

farmdoc**DAILY** LIVE | Coronavirus and Ag Lessons from Infectious Disease and Livestock



Jim Lowe
DVM, MS, DABVP

**Gary
Schnitkey**

Poll: Do you have a plan if your work force gets COVID-19?

- I have a plan for more farm operation
- Not sure what I would do
- I work for an organization with a COVID plan
- I work with an organization that has not announced plans

Audio

Poor Audio

- Normal function of your internet connection
- **Solution:** Call in by following instructions in email

No Audio on computer

- Ensure computer audio is selected and check output device
- Check that speakers are not muted or very low volume
- If all else fails call in by following instructions in email



2. Choose one of the following audio options:

TO USE YOUR COMPUTER'S AUDIO:

When the webinar begins, you will be connected to audio using your computer's microphone and speakers (VoIP). A headset is recommended.

--OR--

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United States: +1 (415) 655-0052

Access Code: 934-330-662

Audio PIN: Shown after joining the webinar

Housekeeping

- Handout available via GoToWebinar control panel
- Webinar will be archived and available on farmdoc
- Submit questions during the webinar and we will answer them at the end of the webinar



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Update



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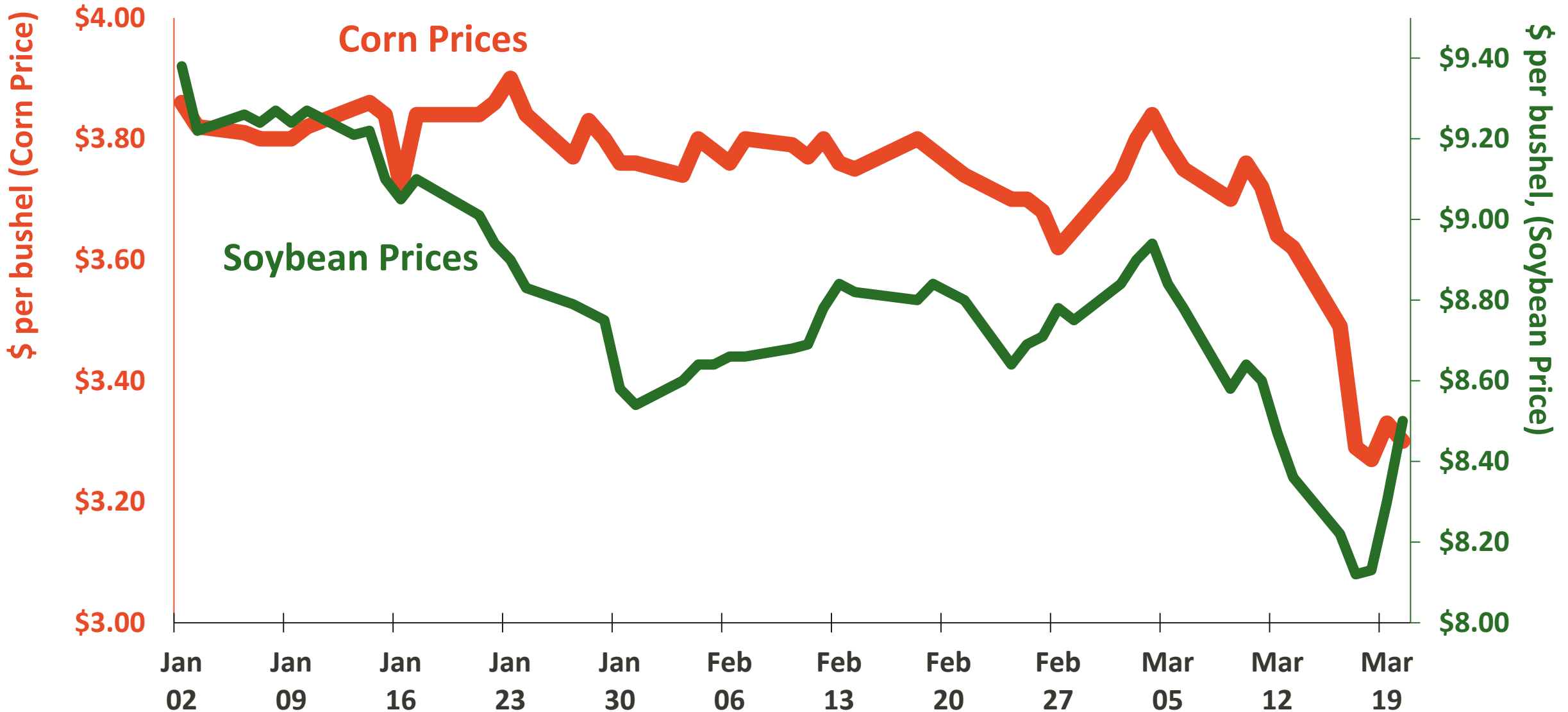
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Gary Schnitkey

Soybean Industry Chair in Agricultural Strategy

Figure 1. Central Illinois Cash Corn and Soybean Prices, January 2, 2020 to March 20, 2020



Income Update – Grain farms

- **Old crop:** lower prices
- **2019 PLC/ARC:**
Increasing chances for corn, ARC-CO soybeans
- **New crop:** lower prices but revenue not low enough to trigger crop insurance payments
- More likely to trigger 2020 ARC/PLC payments

Poll: Economic costs resulting from COVID control measures. I believe:

- more strict measures should be implemented (no matter the cost)
- current measures make sense
- current measures need to be reduced quickly
- current measures are too strict



Lessons from Infectious Disease and Livestock

Jim Lowe, DVM, MS, DABVP

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UNIVERSITY OF ILLINOIS AT URBANA CHAMPAIGN

Few questions for today?



Why are we
so worried about this?



What does zoonotic mean?

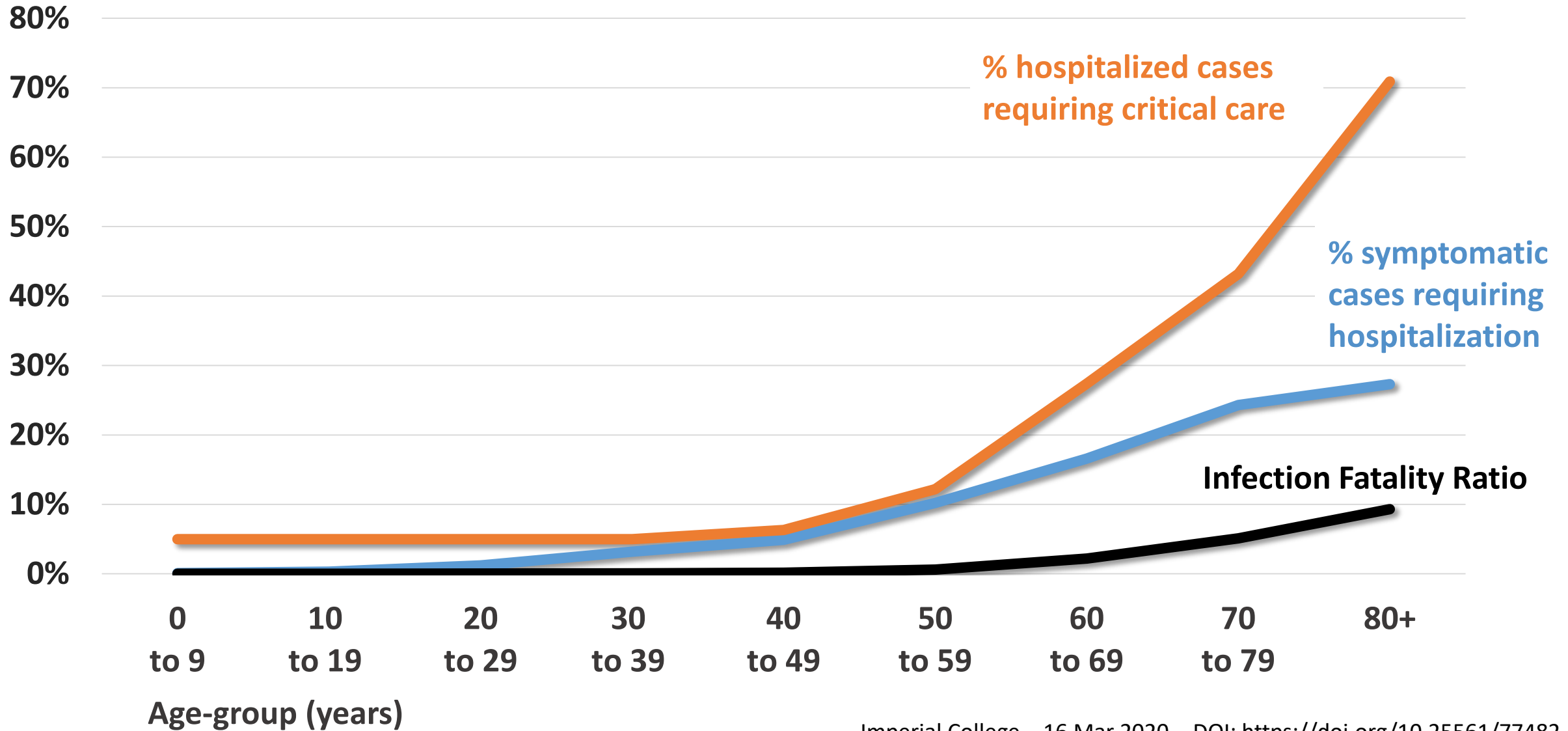


Why are we
all locked up at home?



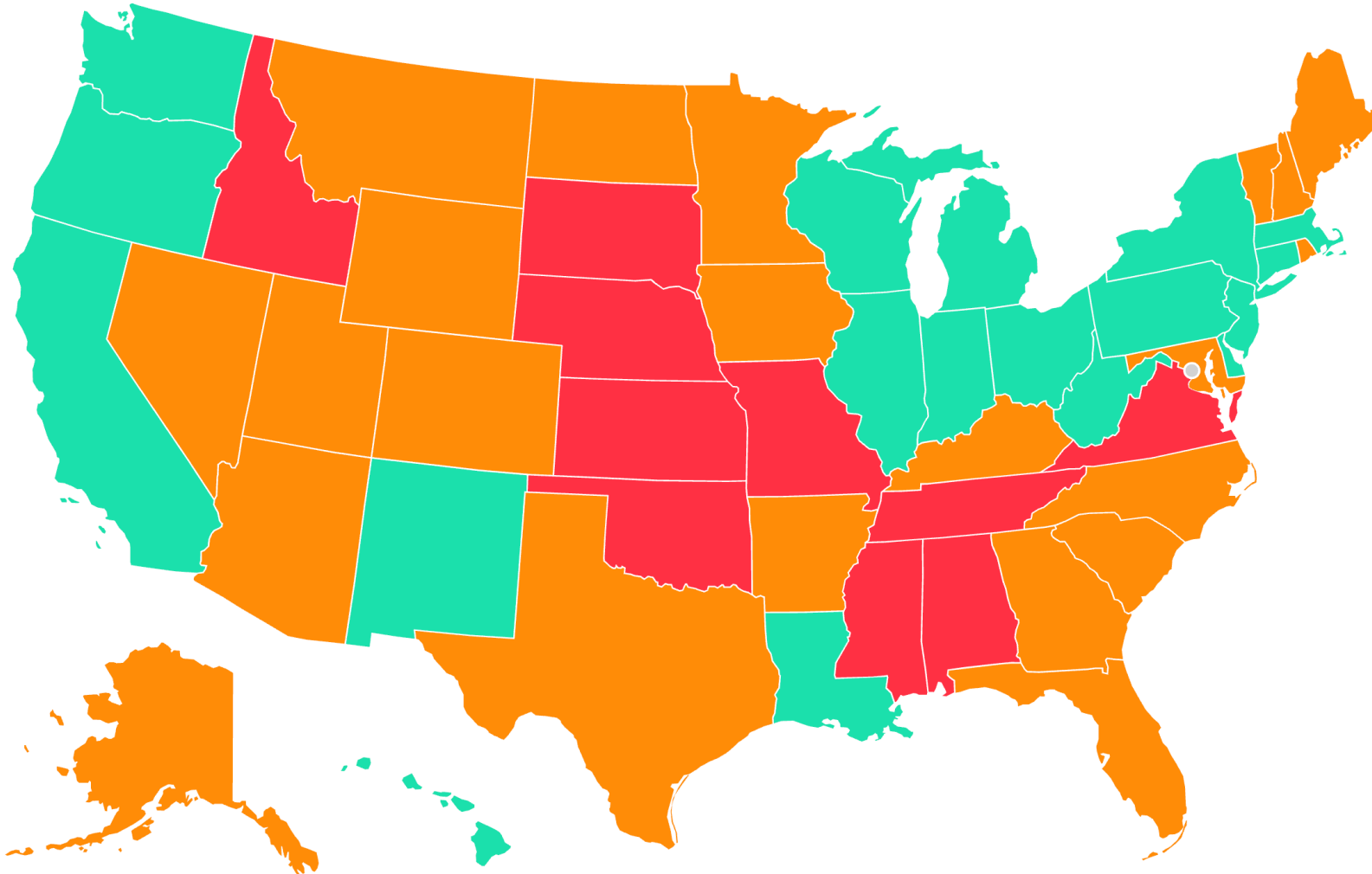
How will this impact
the food supply chain?

Current estimates of the severity of cases



What is being done

<https://www.covidactnow.org/>



Limited Action

Public advocacy around “social distancing” and enhanced hygiene. Minimal mandated restrictions.

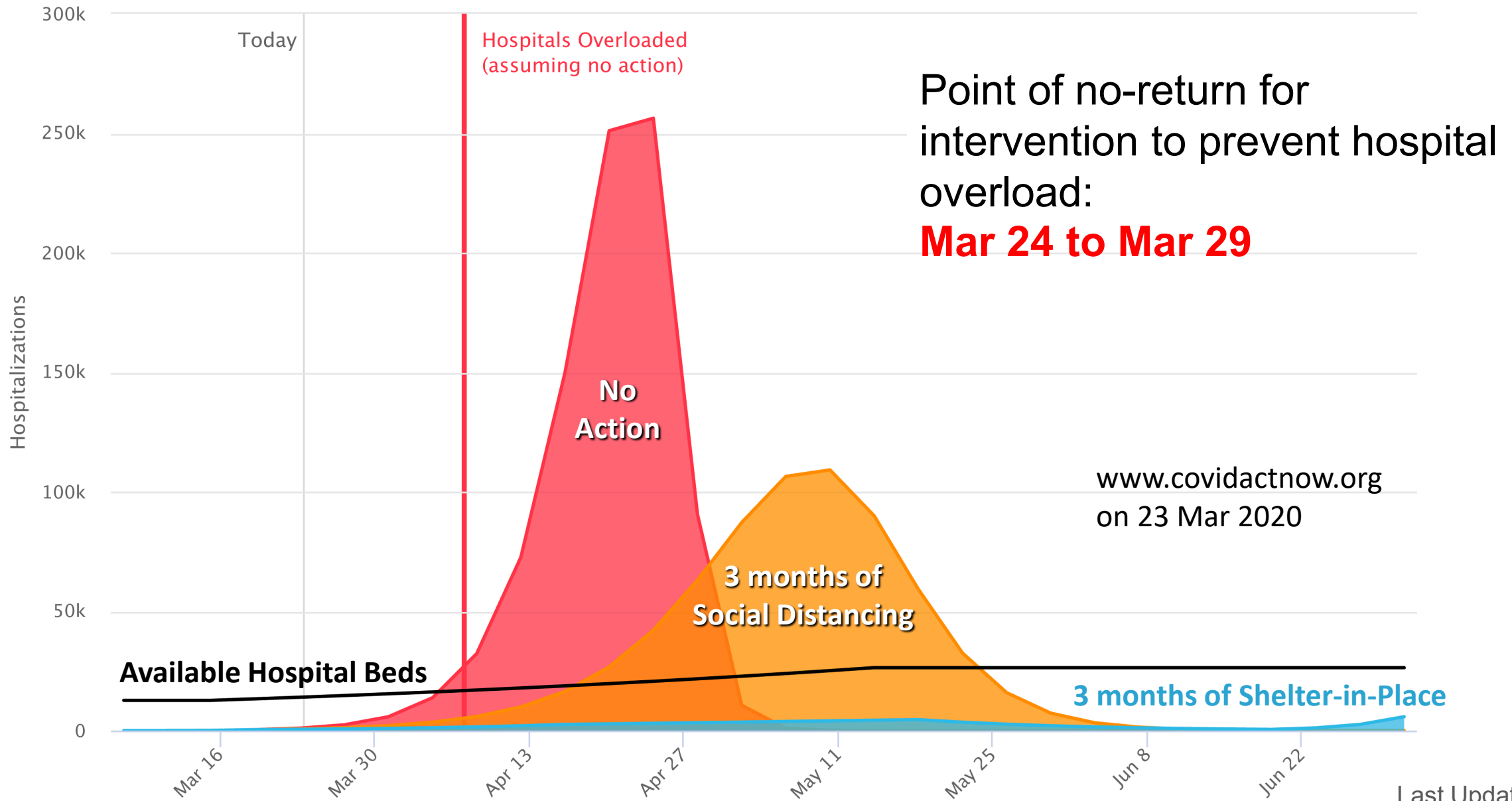
Social Distancing

Voluntary “shelter-in-place” for high-risk groups, schools and bars / restaurants closed.

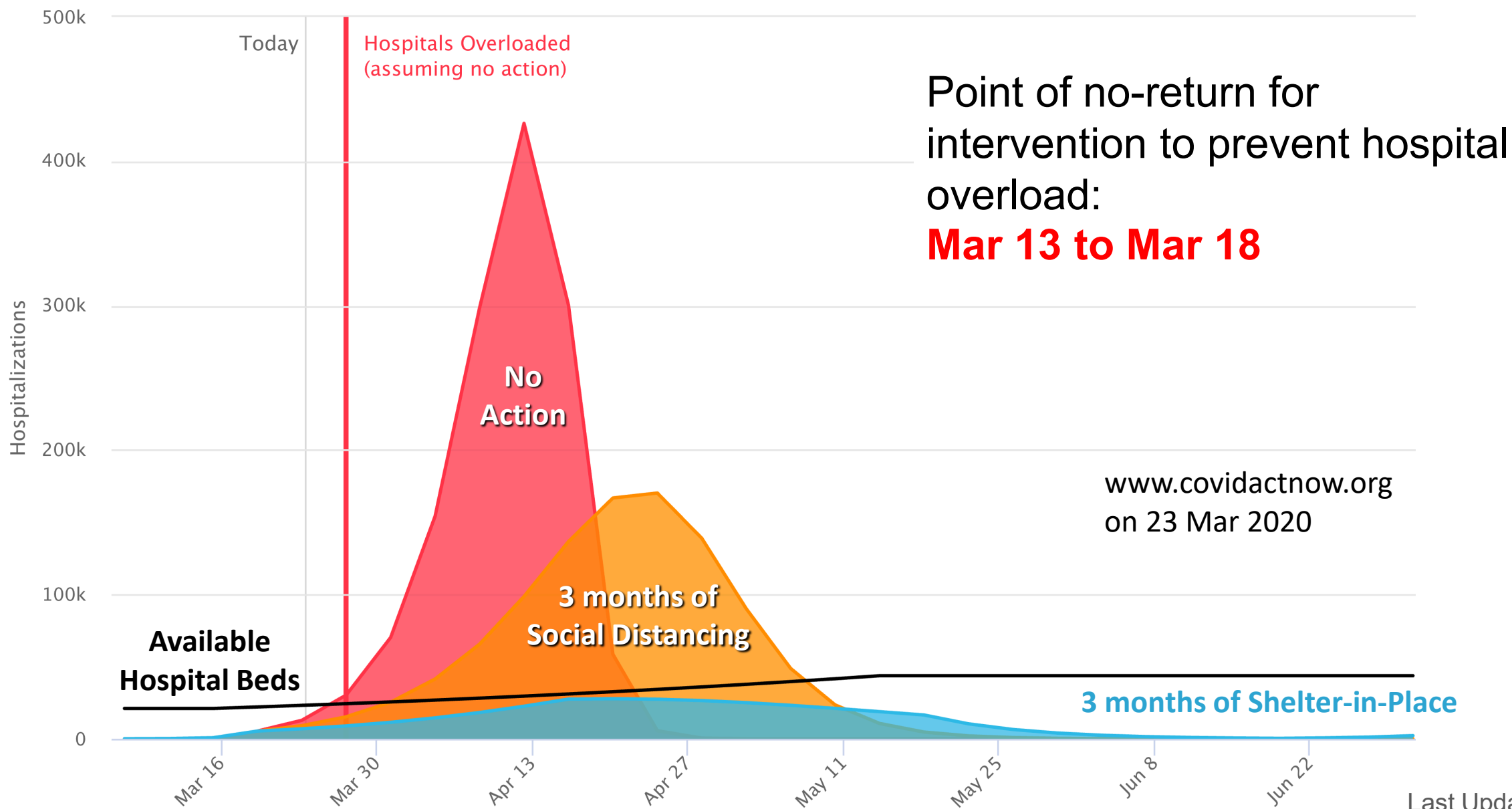
Shelter in Place

Legal order or strong recommendation for citizens to employ “shelter-in-place” home quarantine (especially firm for high-risk groups), shutdown of non-essential businesses, ban on all group events.

Illinois: Hospitalizations over time

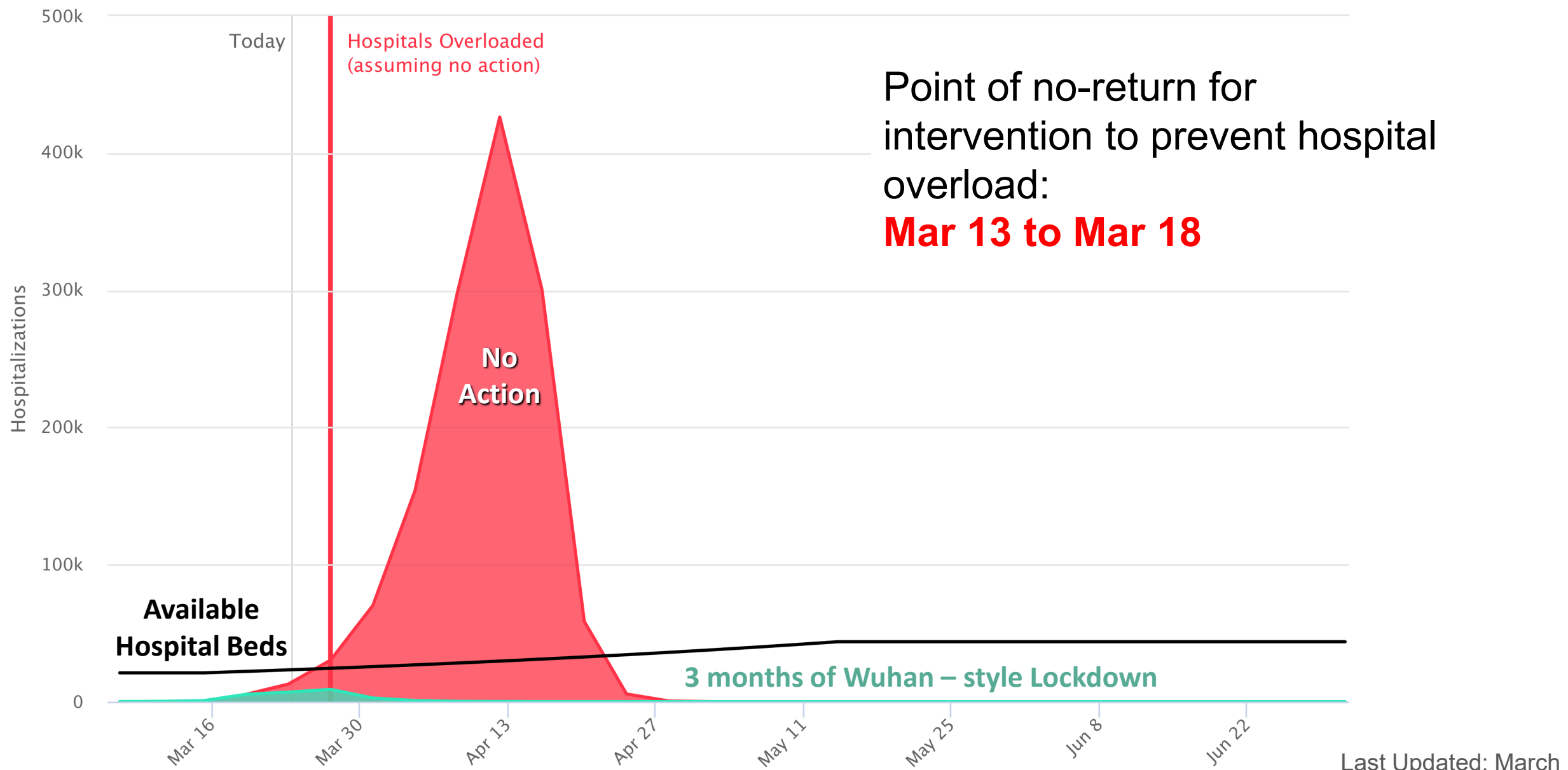


New York: Hospitalizations over time



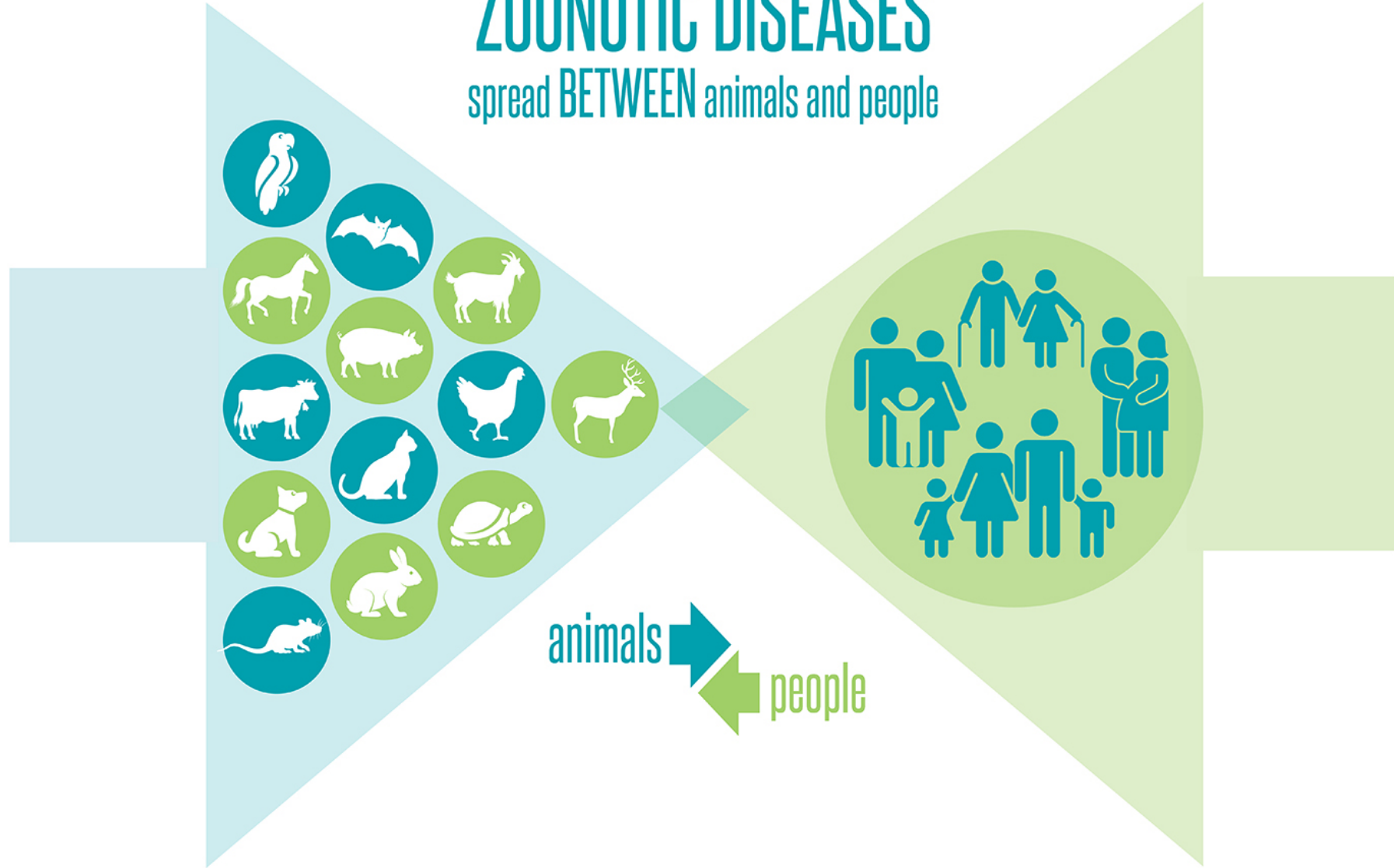
New York: Hospitalizations over time

www.covidactnow.org
on 23 Mar 2020



ZOOONOTIC DISEASES

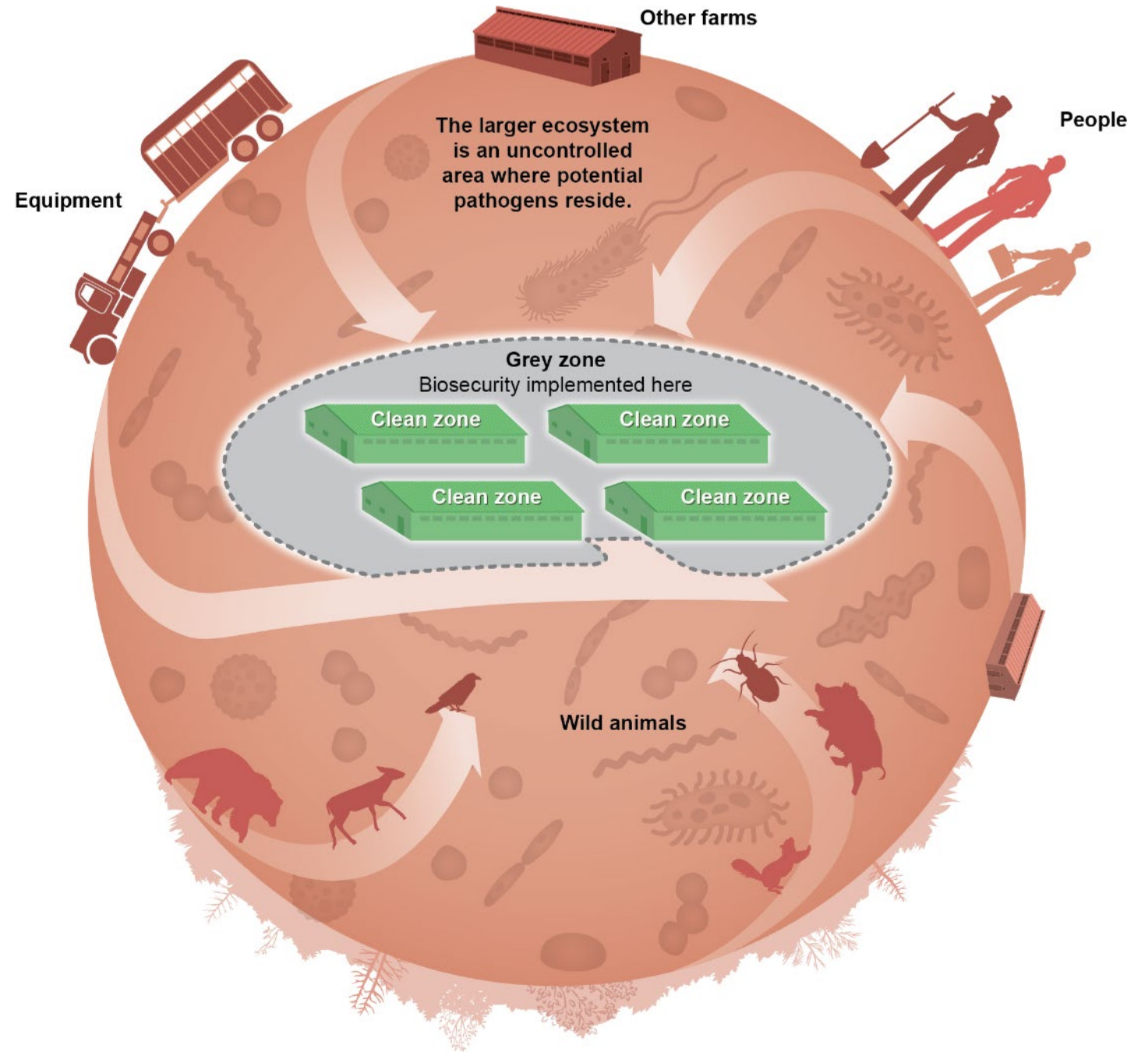
spread **BETWEEN** animals and people

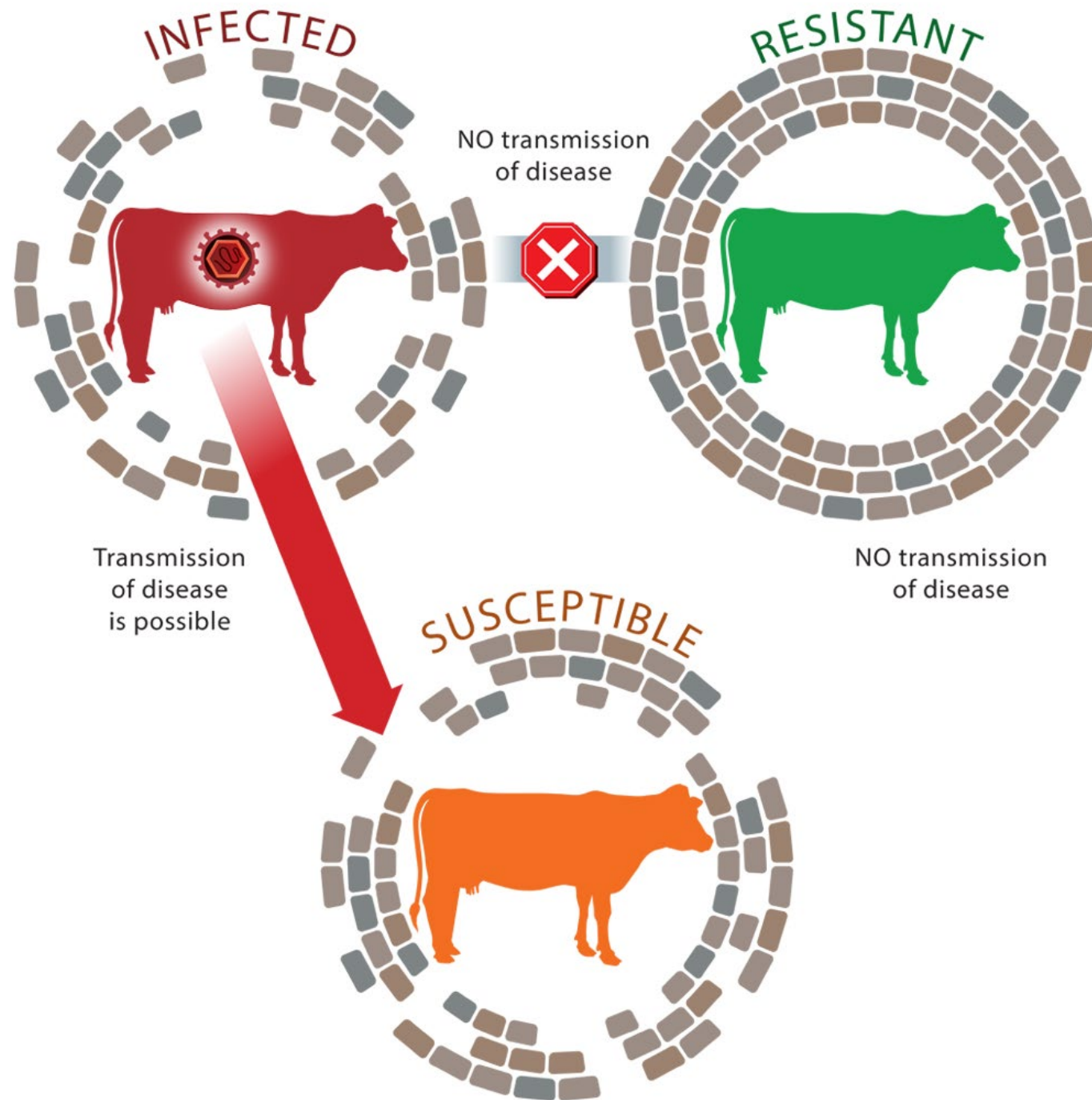


Disease vs Infected

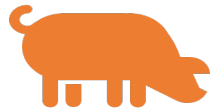
- Disease (from “dis” “ease”) is any abnormal state detrimental to the pig.
- Infectious disease (ID) is due to microbes.
Microbes, bacteria, viruses and parasites, may or may not cause disease. If they cause disease, they are often called pathogens. The normal flora of the microbes literally covers every external and internal surface of the pig’s body. The pig is exposed to many more helpful microbes than harmful ones.
- Whether or not ID occurs depends on the causal agent(s), host factors, and environmental factors. These factors are variable and directly or indirectly influence the frequency or occurrence of disease.
- Presence of a potential pathogen is called infection, but infection does not always result in disease.

Identifying the source of pathogens is critical





Routs of Transmission for microbes



Animals and People

Most efficient method of transmission

Replacement breeding stock



Vectors

Animals or insects that become *infected* with a microbe and often are a key part of the microbes life cycle

Mosquitoes for Malaria

People for SIV



Fomites

Physical carriers of disease

Flies for PRRS, Tools, Trailers

Chance that route is successful



Time out of host

Longer lowers chance
of transmission



Temperature

High or Low
temperatures
lower chance
of transmission



Humidity

Low humidity
lowers chance of
transmission



Ultraviolet light

Higher UV light
lowers chance of
transmission

Methods for the Interruption of Microbe Transmission



Hygiene

cleaning and disinfection

Low cost but hard to implement as the process is highly people dependent and not all things can be cleaned.

Fumigation of supplies prior to entry



Exclusion

keep the fomite, vector or person out

Hard to implement as there is temptation to break the rules
Keeping visitors out of the farm



Segregation

dedicate things to only one purpose

Easy to implement but expensive as there is duplication of many assets.

Dedicated trailers



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PROFESSIONAL DEVELOPMENT
This course breaks down concepts taught in business
- Business Management and Entrepreneurship in Veterinary Medicine** (1 CREDIT HOURS)
PROFESSIONAL DEVELOPMENT
Being a successful
- Understanding the Response to the COVID-19 Pandemic** (1 CREDIT HOURS)
PROFESSIONAL DEVELOPMENT
This dynamic course will feature

Poll: Economic costs resulting from COVID-19 control measures. I believe:

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**Gardner
Agriculture
Policy
Program**

farmdocDAILY

Upcoming Webinar

11:00am, Friday March 27th:

Nick Paulson, a farmdoc team member, will lead a discussion of COVID-19 concerns related to agricultural finance. Nathan Kauffman (Vice President and Omaha Branch Executive) and Cortney Cowley (Economist, Regional Affairs Department), from the Federal Reserve Bank of Kansas City, will be guests and provide important perspectives. Any recent important updates related to COVID-19 and agriculture will be shared.



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Thank You for joining us!

Please submit your questions



A screenshot of the farmdoc website. The header includes 'ILLINOIS EXTENSION farmdocDAILY Farm Policy News'. The main navigation bar has 'farmdoc DECISION OUTREACH CENTRAL' and links for 'Market Prices', 'Sections', 'Tools', 'Publications', 'Events', 'Sponsors/Donate', and 'About Us'. The page title is 'Coronavirus and Ag'. A paragraph states: 'The farmdoc team discusses the impact and influence of the Coronavirus on farmers and agriculture. As we learn more we'll update this page with articles and videos to help inform our audience.' Below this is a 'Submit Questions' button. Another paragraph says: 'We invite you to use the button on the right to submit questions. We will do our best to address them during the upcoming articles and videos.' A section titled 'farmdoc daily live: Coronavirus and Ag' includes links for 'View All', 'See Upcoming', and 'Register For Series'. There are four featured articles: 'Setting the Stage' (March 17th, 2020) with a 'Watch Video' and 'Download Slides' button; 'Lessons from Infectious Disease and Livestock' (March 24th, 2020) with a 'Register for Series' button; 'Financial Perspectives on Agriculture and Coronavirus' (March 27th, 2020) with a 'Register for Series' button; and 'Farmer Safety Net' (March 31st, 2020) with a 'Register for Series' button. At the bottom, there is an article 'Farm Policy Going Forward' (April 3rd, 2020) with a 'Register for Series' button.

Visit our new Coronavirus and Ag page for the latest information
farmdoc.illinois.edu/coronavirus-and-ag

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