



Reopening Food Processing Plants: Mitigating the Risks

Disclaimer:

This *Quick Response Report* was published on June 10, 2020. Given the rapidly changing nature of the coronavirus pandemic, some of the references included in this report may quickly become out-of-date. We further caution readers that researchers at the Newfoundland & Labrador Centre for Applied Health Research are not experts on infectious diseases and are relaying work produced by others. This report has been produced quickly and it is not exhaustive, nor have the included studies been critically appraised.

Original Inquiry

What approaches are being taken in other jurisdictions to mitigate the risks associated with reopening food processing plants (with attention to meat, poultry, or fish processing plants)? Are there any published guidelines or articles on this topic?

Summary

Please note that this report focuses on specific information for food processing rather than on more general guidance for reopening workplaces.

We found a number of plans/guidance related to the reopening of food processing plants from selected jurisdictions in Canada as well as from several International locations (included in the first section of the document below). In addition, we found guidance documents from five national and international agencies/organizations, including the Centres for Disease Control and the World Health Organization, among others. We also found two other reviews, two expert commentaries/ editorials, one primary study and eleven news articles. We did not find any systematic reviews at this time.

Government Documents (Canadian and International Jurisdictions)

Canadian Jurisdictions

Government of Canada

Government of Canada, Department of Agriculture and Agri-Food. **Workplace guidance for sector employers and employees.** Last modified June 5, 2020. ([LINK](#))

Canadian Food Inspection Agency. **Coronavirus disease (COVID-19): CFIA information for industry.** Last updated May 22, 2020. ([LINK](#))

- Contains links to guidance, latest updates, information for industry, and related links.

Government of Canada. **Guidance for employers of temporary foreign workers regarding COVID-19 (updated April 22, 2020)**. April 22, 2020. ([LINK](#))

- “Like all Canadians, most temporary foreign workers entering Canada are required to follow certain obligations, including quarantine... Employers must not prevent workers from meeting those requirements in any way.”
- “In addition, employers have an important role to play in helping to prevent the introduction and spread of COVID-19. This document is intended to assist employers in understanding how to fulfill that role, with a view to helping to protect the health and safety of Canadians and workers.”

Government of Canada, Canadian Food Inspection Agency (CFIA). **CFIA expectations for the prevention of and response to suspected and confirmed cases of COVID-19 by Meat Slaughter and Processing Establishments**. March 31, 2020. ([LINK](#))

- “Prevention and mitigation measures and response plans: Establishments are requested to have COVID-19 prevention documentation which clearly articulates mitigation measures intended to address exposure risks. It is recognized that certain public health measures may not be possible in plant operations; documentation should recognize this and outline the mitigation measures that are in place.”
- “Additional examples of potential concerns and practical mitigation measures are included as an Annex to this document.”

Alberta

Government of Alberta. **Guidance for Food Processing Operations**. May 20, 2020. ([LINK](#))

- Includes information on restricting facility access and suggests that employers screen all individuals for symptoms prior to entering the facility and “keep a complete record of the workers and visitors on the work site.” Also includes a section on physical distancing for the production floor, offices, and common areas, shipping and receiving areas and communications.
- Related documents:
 - Government of Alberta. **Workplace Guidance for Business Owners**. Updated May 16, 2020. ([LINK](#))
 - See: “Appendix B: COVID-19 Plan for Large Production Facilities”
 - Alberta Pork. **COVID-19 resources for producers**. 2020. ([LINK](#))
 - Calgary Herald. **Union says 21 Alberta meat-plant inspectors have tested positive for COVID-19**. May 14, 2020. ([LINK](#))
 - Alberta Health Services. **Meat Processing Plant COVID-19 Outbreaks novel coronavirus (COVID-19)**. May 6, 2020. ([LINK](#))

British Columbia

BC Center for Disease Control and BC Ministry of Health. **Guidance on reducing the risk of COVID-19 to workers in processing facilities**. May 29, 2020. ([LINK](#))

- “Facilities should be prepared by having written procedures supported by activities and records (e.g., visitor log records, employee health checks, COVID-19 training records) that demonstrate compliance with procedures. Procedures are to be made available on

request to WorkSafe and public health inspectors to provide assurance that workers are protected from infection at the work site.”

- Related document:
 - WorkSafe BC. **Meat processing and COVID-19 safety**. 2020. ([LINK](#)).
 - “These resources are for employers in poultry processing, meat processing (beef, pork, and other meats), and shore-based seafood processing, including limited processing.”
 - Sections include: developing a safety plan, understanding the risk, selecting protocols for your workplace, and protocols for meat processing
- Related news article:
 - Alberni Valley News. **Ucluelet’s major fish processing plant re-opens: COVID-19 safety plan established**. April 29, 2020. ([LINK](#))

BC Centre for Disease Control, BC Ministry of Health. **Protecting workers, contractors, and employers working in the natural resource sector during the COVID-19 pandemic**. May 13, 2020. ([LINK](#))

- Includes three sections: what you need to know about COVID-19, steps for employers and operators of natural resource sector work camps, and what employers need to put in place to assess and monitor worker health.
- Related document:
 - BC Centre for Disease Control, BC Ministry of Health. **Protecting farm workers and temporary foreign workers during the COVID-19 pandemic**. May 13, 2020. ([LINK](#))

Government of British Columbia. **Guidance to BC manufacturers during COVID-19**. March 25, 2020. ([LINK](#))

- Related document:
 - WorkSafe BC. **Manufacturing and COVID-19 safety**. 2020. ([LINK](#))

Manitoba

Manitoba Government. **Guidance for the Manitoba Food Processing Sector**. 2020. ([LINK](#))

- Related documents:
 - Manitoba Government. **Guidance for Industry Sectors**. 2020. ([LINK](#))
 - Contains small sections on food processing and manufacturing.
 - Manitoba Pork. **Human Resources during COVID-19**. 2020. ([LINK](#))
 - Includes “Important links for Manitoba pork producers during COVID-19”

New Brunswick

Government of New Brunswick. Covid-19. **Information for the agriculture, aquaculture, fisheries and processing sectors**. 2020. ([LINK](#))

- Contains FAQs, health and safety recommendations, funding programs and resources.
- Relevant links on this page include:
 - Aquaculture, fisheries and seafood processing FAQ ([LINK](#))
 - Safety plans for fishermen and seafood processing plants ([LINK](#))
 - Contains information about [Fishermen](#) and [processing plants](#)

Nova Scotia

Government of Nova Scotia. **Guidance for temporary foreign workers employed in the agriculture and seafood sectors.** 2020. ([LINK](#))

- See appendix A: “Pre-Screening Checklist for Temporary Foreign Worker Self-Isolation Facilities.”
- Related document:
 - Government of Nova Scotia. **Self-isolation for fishery workers coming to Nova Scotia.** 2020. ([LINK](#))

Ontario

Government of Ontario. **Food manufacturing and processing health and safety during COVID-19.** Published April 30, 2020 (Updated May 14, 2020). ([LINK](#))

- Related document:
 - Government of Ontario. **Manufacturing health and safety during COVID-19.** Published April 30, 2020 (Updated May 26, 2020). ([LINK](#))
 - Very similar to the “Food manufacturing and processing health” document above but some advice has been modified for manufacturing.
 - Government of Ontario. **Resources to prevent COVID-19 in the workplace.** 2020. ([LINK](#))
 - Ontario Pork. **COVID-19: Tips and Advice for Pork Farms in Ontario.** 2020. ([LINK](#))
 - See: Meat supply [poster](#) for a summary of “Measures taken by the Canadian Meat Industry to Protect Against COVID-19”

Prince Edward Island

Government of PEI. **Protecting PEI Seafood Industry Workers during COVID-19: A Guidance Document for Seafood Processors Employing Temporary Foreign Workers.** April 22, 2020. ([LINK](#))

- Section 7.2 of the document includes information that applies to those working on processing lines
- Section 7.3 contains information on guidance for breaks or being in communal spaces (e.g., Processing Plants)
- Guidance includes measures such as physical distancing, designating “employees to small working groups”, “2 meters of separation from other individuals” for workstations, and constructing physical barriers where distance cannot be safely maintained, e.g., Plexiglas.
- Related news article:
 - CTV News. **PEI announces funding for essential workers, fisheries, more reopening plans.** May 7, 2020. ([LINK](#))

International Jurisdictions

Australia

Australian Food and Grocery Council. **COVID-19 Information for Industry.** 2020 ([LINK](#))

- Includes resources for the industry as well as a link to a guidance document called “Principles for Risk Management of COVID-19 Infection within Manufacturing Sites” with

more information on risk assessment and minimisation, compliance and contacts for manufacturers.

- Related document:
 - Safe Work Australia. **COVID-19 resource kit**. 2020 ([LINK](#))
 - Includes a page on [food processing and manufacturing](#) but links are to general information

Ireland

Health Service Executive of Ireland. **COVID-19 Outbreaks in Meat Factories in Ireland Outbreak Control Team Interim Guidance on COVID-19**. May 18, 2020. ([LINK](#))

- Related news articles:
 - GlobalMeatNews.com. **Rise in coronavirus cases in Irish meat industry**. May 20, 2020 ([LINK](#))
 - The Guardian. **'Everyone's on top of you, sneezing and coughing': life inside Ireland's meat plants**. May 14, 2020. ([LINK](#))

New Zealand

Worksafe New Zealand. **COVID-19 Alert Level 2: Public Health Requirements – What you need to know**. Last updated May 29, 2020. ([LINK](#))

- “Businesses and services with a consistent group of workers and a fixed workplace. Examples include: ...factories, warehouses, manufacturing plants” must “follow the general requirements for all businesses and services” and adhere to physical distancing workers should “remain at least one metre away from each other to the greatest extent practicable, keep workers apart one metre to the greatest extent practicable, mitigate the risks where physical distancing requirements aren’t fully maintained.” Also, employers are required to “keep contact tracing records for all people who enter the work premises or use its services, including workers.”
- Related news article:
 - **New Zealand Meat Board**. Team effort to keeping NZ’s red meat exports moving during lockdown. **May 2020**. ([LINK](#))
 - “...NZ was able to continue to export red meat and generate valuable income when the rest of the economy had shut-down. That came down to the farmers, transport operators, processors and the team at the New Zealand Meat Board who made it all happen.”

United Kingdom

Government UK, Department for Business, Energy & Industrial Strategy. **Factories, plants and warehouses - Working safely during coronavirus (COVID-19) - Guidance – Government UK**. May 11, 2020 (Updated May 29, 2020). ([LINK](#))

Government UK, **Guidance for food businesses on coronavirus (COVID-19)**. Updated May 18, 2020. ([LINK](#))

- “Food safety practices in food processing plants should continue to be delivered to the highest hygiene standards including the use of some personal protective equipment and frequent hand washing.”
- Related documents:
 - Government UK, Department for Business, Energy & Industrial Strategy. **5 steps to working safely - Working safely during coronavirus (COVID-19)**. May 11, 2020 (Updated May 25, 2020). ([LINK](#))
 - Scottish Government. **Coronavirus (COVID-19): manufacturing sector guidance**. ([LINK](#))
- Related news articles:
 - The Guardian. **'A terrible way to go for £9 an hour': fear at meat plant after three coronavirus deaths**. May 20, 2020. ([LINK](#))
 - GlobalMeat. **Warning on 'high-risk nature' of meatpacking after COVID-19 clusters emerge**. May 13, 2020. ([LINK](#))

Guidance from Agencies, Organizations, and Associations

Centres for Disease Control and Occupational Safety and Health Administration. **Meat and poultry processing workers and employers. Interim guidance from CDC and the Occupational Safety and Health Administration (OSHA)**. Last reviewed: May 12, 2020. ([LINK](#))

- Includes information on creating a COVID-19 assessment and control plan, the types of controls to use (engineering, administrative), cloth face coverings, how to educate and train workers and supervisors about how they can reduce the spread of COVID-19, cleaning and disinfecting, screening and monitoring workers, managing sick workers, addressing returning to work, personal protective equipment and worker’s rights.
- Related documents:
 - Dyal et al. **COVID-19 among Workers in Meat and Poultry Processing Facilities - 19 States, April 2020**. CDC, MMWR. May 08, 2020. ([LINK](#))

Centres for Disease Control and Occupational Safety and Health Administration. **Manufacturing Workers and Employers Interim Guidance from CDC and the Occupational Safety and Health Administration (OSHA)**. May 12, 2020. ([LINK](#))

- Includes sections on: exposure risk among manufacturing workers, creating a COVID-19 assessment and control plan, controls, educating and training workers and supervisors about how they can reduce the spread of COVID-19, cleaning and disinfecting in manufacturing, screening and monitoring workers, personal protective equipment, and workers’ rights.

Food and Agriculture Organization (FAO) of the United Nations. **Guidelines to mitigate the impact of the COVID-19 pandemic on livestock production and animal health**. 2020. ([LINK](#))

Quotes:

- See section “3.3 Recommendations for animal product processing plants, live animal markets and related supply chains” that includes 8 recommendations
- Related documents:

- Schmidhuber et al. **COVID-19: Channels of transmission to food and agriculture.** FAO. 2020. ([LINK](#))
- FAO. **COVID-19 and Food Safety: Guidance for food businesses: Interim guidance.** 2020. ([LINK](#))
- FAO. **Mitigating risks to food systems during COVID-19: Reducing food loss and waste.** May 11, 2020. ([LINK](#))
 - “Focus attention on the needs of the production, post-harvest and processing sectors, and try to find the balance between focusing on health and on agricultural systems, which are vital to assuring food security.”

Canadian Centre for Occupational Health and Safety (CCOHS). **Food Processing.** April 16, 2020. ([LINK](#))

- This document includes the following sections pertaining to food processing: sanitation, disinfectants, physical distancing, and general site management.

World Health Organization. **COVID-19 and food safety: Guidance for food businesses.** April 7, 2020. ([LINK](#))

- This document includes the following sections: potential transmission of COVID-19 via food, awareness of COVID-19 symptoms, preventing the spread of COVID-19 in the work environment, use of disposable gloves, physical distancing in the work environment, illness in the workplace, transport and delivery of food ingredients and food products, retail food premises, open food display in retail premises, and staff canteens.
- Related documents:
 - WHO. **Questions relating to food businesses.** May 15, 2020. ([LINK](#))
 - WHO. **COVID-19 and food safety: Guidance for competent authorities responsible for national food safety control systems.** April 22, 2020. ([LINK](#))

Canadian Agricultural Human Resources Council. **Information and Tips on COVID-19.** 2020. ([LINK](#))

Systematic Reviews

None found at this time.

Other Review Articles

Rueda-Garrido, J. et al. **Return to Work Guidelines for the COVID-19 Pandemic.** Occupational Medicine. June 1, 2020. ([LINK](#))

- Searched PubMed December 2019 to 15 April 2020 and “found no articles specifically addressing return to work guidelines”
- “Until a vaccine or herd immunity is established, we propose the following return to work strategies. All workers must remain isolated at home for the duration of any significant symptoms.”
- “In the current situation with a high rate of transmission and limited testing resources, it is important to differentiate between high- and low-risk workers. While low-risk workers’

guidelines may rely on clinical criteria, more specific testing-based strategies should be used for high-risk workers.”

Althouse, B. et al. **Stochasticity and heterogeneity in the transmission dynamics of SARS-CoV-2**. Ithaca: Cornell University Library, arXiv.org. May 27, 2020. ([LINK](#))

- “The basic reproduction number... hides the fact that transmission is stochastic, is dominated by a small number of individuals, and is driven by super-spreading events (SSEs)... Many explosive SSEs have occurred in indoor settings stoking the pandemic and shaping its spread, such as long-term care facilities, prisons, **meat-packing plants, fish factories**, cruise ships, family gatherings, parties and night clubs.

Expert Opinion

Lewandowski, P. **Occupational Exposure to Contagion and the Spread of Covid-19 in Europe**. IZA Discussion Paper No. 13227. May 15, 2020 ([LINK](#))

- “Health professionals are the most exposed occupations, followed by workers in sales and personal and protective services. Conversely, farmers, plant and machine operators, as well as technology and business professionals are the least exposed occupations. Moreover, the workers who are most exposed to contagion tend to be those with weaker labour market positions: i.e., they are disproportionately female, young, and less educated.”

Gray, R. **Agriculture, transportation, and the COVID-19 crisis**. *Cand J Agr Econ*. April 14, 2020; 1–5. ([LINK](#))

- Conclusions: “The limited supply of empty non-refrigerated marine shipping containers will cause some delays and increase logistical issues in some export supply chains for specialty grains and **processed products**.”

Primary Research

Wong et al. **Workplace safety and coronavirus disease (COVID-19) pandemic: survey of employees**. *Bulletin World Health Organization*. March 20, 2020. ([LINK](#))

- Among those surveyed were “plant and machine operators and assemblers”
- “Interpretation: Our findings suggest there was deficiency of workplace policy and inadequate of workplace protective equipment supply during COVID-19 pandemic and it significantly led to an increase in employee’s stress.”

News Articles

UFCW. **American farmers, ranchers and food workers call for better worker protections at meatpacking plants to stop COVID-19 outbreaks and protect food supply**. May 28, 2020. ([LINK](#))

- Call for “meatpacking companies to take immediate safety steps to stop the ongoing spread of COVID-19, which include, but are not limited to: (1) increased worker testing at meatpacking plants, (2) priority access to PPE for all meatpacking workers, (3) halting line speed waivers, (4) mandating social distancing inside meatpacking plants, and (5) isolating workers with symptoms or who test positive for COVID-19.”

KPIX CBS BayArea. **Coronavirus cluster discovered at Morgan Hill Fish Processing Plant.** May 26, 2020. ([LINK](#))

- “All employees [are] provided with face masks which are mandatory while on the premises, temperature checks are taken at the beginning and middle of each shift, and protective barriers have been installed at work stations.”

Maple Leaf Foods. **Maple Leaf Foods Continues to Protect People and Produce Food People Need.** May 28, 2020. ([LINK](#))

- “Prevention efforts, including: Increasing social distancing where ever possible, Temperature checks and daily health screenings upon arrival, Mandatory face coverings for all of Team Members at all sites, Increased sanitation in common welfare areas like cafeterias, locker rooms and breakrooms, Staggered breaks and start times to reduce the potential for congestion, Addition of trailers and tents to decrease density during breaks”

CTV News. **Canada’s meat industry expected to increase safety measures amid COVID-19.** May 23, 2020. ([LINK](#))

The Guardian. **‘Exploitative conditions’: Germany to reform meat industry after spate of Covid-19 cases.** May 22, 2020. ([LINK](#))

Financial Post. **‘Everything’s on the table’: How COVID-19 could change Canada’s meat processing industry.** May 16, 2020. ([LINK](#))

- “Stagger shifts, outfit staff in protective gear and retrofit facilities with Plexiglas shields.”
- “The challenge is that social distancing has to happen before and after work and while you can control conditions at work, you can’t control it when people go home.”

iPolitics. **Opportunity to re-think food production in Canada amid COVID-19: report.** May 15, 2020. ([LINK](#))

- “Farmers are being forced to euthanize pigs, resulting in food being removed from the supply chain... Canada could be forced to rely on imports, while a continued reduction in processing could contribute to a food shortage.”

National Fisherman. **Blue Harvest implements COVID-19 safeguards.** May 1, 2020. ([LINK](#))

Melita New Era. **Cargill beef plant to reopen next week after COVID-19 outbreak forced closure.** April 29, 2020. ([LINK](#))

CTV News. **Ottawa announces \$62.5 million for country's fish and seafood sector.** April 25, 2020. ([LINK](#))

- “Processing companies can also use the money to help pay for equipment such as freezers, so they can store food products while they adapt their factories to ensure workers can maintain a safe distance from one another.”

The Reporter. **Revisit decision to reopen fisheries**. April 24, 2020. ([LINK](#))

- Letter written to the Minister of Fisheries and Oceans

Methodology

Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) COVID-19 Quick Response reports are initiated by, and shared with, our partners in the provincial health system, including the four Regional Health Authorities, the Departments of Health and Community Services and Children, Seniors and Social Development, and public health officials.

NLCAHR staff work with topic submitters to clarify the research question. We then search for related systematic reviews, meta-analyses, other reviews, interim and other guidance statements, primary research, expert opinion and health and science reporting.

We use several search strategies, with a focus on the following databases:

- [CADTH](#)
- [Canadian Pharmacists Association](#)
- [Campbell Collaboration](#)
- [Cochrane Collaboration](#)
- [Centre for Disease Control](#) (CDC)
- [Centre for Evidence Based Medicine](#) (CEBM)
- [Evidence for Policy and Practice Information and Co-ordinating Centre](#)
- [European Centre for Disease Prevention and Control](#)
- [Health Canada](#)
- [Joanna Briggs Institute](#)
- [Johns Hopkins](#)
- [MedRxiv](#)
- [National Institutes of Health](#) (NIH)
- [National Institute of Allergy and Infectious Diseases](#) (NIAID)
- [National Library of Medicine](#)
- [Public Health Agency of Canada](#)
- [Trip Database](#)
- [World Health Organization](#)

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