Novel Coronavirus Information Sheet

This information sheet is based on information obtained from:

- World Organisation for Animal Health (OiE) website accessed on 3 February 2020
- European Center for Disease Control (ECDC) website accessed on 3 February 2020
- World Health Organisation (WHO) website accessed on 3 February 2020

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An emerging One Health matter

All around the world people are startled by the outbreak of a new virus disease in people. Several people got seriously ill or even died from the virus infection. In addition the disease has caused very high economic damage. There is a strong suspicion that the virus disease may be a zoonotic disease, which means that it has an animal source.

The last decades have seen a rise in emerging infectious diseases in humans and of these over 70% are zoonotic. Zoonotic infections are not new. They have always featured among the wide range of human diseases and most, e.g. anthrax, tuberculosis, plague, yellow fever and influenza, have come from domestic animals, poultry and livestock. However, with changes in the environment, human behaviour and habitat, increasingly these infections are emerging from wildlife species. Emerging zoonotic diseases typically are One Health issues that relate to the health of people, animals and the environment. Potentially they have serious health and economic impacts and their current upwards trend is likely to continueⁱ.

What is 2019 novel coronavirus?

The 2019 novel coronavirus, temporarily named 2019-nCoV, was identified in China at the end of 2019 and is a new strain of coronavirus that has not been previously identified in humans.

Coronaviruses (CoV) are a family of RNA (ribonucleic acid) viruses. They are called coronaviruses because the virus particle exhibits a characteristic 'corona' (crown) of spike proteins around its lipid envelope. CoV infections are common in animals and humans.

Some, but not all strains of CoV can be transmitted between animals and humans. A wide range of animals is known to be the source of coronaviruses. For instance, the Middle East respiratory syndrome coronavirus (MERS-CoV) originated from camels and the Severe Acute Respiratory Syndrome (SARS) originated from civet cats.

In humans, CoV can cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (caused by MERS-CoV), and Severe Acute Respiratory Syndrome (caused by SARS-CoV).

On 31 December 2019, human cases of pneumonia of unknown etiology were reported in Wuhan City, Hubei Province of China. A CoV, named 2019-nCoV acute respiratory disease (2019-nCoV), was identified as the causative virus by Chinese authorities on 7 January 2020. Since then, human cases with travel history to Wuhan have been reported by several provinces in China and by a number of countries outside China. For up to date information please consult WHO website

The incubation period for 2019-nCov (i.e. the time between exposure to the virus and onset of symptoms) is currently estimated at between two and 12 days. While people are mostly infectious when they present (flu-like) symptoms, there are indications that some people maybe be able to transmit the virus without presenting any symptoms or before the symptoms appear. If this is confirmed, it would make early detection of 2019-nCoV infections more difficult. However, it is not unusual for viral infections of this type, as is also seen with measles, for example. If people with 2019-nCoV are tested and diagnosed in a timely manner and rigorous infection control measures are applied, the likelihood of sustained human-to-human transmission in community settings in the EU/EEA is low. Systematic implementation of infection prevention and control measures were effective in controlling SARS-CoV and MERS-CoV.

Are animals responsible for 2019 novel coronavirus infections in people?

Genetic sequence data reveals that 2019-nCoV is a close relative of other CoV found circulating in *Rhinolophus* bat (Horseshoe Bat) populations. There is suspicion that the 2019-nCoV may have had an animal source, but further investigations are required to confirm this. Ongoing investigations are also important for identifying the animal source (including species) and establishing the potential role of an animal reservoir in this disease.

Although there is suspicion that the initial introduction of 2019-nCoV to humans may have come from an animal source, the predominant route of subsequent transmission appears to be from human to human.

Medical information

- What are the symptoms of 2019-nCoV
 - From what we know so far, the virus can cause mild, flu-like symptoms such as
 - fever
 - cough
 - difficulty breathing

- pain in the muscles and
- tiredness.

More serious cases develop severe pneumonia, acute respiratory distress syndrome, sepsis and septic shock that can lead to the death of the patient. People with existing chronic conditions seem to be more vulnerable to severe illness.

Are some people more at risk than others?
Generally, young children, elderly people and those with underlying conditions (e.g. hypertension, heart disorders, diabetes, liver disorders, and respiratory disease) are expected to be more at risk of developing severe symptoms. As this is an emerging disease and there is only limited data available, we do not yet know which groups of people might be prone to a more severe outcome following infection with 2019-nCoV.

- Is there a treatment for the disease caused by 2019-nCoV?

There is no specific treatment for this disease so the approach used to treat patients with coronavirus-related infections is to treat the clinical symptoms (e.g. fever). Supportive care (e.g. supportive therapy and monitoring – oxygen therapy, fluid management and antivirals) can be highly effective for those infected.

Are there any precautions to take with live animals or animal products?

In accordance with advice offered by the WHO, as a general precaution, when visiting live animal markets, wet markets or animal product markets, general hygiene measures should be applied, including regular hand washing with soap and potable water after touching animals and animal products, avoiding touching eyes, nose or mouth with hands, and avoiding contact with sick animals or spoiled animal products. Any contact with other animals possibly living in the market (e.g., stray cats and dogs, rodents, birds, bats) should be strictly avoided. Attention should also be taken to avoid contact with potentially contaminated animal waste or fluids on the soil or structures of shops and market facilities.

Standard recommendations issued by WHO to prevent infection spread include regular hand washing, covering mouth and nose when coughing and sneezing, and thoroughly cooking meat and eggs. Avoid close contact with anyone showing symptoms of respiratory illness such as coughing and sneezing. Raw meat, milk or animal organs should be handled with care, to avoid cross-contamination with uncooked foods, as per good food safety practices. Further recommendations from WHO can be consulted here: https://www.who.int/health-topics/coronavirus#

What is the World Organisation for Animal Health (OIE) doing?

The OIE is in contact with its Regional Representation in Asia and The Pacific, the OIE Delegate for China and the National Veterinary Service, the <u>OIE Wildlife Working Group</u>, as well as FAO and WHO, to gather and share the latest information. The OIE is closely liaising with its network of experts involved in current investigations on the source of the disease. Rumours and unofficial information are also monitored daily.

What are the Veterinary Authority's international responsibilities in this event?

The detection of 2019-nCoV in animals meets the criteria for reporting to the OIE through WAHIS, in accordance with the OIE *Terrestrial Animal Health Code* as an <u>emerging disease</u>.

Therefore, any detection of 2019-nCoV in an animal (including information about the species, diagnostic tests, and relevant epidemiological information) should be reported to the OIE.

It is important for Veterinary Authorities to remain informed and maintain close liaison with public health authorities and those responsible for wildlife, to ensure coherent and appropriate risk communication messages and risk management.

Effective biosecurity risk management and cooperation with inspection authorities should be maintained at borders.

ⁱ Rev. sci. tech. Off. int. Epiz., 2014, 33 (2), 569-581