



Memorandum

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Subject: Strategies to reduce COVID-19 transmission at Cargill Protein, Dodge City, Kansas

Background

On April 20, 2020, CDC received a request for technical assistance from the Kansas Department of Health and Environment (KDHE) in developing strategies to help prevent SARS-CoV-2 infections in workers at multiple Kansas meat processing facilities. We are copying the appropriate county health officials and company representatives on memos for each of the five facilities we visited (three company memos covering five plants). We are also including 'best practices in implementation' seen in facilities of all three companies (National Beef, Cargill, and Tyson Foods) with their permission. In our opinion, highlighting these 'best practices in implementation' will improve mitigation strategies and further educate the decision makers within these meat processing facilities.

On April 23, a CDC team held a teleconference with Cargill corporate staff to learn about the current efforts that Cargill was taking in their 39 North American processing facilities to protect employees from SARS-Cov-2. We also met with staff from the Ford County Health Department to learn about their efforts in contact tracing and testing symptomatic Ford County residents for SARS-CoV-2 infection. On April 25, a CDC team visited the Cargill facility in Dodge City, Kansas. We observed the fabrication process and toured the harvesting work area, both of which were operating at lower capacity due to reduced worker numbers. Worker numbers were reduced due to SARS-Cov-2 positive workers in isolation (approximately 52 at the time of our visit), and workers in quarantine as a result of close contact with a positive case or self-quarantine for personal reasons (approximately 435 at the time of our visit). Overall increased absenteeism (not included in the previous categories) contributed to the reduced workforce (approximately

300/day at the time of our visit). The harvesting area is where animals are stunned, eviscerated, and processed into beef halves. The fabrication department processes the beef carcasses into various beef products/cuts that are boxed for shipment. During standard operations, the plant operated two processing shifts and a third sanitation shift. This third sanitation shift cleans the entire plant with a focus on processing equipment. All employees performing sanitation are from a third-party contractor. Contract employees work on the sanitation shift to clean the plant overnight. Approximately 180 contract employees work on the sanitation shift.

We also met with the United Food and Commercial Workers (UFCW) Local 2 President on April 29, to gain his perspective on plant operations and mitigation steps Cargill and the union had taken to limit SARS-CoV-2 transmission in the facility.

Observations and discussion

This memo is not intended to document every observation and intervention that occurred at the plant. It is a summary of the plants' implementation of the CDC/OSHA guidance found at <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/meat-poultry-processing-workers-employers.html>. We observed that companies had implemented many recommended changes by the time of our site visit. We discussed our preliminary recommendations for each facility during closing meetings while onsite to facilitate their timely implementation and offered best practices we saw across sites in Kansas. This memo summarizes and highlights areas where we observed best practices for implementation of the CDC/OSHA guidance across companies and areas that could be modified to more closely match existing guidance to better protect worker safety and health. Additionally, our recommended controls are intended to supplement those required and recommended by the KDHE and county health officers per the KDHE [modified quarantine](#) of close contacts who work in critical infrastructure.

All entrants were subject to screening prior to entering the facility. Pre-shift primary and secondary screening was done outside of the plant by third party contract medical personnel. Entrants were screened for fever, symptoms, and travel. The screening questions were posted in large print, in several languages at the entrance of the screening areas. Symptomatic workers were given quarantine instructions and referred to the Ford County Health Department for testing. Plant medical staff and county health department personnel worked together to identify close contacts both in the plant and the community. Periodic infrared camera temperature monitoring was taken throughout the day before entry to the fabrication floor and by the harvest floor cafeteria to potentially detect workers who developed a fever during their shift. Management felt this was helpful in both identifying fevers mid-shift and reassuring employees that co-workers were being monitored throughout the day. Symptomatic patients who turned out to be positive for SARS-CoV-2 were identified via mid-shift temperature screening at the site.

Management has initiated several controls to manage crowding in common spaces. They staggered breaks by modifying production practices (specifically slowing chain speed to extend break times) and delayed the beginning of second shift to leave time for first shift employees to leave before second shift employees arrive.

In the lunchroom, tables had been moved to increase the distance between workers during breaks and some tables were placed outside. Barriers had been installed at lunchroom tables to limit the number of workers that can sit at a single table during lunch and breaks and to provide some physical barrier between workers during meals. Management has assigned people to monitor common areas, entrances, and lunchrooms to encourage distancing between workers during high traffic periods like shift changes and breaks.

Plant production has been reduced due to low staffing. Some workers were able to maintain a 6 feet distance on the line and continue operations. However, where management said the process prohibited enough spacing, barriers (curtains) had been installed between those workers on the line. Some areas on the harvest line and in pack off may be difficult to install barriers or maintain spacing due to work processes.

Hand sanitizer dispensers were located throughout the plant, notably at the entrances to the plant and at entrances to lunchrooms as part of the plant food safety program. Management indicated that several hand sanitizer dispensers had been added as COVID-19 prevention measures. The dispensers were a mix of pump dispensers and touchless. Additional staff have been assigned to clean and sanitize commonly touched surfaces more frequently, such as handrails, doors and door handles, and lunch tables. Time clocks in the plant were touch-free for plant workers. The facility is being fogged periodically and videos of the fogging are being shared with employees to demonstrate disinfection happening when the employees are not on site. As part of their COVID-19 control implementation, the sanitation crew started fogging common areas with PURE ® hard surface, a registered disinfectant.

Face coverings were required for anyone entering the plant grounds or facility. Management was encouraging personal cloth face covering use until they recently were able to source disposable facemasks for employees. The facemasks provided daily resembled surgical or medical facemasks that looped over the wearer's ears. Every employee receives and must wear a facemask, or cloth face covering if a facemask is not available, when at the site. During our walkthrough we saw most workers and management wearing the facemasks correctly. Management was also purchasing washable cloth face coverings to provide to employees for use at work and at home, but they were still on order at the time of our visit.

Management said they had begun COVID-19 education with small group trainings several weeks prior to our visit. Some COVID-19 education materials were posted on the walls. Inside the plant, posters with handwashing messages were posted on a bulletin board at the entrance. Some COVID-19 prevention messaging in multiple languages rotates on video monitors in common areas. They also had posters in multiple languages posted in the hallways, and at locker room entrances on COVID-19 prevention. Printed education materials were limited in cafeterias. Management expressed that communicating messages throughout their diverse staff presented challenges, especially since some interpreters were COVID-19 positive or quarantined. The company used a language line for translation when staff at the site were not available.

Conclusions

The company has implemented controls at the plant to help prevent and mitigate the spread of coronavirus between workers. Recommendations are provided below to assist management, the union, and workers with efforts to limit virus transmission in the plant.

Recommendations for Cargill Management and Workers

As the plant works toward increasing production capacity as workers return, we provide the following recommendations to augment existing controls to help prevent the spread of coronavirus between workers. We understand that with ongoing community transmission COVID-19 cases will continue to be identified. However, the existing and recommended controls with ongoing education will be useful in reducing transmission in the workplace.

A qualified workplace coordinator should be identified who will be responsible for assessment and control planning for these and any other interventions to be rolled out in the workforce. Continued partnering with labor representatives on consistent messaging concerning COVID-19 helps with employee comprehension and compliance with recommended controls.

Hierarchy of controls

The following recommendations should be considered for implementation according to the hierarchy of controls. Hierarchy of controls is an approach to hazard intervention that starts with the controls perceived to be most effective and moves down to those considered least effective. In most cases, the preferred approach is to eliminate a hazard or exposures (such as distancing), install engineering controls (such as barriers), and implement appropriate sanitation and cleaning to reduce workers exposure to the hazard. Until such controls are in place, or if they are not adequately effective or feasible, administrative measures and personal protective equipment (PPE) may be needed.

1. Ensure face covering(s) provided by management conform with state or local requirements for their use, and the Interim Guidance from CDC and OSHA for Meat and Poultry Processing Workers and Employers. The guidance indicates that cloth face coverings should fit snugly but comfortably against the side of the face, include multiple layers of fabric, and allow for breathing without restriction.
2. Require all employees whose role prevents both (a) distancing from employees around them and (b) the installation of a fixed barrier, to wear a face shield as PPE and source control while working. At least one facility manufactured face shields out of sturdy plastic film that affixed to a hardhat until face shields could be procured. For example, some positions in packaging and the kill area require being in close contact with adjacent employees and require frequent movement. When introducing the face shield, ensure the following steps are taken.
 - Use videos or in-person visual demonstrations of proper PPE donning and doffing procedures. (Maintain social distancing during these demonstrations.)
 - Emphasize that care must be taken when putting on and taking off PPE face shields to ensure that the worker or the item does not become contaminated.
 - Provide face shields that are either disposable (preferred) or, if reusable, ensure it is properly disinfected and stored in a clean location when not in use.

- Face shields worn at the facility should not be taken home or shared.
3. Establish a close contact follow-up program per the modified quarantine requirements published by KDHE. According to their guidance, this includes prescreening, regular monitoring under the supervision of the occupational health office, medical check-ins, wearing face coverings, and social distancing as work duties permit.
 4. Continue to identify solutions to promote social distancing in the workplace (i.e., maintaining at least 6 feet between workers.) The effectiveness of physical barriers in preventing coronavirus exposures between physically close workers is not known. Physical barriers should not be used as a replacement for social distancing and should only be used when it is not possible, due to work design or task to be completed (e.g., two people needing to work together on a single carcass or trimming tasks that need to be done next to one another).
 5. Other specific topics that should be included in training based on conversations with management and on observations of workers onsite include the following:
 - Topics should include (a) recognizing signs and symptoms of infection, (b) how the virus spreads, (c) ways to prevent exposure to the virus, (d) proper handwashing and hand sanitizing, (e) cough and sneeze etiquette, and (f) putting PPE on and taking PPE off safely. All communication and training should be easy to understand and should be provided in languages appropriate to the preferred languages spoken or read by the workers, if possible; and be at the appropriate literacy level.
 - Emphasize that face coverings always need to cover the nose and mouth and should remain in place until taken off safely. If a worker's face covering moves during work, it needs to be replaced with one that doesn't need to be frequently adjusted to reduce touching of the face.
 - Train workers on how and when to ask for new face coverings/mask when theirs becomes dirty, wet, and/or difficult to breathe through.
 - Reiterate the need for cough and sneeze etiquette (coughing and sneezing into the elbow) even when wearing a face covering if this does not result in a safety hazard for the worker.
 - Teach workers to wash their hands if they are visibly dirty, because hand sanitizer may not work as well when hands are dirty.
 - Have workers practice proper hand hygiene at hand sanitizing stations. Enough sanitizer should be used to cover all surfaces of fingers and hands and should take about 20 seconds to rub dry. This is comparable to the duration of effective handwashing. More information on hand sanitization and washing can be found here: <https://www.cdc.gov/handwashing/hand-sanitizer-use.html>
 6. Instruct workers to talk with their supervisor if their face covering/facemask needs to be adjusted frequently and/or if it interferes with their job-specific PPE. Supervisors should work with workers to address these issues.
 7. Place simple posters that encourage staying home when sick, cough and sneeze etiquette, COVID-19 symptoms, and proper hand hygiene practices at the entrance to the workplace, break areas, locker rooms, and in other workplace areas where they are likely to be seen.

- CDC has [simple posters](#) available to download and print, some of which are translated into different languages. The Stop the Spread of Germs poster is available in several languages, including English, Spanish, Burmese, and Somali.
- 8. Analyze sick leave policies and consider modifying them to make sure that ill workers are not in the workplace. Make sure that employees are aware of and understand these policies. Analyze any incentive programs and consider modifying them, if warranted, so that employees are not penalized for taking sick leave
- 9. Put handwashing stations near the outdoor break areas to encourage handwashing before eating. Install handwashing stations or additional sanitizer dispensers in the lunchroom to encourage pre-meal hand hygiene.
- 10. Determine if proposed controls, such as barriers between work position on the line, could pose a safety hazard for workers. Ensure it would not be possible for workers' tools, hands, or arms to be caught between the barrier and moving parts of the conveyor. This may require pilot testing barriers before implementing them in all workstations where workers cannot be separated by 6 feet or more.

'Best Practices' Observed at Kansas Meat Packing Facilities

Across all five plants we visited in Kansas, we observed 'best practices' that included both ways that the CDC/OSHA guidance was implemented as well as practices that extended beyond what was described in the guidance. Companies implemented these practices based on their frontline experiences and discussions with other plants, corporate staff, and unions where applicable. (Site location noted with symbol after each observed best practice.) We highlight these 'best practices in implementation' to bring awareness to actionable practices that could be utilized:

- Used a third-party medical contractor to screen staff and other visitors to the plant. Post COVID-19 symptoms at the plant entrance in the most common languages spoken at the plant. *
- Screened staff during breaks for fever to identify new onset or masked fevers during the workday. Some companies said this helped employees feel more comfortable and at least one plant had identified employees with a fever during these screenings who ultimately tested positive for COVID-19. * ‡
- Lowered the temperature at which the thermal imaging system alarms for fever (99°F) to perform secondary screening. This may increase the sensitivity of a thermal imaging system. *§¶
- Sanitized meeting rooms and offices between meetings or trainings. Document this on a posted log to prevent over or under-cleaning, and to assure workers that area has been cleaned and is ready to use. *
- Utilized existing labor-management health and safety committees to implement controls and expand training. Distributed messaging from multiple parties (both union and company). Future messaging was planned to be taken from already developed sources, like KDHE and CDC. *
- Displayed photos and/or videos of extra cleaning and sanitization for employees to see on video monitors or posters in common areas. Management have specifically shared media

about cleaning and fogging that occurs at nights and weekends, when most plant employees are not at work. * ‡

- Created an online social media group for employees through which management can share messages to their staff. ‡
- Used a system that can text employees to further distribute COVID-19 prevention and education messages (when available).
- Partnered with a local radio station to help deliver COVID-19 messages to the local community. Continuing to partner with multiple parties (the union and/or non-management employees) to deliver future messaging. ‡
- Installed barriers that are hung on bars that are parallel to the production line. The barriers can be slid parallel to accommodate employees' different work movements and styles. This prevents, as we observed in some places, employees' arms and elbows hitting the barrier with each cut of their task. ‡
- Used a card system at breakroom tables. Each card has one side that is green and one that is red. Employees should sit at tables with green cards and flip them over to the red side when they leave, indicating that the spot needs disinfection. This ensures tables are cleaned between uses and prevents unnecessary cleaning. Implementation will require worker education on the use and purpose of the card. Signs could be posted in the cafeteria in appropriate languages explaining their use. *
- Educated employees in small groups about COVID-19. In-person instruction, when done in small, distanced groups, ensures that all employees receive the same message and that illiterate employees are also offered complete education. *
- Installed signage about COVID-19 at every entrance, hallway, and at bathroom/locker room entrances and exits and on monitors throughout the plant in languages employees understand. Delivered audio messages in hallways in languages employees understand. *§¶
- Made portable toilets and handwashing stations available at overflow outdoor break areas to encourage use and reduce locker room crowding. *§¶
- Created a space where employees can remove face coverings briefly to make interpretation easier for one-on-one or very small meetings/counseling sessions. The space had physical barriers and was large enough that employees could maintain appropriate distance. §
- Provided handouts with COVID-19 messages for employees to take home with them. The materials came from their corporate office, KDHE, CDC and other organization and were made available in several languages. The messages were available at the plant entrance and exit. ¶
- Reassigned lockers so people in the same shift and/or line are not next to one another to reduce crowding during shift changes. ¶
- Marked all seating (i.e., bench seating in locker rooms) with visual cues that are 6 feet apart to show employees where they should sit. Blocked off areas where social distancing cannot be maintained. Barriers should not be relied upon to keep people safe in common

areas when additional break space can be provided and/or breaktimes can be managed to reduce the total number at break at the same time to fit the break space. ¶

Location where interventions were observed

*Cargill, Dodge City

†National Beef, Dodge City

‡National Beef, Liberal

§Tysons, Holcomb

¶Tysons, Emporia

The plant should continue to consult with USDA to determine if proposed controls are acceptable with regards to food safety and sanitation. KDHE, Ford County Department of Health and Environment, strategic community partners, and the UFCW Local 2 president and stewards should continue to work together in educating employees about COVID-19 risks and prevention strategies. Thank you for your cooperation with this evaluation. We appreciate your interest in occupational safety and health.

End of memo