

Experts agree next steps to combat global health threat MERS-CoV

27 SEPTEMBER 2017 / GENEVA - Critical next steps to accelerate the response to the global public health threat posed by Middle-East respiratory syndrome coronavirus (MERS-CoV) have been agreed by representatives from the Ministries of Health and Ministries of Agriculture of affected and at risk countries, and experts. The virus, which circulates in dromedary camels without causing visible disease, can be fatal for humans.

At a meeting hosted by the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the World Organisation for Animal Health (OIE) in Geneva this week, more than 130 experts from 33 countries, organizations and research institutions met to share what is known about the virus, identify priority research needs, improve cross-collaboration between animal and human health sectors and agree on a plan to address crucial gaps.

“MERS is not only a regional threat. While the majority of human cases have been reported from the Middle-East, the outbreak in the Republic of Korea in 2015 showed MERS’ global reach and capacity to have significant public health and economic consequences,” said Dr Maria Van Kerkhove, MERS-CoV Technical Lead in WHO’s Health Emergencies programme. “We are at the stage where we have to confront the challenges in our ability to detect and respond to MERS outbreaks and improve our knowledge about this virus through collaborative research,” she said.

Since 2012, when the virus was first identified in Saudi Arabia, there have been 2081 laboratory-confirmed cases of MERS-CoV infection reported to WHO from 27 countries, with at least 722 deaths - a fatality rate of 35%. While progress has been made in research and surveillance, significant gaps remain in understanding the virus, including how it circulates in dromedary camels, the natural reservoir host, or how it spills over into the human population.

“MERS-CoV is a disease with a significant impact on public health, which requires further investigations in animal sources to better understand its epidemiology and improve its control in humans. OIE Member Countries are requested to notify any occurrences of

MERS-CoV in animals. This crucial information will contribute to escalating a coordinated response from the animal and human health sectors”, said Dr Gounalan Pavade, Chargé de mission, OIE.

More than 80% of MERS cases have been reported from Saudi Arabia. While many of these people were infected in health care facilities, with improved data collection on MERS patients since 2015, a significant proportion of recently reported human cases are believed to have been exposed through direct or indirect contact with infected camels. Frequent international travel has allowed sporadic cases to be exported to every region of the world by individuals who are unknowingly infected before they travel.

“It is in our common interest to address the disease in the human-animal interface, work across sectors and disciplines, together for the sake of our shared goals, healthy people and healthy animals” said Dr Ahmed El Idrissi, Senior Animal Health Officer, FAO. “In doing so we recognize the importance of a One Health approach to health threats of animal origin”.



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Human to human transmission remains limited, but health-care associated outbreaks have occurred in several countries in the Middle East and in the Republic of Korea. Infection prevention and control measures are vital to prevent the possible spread of the disease in hospitals and clinics and to protect health-care workers, visitors and other patients. No vaccine or specific treatment is currently available and treatment is supportive and based on the patient’s clinical condition.

MERS-CoV is one of the high threat pathogens included in the WHO’s Research & Development Blue Print which provides a road map for research and development of diagnostic, preventive and therapeutic products for prevention, early detection and response to these threats caused by a list of 11 high prioritized pathogens.

The MERS research priorities and activities being guided by WHO, FAO and OIE build on a series of regional and global meetings organized by the three organizations over the past five years. While tremendous progress has been made, particularly at addressing some key unknowns about the behaviour of this virus in animals and humans, some fundamental gaps about MERS-CoV remain. The global community remains within the grip of this emerging infectious disease.