PUBLIC HEALTH ALERT:

NOVEL CORONAVIRUS

(2019-nCoV Acute Respiratory Disease)

Credit - Alissa Eckert, MS; Dan Higgins, MAM
THE SITUATION

- Chinese public health authorities have identified a novel Coronavirus (2019-nCoV Acute Respiratory Disease) not seen previously.
- The virus causes fever and respiratory symptoms.
- The largest number of cases have been reported in China, but others are being identified in other parts of the world (Asia, the US, Europe, etc.) primarily in people who previously visited China.
- To date, the virus has infected tens of thousands of people, with hundreds of reported deaths.
  - There may be more cases identified. Access case counts here - Global Map of Confirmed Cases
- Some but not all the cases are linked to a live animal market Wuhan City, in the Hubei Province of China.
- Public Health authorities are very actively investigating this outbreak and the situation will evolve
- Because of this… public health recommendations focus on standard infection control practices to reduce exposure to and transmission of a range of illnesses.
- On 30 January, the WHO declared a Public Health Emergency of International Concern (PHEIC) to ensure that risk management efforts are appropriately directed
  - Especially in countries without strong public health resources who may be ill-prepared to manage this crisis effectively.
  - This is not because of a poor response in China, but rather that their response is seen as exemplary and in large part, why there are so many limited cases outside of China.

WHAT IS A CORONAVIRUS?

- It is a type of RNA virus with an envelope, which mainly cause symptoms of respiratory and intestinal diseases. There are many regularly arranged protrusions on the surface of this type of virus particle, and the entire virus particle is like an emperor's crown, hence the name "coronavirus".

- In addition to humans, it can infect many mammals such as pigs, cattle, cats, dogs, martens, camels, bats, mice, hedgehogs, and various birds.

- So far, there are six known human coronaviruses. Four of these coronaviruses are less pathogenic, generally causing only minor respiratory symptoms like the common cold. Two other coronaviruses—Severe Acute Respiratory Syndrome Coronavirus (SARS CoV) and Middle East Respiratory Syndrome Coronavirus (MERS CoV)—can cause serious respiratory diseases.

- The new coronavirus (2019 nCoV) that caused the epidemic is different from the human coronavirus that has been discovered and requires further scientific research.

- Member of China Engineering Academy : Xu Jianguo

Source: http://www.xinhuanet.com/politics/2020-01/09/c_1125438971.htm
TRANSMISSION ROUTES?

This depends on the particular coronavirus…

Human coronaviruses are rarely spread by fecal contamination and but *may* spread from an infected person to others through:

- The air by coughing and sneezing
- Close personal contact, such as touching or shaking hands
- Touching an object or surface with the virus on it, then touching your mouth, nose, or eyes before washing your hands

Transmission from person to person is occurring *to some extent* with 2019-nCoV acute respiratory disease. Surveillance continues.

There is currently no evidence 2019-nCoV is transmitted to humans through food.

There are currently no vaccines available to protect you against human coronavirus infection yet. You may be able to reduce your risk of infection by doing the following:

- Avoid touching your eyes, nose, or mouth with unwashed hands
- Avoid close contact with people who are sick
- In regions where excessive cases are being reported, avoid areas where live animals are being sold or raised
- If you have fever or other symptoms after traveling home, you should wear a mask and seek medical advice immediately and tell the doctor where you have visited recently
- Practice standard food safety practices

**Visit a Doctor.**

**Know your novel coronavirus facts.**

- Get access to educational & procedural information.

**Frequent handwashing.**

- Wash your hands often and correctly. The World Health Organization recommends performing hand hygiene with soap & water or alcohol-based hand rub if soap and water are not available.
- For at least 20 seconds. Use designated handwashing sink.

**Sanitize Hand.**

- Properly cover your mouth and nose with a tissue or sleeve when coughing, sneezing and preparing & cooking food
- Using Instant Hand Sanitizer Gel without rinse.

**Avoid close contact with anyone showing symptoms of respiratory illness.**

**ADDITIONALLY**

- Avoid touching your eyes, nose, or mouth with unwashed hands
- Avoid close contact with people who are sick
- In regions where excessive cases are being reported, avoid areas where live animals are being sold or raised
- If you have fever or other symptoms after traveling home, you should wear a mask and seek medical advice immediately and tell the doctor where you have visited recently
- Practice standard food safety practices

PREVENT- HOW TO PROTECT OTHERS

If you have cold-like symptoms, you can help protect others by doing the following:

- Washing your hands
- Wearing a mask
- Staying home while you are sick
- Avoiding close contact with others
- Seeing a doctor at once
- Cleaning and disinfecting objects and surfaces
- Covering your mouth and nose with a tissue when you cough or sneeze, then throwing the tissue in the trash and washing your hands

WHAT ARE THE FOOD SAFETY IMPLICATIONS?

There is currently no evidence that 2019-nCoV is transmitted to humans through food.

Standard food safety practices are encouraged:

- In regions where excessive cases are being reported, avoid areas where live animals are being sold or raised.
- Avoid consuming raw or undercooked animals or sick animals.
- Avoid cross-contamination by properly handling raw meat, milk or other animal materials.
- Properly clean and sanitize food contact surfaces including hands and utensils.
WHAT CAN I DO IN MY FOOD OR BEVERAGE PROCESSING PLANT?

- Follow good manufacturing and food safety practices from receiving, handling and preparing raw materials, ingredients, packaging, work in progress and finished products.
- Ensure employee health and hygiene practices are in place and are maintained including proper hand washing.
- Clean and sanitize food contact and non-food contact surfaces as well as carrying out environmental cleaning and sanitation (floors, walls, ceilings and equipment).
- Use only cleaners and sanitizers suitable for their use in a food manufacturing facility, following label instructions.
Coronaviruses have poor survivability on surfaces, therefore there is likely a very low risk of spread from products or packaging.

Currently there is no evidence to support transmission of 2019-nCoV associated with imported goods.

Ecolab continues to monitor this evolving situation.

REFERENCES AND FURTHER INFORMATION

- WHO - [www.who.int/health-topics/coronavirus](http://www.who.int/health-topics/coronavirus)
- EPA – [content.govdelivery.com/accounts/USAEPAOPPT/bulletins/278c716](http://content.govdelivery.com/accounts/USAEPAOPPT/bulletins/278c716)