS - CoV Come From…

• At this time, it is unclear where the virus developed.

• MERS-CoV most likely came from an animal source.

• In addition to humans, it has been found in camels in Qatar, Egypt and Saudi Arabia, and in a bat in Saudi Arabia. (CDC)

• Camels in a few other countries have also tested positive for antibodies to MERS-CoV which means they were previously infected with MERS-CoV or a closely related virus.
How Is MERS-CoV Transmitted…

- MERS-CoV is transmitted by water droplets that are expelled from the lungs when a person breathes, coughs or sneezes.

- MERS-CoV has been shown to be transmitted by close contact with a person who is infected with the virus.

- A close contact to the ill person includes:
  - Health care provider providing care to an ill patient.
  - Family member who is taking care of the ill person at home.
  - Anyone who visited the person when the person was ill.
  - A person who has traveled with the ill person within the past 14 days.
Am I At Risk For Developing MERS-CoV...

- The groups at highest risk for developing MERS-CoV are:
  - Infants/Children
  - Elderly
  - People with immune system problems
  - Chronic Heart, Lung and Kidney problems
  - Pregnant women
  - People with Diabetes

- A person who has traveled to one of the locations that has had confirmed lab tests that are positive for MERS-CoV.
What Are The Symptoms…

- Most people with MERS-CoV develop respiratory illness with these symptoms:
  - Fever above 100.4°F
  - Cough/ Runny nose
  - Shortness of breath
  - Pneumonia
  - Chills/ Body Aches
  - Sore Throat
  - Headache
  - Nausea/Vomiting
  - Diarrhea

- Symptoms usually develop 2-14 days after exposure to a person infected with MERS-CoV

- Or following travel from countries in or near the Arabian Peninsula within 14 days before onset of symptoms.

There is no evidence of transmission of MERS-CoV in the general public. (ISDH)
Countries With Lab-Confirmed MERS-CoV Cases…

- Countries in the Arabian Peninsula with cases
  - Saudi Arabia
  - United Arab Emirates (UAE)
  - Qatar
  - Oman
  - Jordan
  - Kuwait

- Countries with travel-associated cases
  - United Kingdom (UK)
  - France
  - Tunisia
  - Italy
  - Malaysia
  - United States of America (USA)
What If I Become Infected With MERS-CoV…

- Call ahead before visiting your doctor for your medical appointment. Call the healthcare provider and tell him or her that you may have MERS-CoV infection.

- This will help the healthcare provider’s office take steps to keep other people from becoming infected.
If You Are Sick With MERS-CoV…

• Stay home:
  • You should restrict activities outside your home, except for getting medical care.
  • Do not go to work, school, or public areas, and do not use public transportation.
  • Separate yourself from other people in your home as much as possible, you should stay in a different room from other people in your home.
  • Also, you should use a separate bathroom, if available.
If You Are Sick With MERS-CoV…

- Wear a facemask:
  - You should wear a facemask when you are in the same room with other people and when you visit a healthcare provider.
  - If you cannot wear a facemask, the people who live with you should wear one while they are in the same room with you.

- Cover your coughs and sneezes:
  - Cover your mouth and nose with a tissue when you cough or sneeze, or you can cough or sneeze into your sleeve.
  - Throw used tissues in a lined trash can, and immediately wash your hands with soap and water.
If You Are Sick With MERS-CoV…

• Avoid sharing household items:
  • You should not share dishes, drinking glasses, cups, eating utensils, towels, bedding, or other items with other people in your home.
  • After using these items, you should wash them thoroughly with soap and warm water.

• Wash your hands:
  • Wash your hands often and thoroughly with soap and water.
  • You can use an alcohol-based hand sanitizer if soap and water are not available and if your hands are not visibly dirty.
  • Avoid touching your eyes, nose, and mouth with unwashed hands.

• To learn more click on the picture.
What Tests Can Be Done…

• A swab can be taken from the nose.
• A swab from the throat.
• Phlegm that is coughed up may be used.
• A blood test
• Stool sample
How Is MERS-CoV Treated…

• There is no specific treatment recommended at this time for the treatment of MERS-CoV.

• Medical care may be needed to take care of the symptoms of the disease.

• At this time, there is not a vaccine for MERS-CoV.
How Can I Prevent MERS-CoV…

- 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 a hand sanitizer.

- Cover your nose and mouth with a tissue when you cough or sneeze, then throw the tissue in the trash.
How Can I Prevent MERS-CoV…

- Avoid touching your eyes, nose, and mouth with unwashed hands.

- Avoid close contact, such as kissing, sharing cups, or sharing eating utensils, with sick people.

- Clean and disinfect frequently touched surfaces, such as toys and doorknobs.
How To Wash Your Hands...

1. Wet hands
2. Use liquid soap
3. Lather, rub and count to 15
4. Rinse
5. Towel or air dry hands
6. Turn off taps with towel or your sleeve

Source: City of Ottawa
1. Place a drop of alcohol-based hand sanitizer, the size of a dime in your palm.

2. Rub hands together; palm to palm.

3. Rub back of each hand with palm and interlaced fingers of the other hand.

4. Rub around each thumb clasped in the opposite hand.

5. Rub fingertips of each hand backward and forward in the opposite hand.

6. Keep rubbing until your hands are dry. Paper towels are not needed.

Source: City of Ottawa
Stop the spread of germs that make you and others sick!

Cover your Cough

Cover your mouth and nose with a tissue when you cough or sneeze or cough or sneeze into your upper sleeve, not your hands.

Put your used tissue in the waste basket.

Clean your Hands after coughing or sneezing.

Wash hands with soap and warm water or clean with alcohol-based hand cleaner.
Sources...

- Center For Disease Control And Prevention
- Indiana State Department Of Health
- Minnesota Department Of Health
- ProMed
- World Health Organization