Dg-covidorigin mugshot Jim Lowe

Veterinarian dissects coronavirus origin, concerns as planting nears

BY DANIEL GRANT

FarmWeek

As the coronavirus (COVID-19) continues to spread, many people have questions and concerns about the disease and the next steps moving forward.

Farmers in particular find themselves in the unique position where their jobs are defined as “essential” to the country but also in a spot where they must soon increase their outside activity and movement as planting season ramps up, despite a current shelter in place order for Illinois.

Jim Lowe, veterinarian and expert on infectious diseases at the University of Illinois College of Veterinary Medicine, answered questions about the quickly evolving situation during a recent webinar.

**Where did coronavirus originate?**

COVID-19 is a zoonotic disease, which means it moves between animals and humans. Numerous reports suggest it originated in a bat in China.

“We think most diseases in humans come from animals. Cross-species transmission is pretty frequent,” Lowe said. “It goes to a pandemic or epidemic when the virus is established in a human host and passes from human to human. That appears to be what happened here.”

**How does COVID-19 spread?**

Human to human contact represents one of the top threats, although the virus can survive on certain surfaces from 24 hours to up to three days. Physical carriers are known as fomites.

The other mode of virus spread, vectors such as insects, do not appear to be an issue in this case.

“One of the big challenges is what is the case (load),” Lowe said. “We know the numbers that have been tested. But we know that’s a gross underestimate of people infected in the country.”

**Why should people shelter in place and limit contact?**

“The presence of a pathogen represents an infection, but an infection does not always result in disease,” Lowe said.

“It’s apparent with this virus we have a lot of infected people who are not diseased,” he noted. “That’s why the transmission of this virus is so crazy.

“When you try to contain a disease, you want to identify all the sources of the potential pathogen,” Lowe continued. “If you don’t know that, the only choice is to stop contact and movement. Our real concern is how to minimize overwhelming the hospital system.”

**How should farmers handle the upcoming planting season?**

Proceed with caution. Limit person to person contact. Wipe down handles on doors and machinery each day. Consult a doctor and self-quarantine if you become ill.

“Planting is coming up, and you’ve got to do your job,” Lowe said. “Wash your hands, clean handles of (vehicles) and implements. If you get a cough and don’t feel very good, get isolated so you don’t infect your whole family, and go to a doctor. This isn’t the time to tough it out.” END

**WIU interactive map tracks COVID-19 spread**

[BY JIM TAYLOR](https://www.farmweeknow.com/users/profile/Jim%20Taylor)

Western Illinois University is promoting an interactive tool that monitors the COVID-19 pandemic. The digital map not only focuses on Illinois, but also its bordering states as well.

“I’m a member of the state’s incident management team, which we deployed out for the flood of 2019, so I’m used to working with a lot of folks from the Illinois Emergency Management Agency, the Illinois Department of Public Health and Illinois State Police,” said Chad Sperry, WIU GIS Center Director. “So, we were having conversations with GIS professionals from IEMA and ISP and one of the things that came to our attention was there was not a good interactive viewer specifically for the state of Illinois.”

[Those conversations led to the idea for an online county by county dashboard to include not only Illinois, but contiguous states as well.](https://wiu-gis-center.maps.arcgis.com/apps/opsdashboard/index.html#/8ef833c7ed254fd48fe07266f96e0f70)

“We wanted to get into that granular data of showing what’s happening at the county level,” Sperry told RFD Radio over the weekend. “As we were working on this, one of our staff members was able to find the same statistics from neighboring states.”

That staff member was Renee Buker, GIS Center specialist.

“So, we actually have links embedded at the bottom of that dashboard that contain information for the surrounding states,” Sperry said.

[Check it out at this link](https://wiu-gis-center.maps.arcgis.com/apps/opsdashboard/index.html#/8ef833c7ed254fd48fe07266f96e0f70).

### [**Listen: Chad Sperry details the idea for including not only Illinois data, but information from all bordering states to monitor the COVID-19 pandemic**](https://www.farmweeknow.com/listen-chad-sperry-details-the-idea-for-including-not-only/audio_0304d134-6dda-11ea-9dfc-73952625899a.html)