

# A Delicate Balance

Protecting  
meat plant workers,  
food safety standards,  
and the supply chain  
during COVID-19

BY AMANDA MCCORQUODALE



**T**his spring, as coronavirus cases in major metropolitan areas in the U.S. began to plateau, a spike in other areas of the country raised concern—both for loss of life and potential disruption of the food supply chain.

In 56 counties in the U.S., meatpacking accounts for more than 20% of all county employment. Starting in mid-April 2020, confirmed COVID-19 cases per 100,000 in these rural meatpacking-dependent counties grew rapidly, according to USDA's Economic Research Service, with infection rates as much as 10 times higher than those in other rural counties.

Meat processing plants proved to be far more susceptible to COVID-19 transmission than other sectors. As of September 2020, there have been 42,606 confirmed cases of COVID-19 among the 500,000 people who work in the meatpacking industry in the U.S., with 203 reported fatalities. That's in stark contrast to the 7,253 COVID-19 cases and 16 deaths in the farm sector and the 9,571 cases and 35 deaths in food processing plants, as cited in Food & Environment Reporting Network (FERN)'s dashboard tracking of COVID-19 outbreaks in the food system.

As more workers got sick or felt too unsafe to return to work, plants across the country shut down. Due to the production output of each of these plants, a single shutdown could affect as much as 5% of the supply chain.

The impact was sudden and unprecedented. By the end of April, weekly cattle slaughter was down 35% and hog slaughter by about 45%, according to Jim MacDonald, who was the acting chief of the Structure, Technology, and Productivity Branch at USDA's Economic Research Service before becoming a professor in the department of agricultural and resource economics at the University of Maryland in College Park.

The sharp decline in meat processing also forced hog farmers to euthanize their pigs, which have to be slaughtered at a specific weight, to avoid dangerous overcrowding. Cattle farms experienced an overabundance of livestock, causing prices to drop 18% in April and May.

Even as farmers faced a livestock surplus, fast food chains began running out of beef patties, and grocery stores had to tap into surpluses of frozen meat. John Tyson, chairman of the board with Tyson Foods, took out a full-page advertisement in numerous newspapers, stating that the crisis needed public and private sectors to work together to strengthen the supply chain and make sure employees can come to work "without fear, panic, or worry."

On April 28, President Trump signed an executive order classifying meat processing plants as "critical infrastructure" that could and should stay open during the pandemic. The companies that own the majority of meat processing plants—Tyson, Cargill, Smithfield, and JBS—began implementing personal protective equipment (PPE) requirements, social distancing protocols, test-

ing, and contact tracing. By June, there was a sharp reduction in the number of cases per 100,000 for these meatpacking-dependent counties, reports USDA. These counties now have only 1.25 times the two-week moving average number of cases per 100,000 compared to other rural counties.

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—KEIRA LOMBARDO, *Smithfield Foods*

Most researchers agree that the industry was able to quickly tamp down the flames of these hotspots to restore the stability of the meat supply chain. Yet, labor activists point to ways the industry still has to evolve to make sure workers are kept as safe as the supply chain.

### Unique Hotspots

Plants in other sectors, such as the automobile industry, often rely more on machines than on human labor; however, due to the carcass-specific cutting required in the packing industry, meat fabrication is still largely done by hand in the U.S. Workers typically stand very close together in these plants, which are typically very cold and very loud—all conditions that make transmission of aerosol diseases more likely. "It's not a good place to work if you're prone to respiratory diseases," says MacDonald. At press time, COVID-19 infections have impacted the operations of 496 U.S. meatpacking facilities, as reported by FERN.

There is also a correlation between how fast a plant's line speed is and the rate of coronavirus transmission. "In order to hit the line speed of 120 birds per minute in a poultry plant, [plants] have to put workers shoulder to shoulder," says Jose Oliva, campaigns director at HEAL Food Alliance, a nonprofit organization working to create food and farm systems that are healthy for farmers, consumers, and the economy. "Even if you have a mask on, at that speed, there's blood and other body fluid flying around, and you're much more likely to contaminate yourself and others."

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Additionally, because some people who have COVID-19 are asymptomatic or have very mild cases, workers worried about lost wages may have chosen to show up to work even when sick. Some plants have a point system, says Oliva, which means that missing a day of work adds to accumulating infractions that could end in job termination.

Meatpacking plants also hire large groups of workers who often congregate in the same spaces multiple times a day, from where they live to how they commute. “We set a plant down someplace, and we bring in 900 workers. We’ve essentially set up a little cohort of people, and the opportunity for community spread is really amplified in that that type of setting,” says Edward Mills, PhD, associate professor of Meat Science at Penn State University in University Park. “From my experience, the guys that work in the plants tend to spend a significant amount of time together in the bars as well, where there is a lot of close contact.”

### Industry Response

To date, Tyson Foods has had the most COVID-19 cases by company (10,660, with 35 deaths, according to FERN), even though they formed a coronavirus task force in January 2020. “We were one of the first companies to start taking team member temperatures, and we began efforts to secure a supply of face masks before the CDC recommended using them,” says spokesperson Gary Mickelson. They also initiated comprehensive health screenings, including purchasing 150 infrared walkthrough temperature scanners and adding a new position of chief medical officer.

Tyson now also uses 500 social distancing monitors to ensure social distancing and confirm that PPE is worn properly. Tyson’s plants now include physical barriers between workstations and in break rooms, more break room space, such as in outdoor tents, and staggered start times to avoid large gatherings as team members enter the facilities. “About a third of our U.S. workforce have been tested,” says Mickelson. “Currently, less than 1% of Tyson Foods’ U.S. workforce has active COVID-19.”

Meanwhile, Smithfield, which lost eight workers to COVID-19, says the com-

pany has spent \$350 million to protect its team members as well as the food supply. This allowed them to expand employee benefits and remove all COVID-related limitations in their health plans; add pay premiums; hire private healthcare providers to supply free, on-site, on-demand COVID-19 testing to all employees; provide PPE and hand sanitizing stations; install mass thermal scanning systems and physical barriers; and slow line speed.

“Throughout the pandemic, we have had two priorities,” says Keira Lombardo, executive vice president of corporate affairs and compliance at Smithfield Foods. “First, keep our people healthy and safe, and second, keep our nation fed. These remain our sole priorities.”

JBS USA, which closed four production facilities due to the outbreaks, all of which are now open again, spent \$100 million to enhance safeguards for its workforce and nearly \$100 million to reward team members with thank you bonuses. “We also hired 1,000 team members to conduct additional, around-the-clock sanita-

tion and cleaning services and to provide education, training, and enforcement of COVID-19 preventive measures,” says a company spokesperson. To further ensure a safer work environment, JBS is also using ultraviolet germicidal air sanitation and plasma air technology to neutralize potential viruses in plant ventilation and air purification systems.

To encourage safe practices even when employees are not at work, Cargill, which has had 1,372 COVID-19 cases in its facilities, began providing buses with protective barriers to employees to discourage carpooling. Inside the plant, the company implemented standard prevention measures such as PPE, barriers, and social distancing, as well as a temporary wage increase. “If our employees see a practice that does not adhere to our values or these policies, we encourage them to speak with a manager or call our open ethics line,” says a spokesperson. “We adopted a ‘see something, say something’ safety culture many years ago to ensure our workplaces are safe for all who enter.”

### The Case for Legislation

Production may be back to near pre-pandemic levels, but do workers feel safe? Not really, says Oliva. “Just yesterday, workers were telling me they’re not so concerned about getting masks and face shields,” he says, adding that they’re more concerned about social distancing and being shoulder to shoulder on the production lines, which he says goes back to line speeds.

He notes that even if ample risk mitigation measures are recommended by corporate, it’s up to a plant’s manager to balance those with what needs to happen to meet target production rates. To ensure that companies are prioritizing worker health as much as profits, U.S. Senator Cory Booker recently introduced a bill that would limit increase of line speeds at meat plants during the pandemic.

“There are also a lot of companies that haven’t gotten rid of their point system,” adds Oliva. “So, it may be corporate policy to stay home if you feel sick, but missing work could also lead to a point against you. It’s a mixed message for workers who have

to choose between an income and the public health.”

Ultimately, until there is a mandated standard to implement CDC guidelines, workers will be at the mercy of their individual plant’s management. “In the HEROES (Health and Economic Recovery Omnibus Emergency Solutions) Act, which was passed in the House and has stalled in the Senate, there’s some very clear language around how OSHA should be implementing CDC guidelines in these facilities,” Oliva says. “If passed, it would literally take care of 90% of the problems.”

In a recent statement, Marc Perrone, president of United Food and Commercial Workers International Union, which represents the more than 250,000 meatpacking and food processing workers, wrote, “If we truly care about protecting workers and our nation’s food supply during this pandemic, the federal government must take action, beginning with an enforceable national safety standard, increased access to PPE and COVID-19 testing, and rigorous proactive inspections.”—AM



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—EDWARD MILLS, PHD, Penn State University

Most plants are back up and running at about 95% of typical production levels, says Keith Belk, head of the department of animal sciences at Colorado State University in Fort Collins, but with less staff on the floor, and with shifts spread out over more days. To keep production numbers up, plants may be opting not to fill custom orders. They also may be shipping more half or whole carcasses and producing fewer tray-ready cuts that go right onto supermarket shelves.

### Preventing Future Shutdowns

The coronavirus pandemic represents a shift for the meat processing industry, which will have to be as diligent about protecting human health as it is about food safety. "It took the 1993 E. coli outbreak at Jack in the Box to really figure out what we needed to do to prevent food safety outbreaks," says Belk. "I think the same will be true here."

Looking forward, researchers think that new meatpacking plants will be designed to avoid some of the pitfalls of the shutdowns in April and May. This could mean building more, but smaller, plants so that one shutdown doesn't have as sizable an impact on the supply chain. Future plants could be built with more square footage to enable better social distancing. They may also be designed with optimized personnel flow within the plant. "We did this years ago when we got more serious about eliminating pathogens in raw products, and we knew we couldn't have people go from raw areas in the plant to other areas," says Dr. Mills.

The most foolproof solution, however, would be to invest in more automation at the fabrication level. At Europe's largest pig slaughterhouse, which relies heavily on automated labor, only 10 of its 8,000

workers contracted coronavirus during the pandemic. The meat supply remained secure, and the workers overseeing the series of advanced robots that fabricate pig carcasses remained largely safe.

Automation in meat fabrication would be a significant investment, however, as artificial intelligence is needed in order for these robots to perform carcass-specific evaluation and cutting. Because meatpacking production in the U.S. has just about fully recovered, spending that kind of capital could be a tough sell. "I'm guessing that managers are thinking, 'You know, we've handled this pretty well,'" says MacDonald. "I'm not sure that we will see really major investments in the future of these plants unless they find themselves facing another wave and really getting dragged down."

Others note that if such an investment meant a much more stable food supply, consumers might be ready to pay more for meat at the register. "During the last two to four decades, Americans have only spent about 6% of our disposable income on food. That's the lowest of any country by far," says Belk. "Clearly, potential food shortages during the pandemic caused the entire U.S. population to instantly recognize the value of a secure supply chain."

In the rippling wake of the pandemic, it's easy to see how a secure supply chain starts with a healthy workforce. Even if the industry doesn't invest in a fleet of robot technology across the board, companies will have to invest in the health and wellness of their human workforce more than ever before to ensure that the shutdowns from the spring of 2020 never happen again. ■

**McCorquodale** is a freelance writer who covers the food industry and is based in New York. Reach her at [amandamccorq@gmail.com](mailto:amandamccorq@gmail.com).

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