

Middle East respiratory syndrome coronavirus

MERS-CoV is believed to have originated in bats and then spread to camels and has spread to humans from animals

Middle East respiratory syndrome coronavirus (MERS-CoV) is a virus that has spread to humans from animals. It is a type of coronavirus (a family of viruses that can cause respiratory infections, including the common cold). MERS-CoV was first recognised in Saudi Arabia in 2012, and although its origins are not fully understood, it is believed to have originated in bats and then spread to camels.

Symptoms include fever and cough, which may lead to severe pneumonia, causing shortness of breath and breathing difficulties. In some cases, diarrhoea is the first symptom. The virus appears to cause more severe illness in older people, those with weakened immune systems and anyone with conditions such as cancer, chronic lung problems, diabetes and kidney disease.

Although many human MERS-CoV cases have been linked to human-to-human infections in healthcare settings, current scientific evidence suggests that dromedary camels are a major host for MERS-CoV and a source of infection in humans. However, the exact role of camels in spreading MERS-CoV is not clear.

Risk of MERS-CoV infection to United Kingdom (UK) residents in the UK is very low. The risk of infection with MERS-CoV to UK residents travelling to the Middle East is very low but may be higher for those with exposure to specific risk factors within the region. This includes contact with camels or camel products and/or use of the local health care system.

Prevention

All travellers to the Middle East are advised to avoid contact with camels and sick animals as much as possible. Travellers, particularly those with chronic medical conditions, should practise good general health measures, such as regular hand washing with soap and water at all times, but especially after visiting farms, barns or market areas in the Middle East.

Travellers should also:

- Avoid raw camel milk and/or camel products, including meat (raw or undercooked) from the Middle East.
- Avoid eating or drinking any type of raw milk, raw milk products and any food that may be contaminated with animal secretions, unless cleaned and/or thoroughly cooked or fruit that can be peeled.
- If you must visit farms, barns and market areas where camels are present or go on camel rides, practise good general hygiene measures, including regular hand washing with soap and water at all times.
- If you have diabetes, kidney problems, chronic lung disease or a weakened immune system (immunosuppression) you are at risk of severe MERS-CoV illness and should avoid all areas where camels are found. If you do visit farms, barns or market areas or go on camel rides clean your hands regularly, including before and after attending or touching

- animals.
- Follow advice of local health authorities.
- If you are acutely ill with an infectious illness, you are advised not to travel, but stay at your destination and get local health advice immediately.

The UK Health Security Agency (UKHSA) and NaTHNaC provide specific guidance for travellers [MERS-CoV: advice for those travelling to the Middle East](#).

Pilgrims planning to visit the Kingdom of Saudi Arabia for Hajj or Umrah should read our [factsheet](#) for updated information.

There is currently no preventive vaccine or specific treatment for MERS-CoV. Care is supportive and based on the patient's condition.

UK travellers returning from the Middle East developing fever and a cough within 14 days of travel should seek medical advice by calling their GP or [NHS 111](#) reporting their travel history so appropriate clinical assessment can be made. It is important that returning travellers give details of any recent travel history to the health professional, so that appropriate measures and testing can be carried out.

The UKHSA and NaTHNaC provide specific guidance for returning travellers; [MERS-CoV: Have you travelled from the Middle East?](#)

More detailed information on [MERS-CoV can be found on the UKHSA website](#).

Resources

- [European Centre for Disease Control and Prevention: MERS-CoV worldwide overview](#)
- [World Health Organization: Middle East respiratory syndrome coronavirus \(MERS-CoV\)](#)
- [UKHSA: MERS-CoV: public health investigation and management of possible cases](#)