Questions Regarding the Novel Coronavirus (COVID-19) on Farms with Employees

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What is COVID-19 coronavirus?

COVID-19 is an infection caused by a novel (or new) strain of coronavirus. This strain is new; thus, people around the world do not yet have any immunity to the virus. Group immunity means a high enough proportion of individuals in a population are immune; thus, the majority will protect the few susceptible individuals because the pathogen is less likely to find a susceptible individual. This virus strain is very contagious before any signs or symptoms of sickness appear. It spreads very easily from person to person and has become a worldwide pandemic. In addition, this strain of virus can cause serious disease and death in elderly people and those with underlying health conditions such as heart disease, lung disease, and diabetes. Anyone who has a suppressed immune system (immunocompromised) is also considered high risk.

CDC: https://www.cdc.gov/coronavirus/2019-ncov/index.html

Are the risks and concerns regarding COVID-19 coronavirus different on a farm?

The difference between a farm and some other workplaces is that most work cannot be performed remotely. People must be physically present to feed, milk, and care for animals or crops. While automation may reduce the number of people necessary on some farms (e.g., robotic milkers, automatic feed pushers, automatic calf feeders, etc.), people are still needed onsite to operate and manage the automated systems as well as to provide care that cannot be automated.

Is there anyone available to communicate remotely with my employees at the farm?

Yes, we are available to assist farmers remotely via conference call (e.g., Zoom, WhatsApp). Please contact Dr. Jeff Workman at workman.45@osu.edu or Dr. Gustavo M. Schuenemann at schuenemann.5@osu.edu (Ph: 614-625-0680).

Novel Coronavirus (COVID-19) on Large Farms.

Can livestock or other animals be infected with the COVID-19 coronavirus?

The Center for Disease Control and Preventions (CDC) has reported that while this virus seems to have emerged in China from an animal source, it is now spreading from person-to-person. There is no reason to believe that any animals including livestock or pets in the United States might be a source of infection with this new coronavirus.

There are bovine coronavirus infections that are caused by different strains of coronavirus such as: calf diarrhea, winter dysentery in cows, and bovine respiratory disease complex (shipping fever).

It is illegal and dangerous to use any vaccines or drugs labeled for cattle for human use. No current products will help prevent or cure COVID-19.

Merck Veterinary Manual: https://www.merckvetmanual.com/digestive-system/intestinal-diseases-in-ruminants/intestinal-diseases-in-cattle

CDC: https://www.cdc.gov/coronavirus/2019-ncov/faq.html#animals

Do farm workers develop a better immune systems?

Your immune system helps your body fight an infection from microorganisms. Microorganisms include bacteria, viruses, fungi (yeasts & molds), protozoa, and algae. The microorganisms that infect and cause disease are called pathogens. Being exposed to various pathogens commonly found on a farm can help your body develop some immunity. However, this novel strain of coronavirus is new and different from other strains of coronavirus in which you may have been previously exposed. COVID-19 appears to spread very easily between people because it is able to spread without people knowing they are infected and there is no immunity to the virus in the population.

How is this coronavirus different from the common cold or flu?

Many different respiratory viruses can cause the common cold, but rhinoviruses are the most common. Other virus such as coronaviruses, parainfluenza, and adenoviruses may also cause the common cold. Flu is caused by the influenza virus. Flu is considered to be a more serious and dangerous infection than the common cold. The COVID-19 coronavirus has many of the same signs and symptoms as the common cold and flu. It would be closest related to those coronavirus strains that do occasionally cause a common cold. However COVID-19 is different because it is novel meaning our bodies do not yet have any immunity, and it can cause serious disease and death in certain groups of people similar to an influenza virus.

CDC: https://www.cdc.gov/features/rhinoviruses/index.html

CDC: https://www.cdc.gov/flu/index.htm

How can I protect myself from getting COVID-19?

1) **Social distancing**: This helps to prevent spread of virus from person to person. Social distancing includes avoiding large groups of people and the closing of certain public businesses and events. Groups of people who are only in contact with those within their house or farm and are not in contact with other people are less likely to experience community spread. Avoid hand shaking when greeting someone and maintain 6 feet of distance from other people.
2) **Proper hand washing and sanitation**: It is extremely important you wash your hands frequently and after touching a high contact surface. The virus may live on surfaces for 2-3 days. If you touch a surface such as a doorknob or counter that has virus on it, and then you lick your fingers or touch your mouth, nose, eyes, or face, you could become infected. By washing your hands frequently and wearing disposable gloves, you decrease the risk of becoming infected or potentially spreading a virus to others. Most people still need to go to public places on occasion such as the grocery store and gas station. It is important to maintain 6 feet of distance from other people and wash your hands with soap and hot water for at least 20 seconds, or if a sink and soap aren't available, use an alcohol-based hand sanitizer (at least 60% alcohol). Keep the bathrooms and break/kitchen area in your workplace and at home clean and disinfected.
3) **Avoid any direct contact** with individuals feeling sick or experiencing the symptoms/clinical signs of common cold or flu. With the exception of those responsible for providing care for sick individuals.
CDC: https://www.cdc.gov/coronavirus/2019-ncov/index.html

Should I report to work?

The short answer is "YES", unless you are sick or experiencing the symptoms/signs: fever, dry cough, and shortness of breath.
CDC: https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html

What if I start to feel sick or are getting symptoms/signs?

Symptoms/signs are similar to the cold or flu: **fever, dry cough, and shortness of breath**. Emergency signs are difficulty breathing or shortness of breath, persistent pain or pressure in the chest, new confusion or inability to arouse, and bluish lips or face. Emergency signs require that you immediate call your health care provider for help. Do not go in-person as you might spread to others. By calling ahead, health care professionals can give you instructions and prepare for your arrival. You may also contact your manager or supervisor to help you contact the doctor's office if you are experiencing these symptoms/signs.
CDC: https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html

How long will this concern about COVID-19 last?

All of the current changes are intended to reduce the spread. Eventually, a vaccine or treatment may be developed and manufactured that will allow protection of individuals and the population such as with the seasonal flu vaccine. No one knows for certain how long it will take for life to return to normal, but a few weeks or months of collective efforts will certainly make a huge difference within our community.

All farms should immediately implement stricter biosecurity protocols for all outside personnel and visitors.

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