Since COVID-19 was declared a pandemic, the meat industry has struggled to contain the virus SARS-CoV-2 in its facilities. There were outbreaks in plants in Iowa, South Dakota and Kansas. With an increased risk for contracting and spreading the virus, targeted workplace interventions and prevention efforts were key to reducing the COVID-19 occupational risk and health disparities among vulnerable populations.

For AMA member Douglas W. Martin, MD, an occupational medicine physician and medical director for UnityPoint Health St. Luke's Occupational Medicine in Sioux City, Iowa, it was vital that proper preventive measures were established immediately to protect employees at the local meatpacking plants from COVID-19.

During a recent interview, Dr. Martin discussed how he ensured the safety of employees at the meatpacking facilities and advocated for vaccinations on premises.

**AMA:** When the pandemic began, what initial challenges did you have to overcome in occupational medicine?

**Dr. Martin:** The initial challenge that we had in occupational medicine when this hit was, what are we going to do from our perspective of providing injury care to employees? One of the things that we struggled with as an outpatient discipline was, what are we going to do? Are we going to continue to stay open or reduce hours? What are we going to do with people who have COVID and also have injuries or have injuries and now develop COVID?
We decided that we were going to stay open with no reduced hours. The crux of that decision process was that we asked the question, if we shut down, or if we reduce hours, where are our injured workers going to go? And we realized that the answer to that question was going to be either the emergency room or an urgent care facility.

Of course, you don't want to have people go to those facilities in a pandemic because that's where the sick people are. Not only that, but those facilities obviously were being overrun with COVID types of situations. So, we decided to keep moving. However, we were very rigid about the folks that we let through the door. If you had a fever or you had symptoms, you didn't get in our front door because we wanted to maintain, for lack of a better term, a clean environment to do our routine occupational medicine work, which was the absolute right decision that needed to be made at that time.

**AMA:** With your focus on the agriculture industry and meatpacking, how do you remain open and ensure everyone is following proper preventive measures like wearing masks and practicing physical distancing?

**Dr. Martin:** There was so much emphasis with regards to the agricultural basis of the industry. These people were identified as essential workers, which they needed to be—everybody's got to eat. That doesn't miraculously go away.

This includes the people in the meatpacking industries, the grain processors and the dairy folks. But it's also the truck drivers that deliver the goods and get it to the stores and stock the shelves. And it's the shag drivers that take the milk from the dairy farms to the pasteurization facilities. It took a pandemic like this to show you how all of those moving parts need to work together. And the interesting thing is that if you have one clog in that process—and it only takes one clog in that process—it can screw up the whole thing. We had to make sure that everybody within all of those industries were working in a safe environment and that, of course, included a lot of different things. It's not just personal protective equipment (PPE), but that was a big part of it. The other parts were making sure that people were limiting exposures.

Dealing with the meatpacking facilities, it may sound like it's not necessarily medical, but it really is. It's a study in population health, as far as how you get 5,000 people in a meatpacking facility to safely and reasonably physically distance and take mitigation steps that make people feel safe.
Before the pandemic, everybody would come to work and walk into the entrance facility all at the same time. In a meatpacking facility, where you've got all these people wanting to come together at the same time, you stagger their start time. It seems like an easy thing to do, but not in the meatpacking world because time is money. It is better to stagger start times than to close the plant because everyone is COVID-positive. That obviously would be a disaster. Then other things like staggering their break times or lunch times helps too.

One of the good things about working in a meatpacking facility is there are already a number of PPE items that you have to put on before you go to your workstation. You get a hard hat, an apron, gloves, hair net and other protective clothing. Essentially, the only thing that needed to be added in was wearing a mask. In a lot of the food processing arenas, people already had this mindset of personal protective equipment more from a cleanliness standpoint because of the food production part of it. Adding additional items because of COVID-19 wasn't necessarily a foreign concept to them, which was a really nice thing.

You do also have hundreds of people lined up on a conveyor belt who are wielding knives and hooks that are cutting and processing meats. For that reason, we installed a lot of plexiglass and plastic partitions in an overnight type of situation to make that look and work correctly. We continue to maintain those separators today.

**AMA:** On top of wearing a mask and distancing, how do you monitor all the workers and their symptoms as they enter the facilities?

**Dr. Martin:** These big meatpacking facilities and other food processors generally have an onsite occupational health nurse present. Those nurses are usually there to deal with work-related injuries and triaging. But with COVID-19, that all flipped from a priority standpoint.

Now they're involved in taking temperatures of everyone, doing the screening for symptoms and making those triaged judgements about who can go to work and who can't. One of the challenging things at the beginning was to figure out what that should be. At the very beginning there was no consensus on what the maximum temperature should be. Some people were saying 100, other people were saying 99 and then others were saying 101—nobody knew what normal was.

That meant trying to get people's heads together to determine an appropriate temperature that everyone would be comfortable with. That was a bit of a challenge, but once you got everyone on the same page, then the institution of the plan was not all that difficult only because we had those occupational health nurses in place. It's just that the focus of what they did changed from worrying about cuts and foreign objects in eyes and repetitive motion disorders to now worrying about whether you have any type of infection or symptoms.
AMA: How did your approach change as the pandemic progressed?

Dr. Martin: As the pandemic progressed, the change in occupational medicine shifted from how are we going to put our prevention measures in place—which we’re really good at—to what do you do with people who have had the illness and now have to go back to work? We had all of this discussion about if we should be doing antibody testing to make sure that people have enough antibody levels. Well, we came to find out that it clinically didn’t mean anything, so that went out the door really quick.

At the very beginning, we were very cautious, so we did have that 14-day period of if you were COVID positive, you had to get over the disease. You had to be symptom-free and fever-free for two weeks before you could go back to work. As time went on and we learned more about these things, that timeframe became shorter.

AMA: Now that there are three COVID-19 vaccines available, how has vaccine rollout been?

Dr. Martin: In my area, we have three different states to deal with. We’ve got Iowa, Nebraska and South Dakota that all come together. Then at these larger facilities that we’re talking about, you get three different states worth of people in the same facility. My fear when this rolled out was that I was going to give the vaccine sooner than Nebraska and South Dakota. If you were an Iowa worker in the meatpacking facility, you felt really good because you got your vaccine, but what does that mean for the Nebraska or South Dakota resident? They’re not going to feel safe and they’re going to feel like they’re slighted.

I got in contact with the county health department here and I went through this scenario with them. I told them they had to think about how this is going to work in these larger employer facilities and going through a vaccine administration perspective from an employer aspect, not necessarily a residential aspect. In the last couple of weeks, they have done just that and decided to set up vaccination facilities at these larger meatpacking plants.

This is what we do in occupational medicine. We think in terms of population health based on segments of the players and what they do.

AMA: As more workers in your facilities get vaccinated, how will you know when to change prevention measures?

Dr. Martin: We’re tracking very closely our incidence rate here amongst our counties in the three-state area. We have seen a precipitous decline—the data numbers that come out every week continue to go down. We also get information about the total vaccines that have been administered as far as a percent of the eligible population.

If we have 50% of the population vaccinated, we’re going to feel pretty good about that. Obviously, we
want to have a lot more. Our goal is 100%, but if we get into the 90th percentile or upper 80th percentile, we’re going to feel pretty good about folks who are inside of that facility. We’re not at the point where we can tell people to stop using masks and physically distancing, but at some point, when that numerical value gets to that level, we will have some serious discussions about when people can discontinue following these preventive measures.