

# Questions answered about MERS

As concern increases about Middle Eastern Respiratory Syndrome, or MERS, in the Middle East and in Asia, Dr. Peter Hotez, dean of the National School of Tropical Medicine at Baylor College of Medicine, answers questions on what we need to know about this emerging infectious disease.

#### **WHAT IS MERS?**

It is a serious lower respiratory infection caused by the MERS coronavirus. This emerging viral pathogen was first acquired from camels, but now has limited human-to-human transmission.

### WHAT ARE THE SYMPTOMS?

The symptoms include fever, cough, and respiratory symptoms that could lead to respiratory failure and other organ system breakdown. This infectious disease is similar to SARS (severe acute respiratory syndrome) that caused a severe and highly lethal outbreak in South China in 2002–2003. Some data from previous SARS outbreaks indicate that 13% of cases may have no symptoms and this could also be true for MERS.

#### **HOW IS IT SPREAD?**

The mode of spread is still not well known. In general, it involves close contact, especially in health care settings. For SARS, a related coronavirus, sneezing and cough seems to facilitate transmission.

### IS THERE A TREATMENT? IS THERE A VACCINE?

There is no proven antiviral treatment, yet, for MERS. Several prototype vaccines are in different stages of development.

# WHO IS AT RISK? ANY GROUPS MORE AT RISK?

For about 30 to 40%, of people who get MERS, the disease is fatal. At greatest risk of dying are the elderly and those with underlying heart and lung disease or diabetes.

## SHOULD WE BE CONCERNED?

The MERS epidemic in South Korea looks as though it will be contained soon with all new cases appearing among the estimated 3,000 people in quarantine. However, in Saudi Arabia and elsewhere on the Arabian Peninsula, new cases continue to appear. Individuals thinking about travelling to the Arabian Peninsula should consult their doctor if they are elderly or have underlying chronic disease conditions.

