A Multi-Sector Guide to

Pandemic Economic Resilience

Working Across Disciplines and Sectors to Prepare for, Respond to, and Recover from the Next Pandemic

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Introduction

The COVID-19 pandemic fundamentally changed the way people live, work, learn, and socialize across the world. The unprecedented global health crisis led to lockdowns, the closing of international borders, and halted economic activity in several areas of the world.

COVID-19 highlighted economic vulnerabilities of a hyper-globalized world while also demonstrating the benefits of sharing information, technology, and talent across borders. Despite the catastrophic impact of COVID-19 on daily life for many people, the rapid development and distribution of safe, effective vaccines was unlike anything seen in previous pandemics. The COVID-19 pandemic stress-tested emergency management and public health pandemic planning and revealed the ways in which businesses, organizations, and governments were less prepared than experts may have believed.

During these early response months of the COVID-19 pandemic, all sectors and all levels of government scrambled to identify the steps needed to effectively respond to this public health emergency. Local and state leaders issued stay at home orders, major employers transitioned to remote work, the size of social gatherings was limited, and schools and restaurants and other gathering places were closed. The pandemic caused serious and lasting economic impacts. As daily life ground to a halt and people scrambled to buy bleach, soap, and toilet paper, there were few resources available to help leaders strategize and plan for economic resilience.

Purpose and Function of this Guide

The primary purpose of this Guide is to improve community capacity for safely and successfully addressing the challenges of, and economically recover from, a pandemic. It was built on the understanding that communities and regions need to respond to the event at hand, but also have the resources, tools, and capabilities to build and sustain resilience practices to thrive and grow.

The Multi-Sector Guide to Pandemic Economic Resilience (the Guide) seeks to increase regional economic resilience by:

- Encouraging collaboration across sectors;
- Balancing disease management response with continuation of economic and social interactions; and
- Maintaining the functioning of individual businesses, business sectors, and industries.

The Guide is designed as a user-friendly and customizable document for thinking critically through pandemic preparations, response, and recovery.

This Guide is not an in-depth review or after-action analysis of the U.S. COVID-19 pandemic response, nor is it a plan for responding to COVID-19 in the future. Its focus is broader – looking at how various organizations and sectors can plan for, and respond to, pandemics and other emergencies. The Guide recognizes that economic continuity is a major component of community resiliency, especially in long-term disasters like pandemics. The Guide recognizes that future pandemics and emergencies may look different, and will come with lots of unknowns, challenging us to learn quickly and work together towards effective disease management and eventual recovery strategies.

Audience

This Guide is intended for a broad audience across the public, private, and nonprofit sectors – from government policy makers and emergency managers to business owners and community organizations. The goal is to provide a serious of tools to help anyone trying to figure out what to do' in the face of a pandemic.

Who are you?	How might you use this Guide?
Emergency manager or public health official	The Guide won't tell you what to do but some worksheets may spark ideas on how to work with the private and nonprofit sectors. It can serve as a resource for businesses and organizations you serve.
Elected official	Use the Guide to consider appropriate policies and interventions from a comprehensive view of public health. Consider your community broadly and the many connections and interdependencies among its public, nonprofit, and private sector entities.
Owner or manager of a business or nonprofit	If you have an emergency manager on staff, the Guide could benefit that person. Otherwise, you may use the Guide to think about your business, your workforce and your relationship to others in the public, private, and nonprofit sectors.

Developing the Guide

In 2010, the Pacific NorthWest Economic Region's (PNWER) Center for Regional Disaster Resilience released a "Comprehensive Community Bio-Event Resilience Action Plan" that was crafted in response to the 2009 H1N1 influenza pandemic. That resource was helpful during but the most recent pandemic also highlighted the need for updates to account for the lessons learned during COVID-19.

The Multi-Sector Guide to Pandemic Economic Resilience is a U.S. Department of Commerce Economic Development Administration funded effort to update and revamp the "Comprehensive Community Bio-Event Resilience Action Plan."

The Guide synthesizes best practices from across North America, specifically the 10 jurisdictions represented by the bi-national organization PNWER, including Alaska, Idaho, Montana, Oregon, Washington State, Alberta, British Columbia, Northwest Territories, Saskatchewan, and the Yukon.

In developing the Guide, the PNWER team worked with BERK Consulting to identify these six sectors to deeply investigate to better understand how public policy interacted with business operations across a variety of industries:

- Construction
- Food Services / Drinking Establishments
- Information / Publishing Industries [software development]
- Manufacturing
- Small Businesses and Retail Services
- Transportation and Warehousing

The insights and strategies contained in this document were derived from economic analysis, desk research, surveys, interviews with representatives of public and private sector organizations, and informational webinars. A list of interviewees is found in Appendix 2.

While the Guide includes concepts and worksheets that may be useful for Tribal communities and businesses, it was not developed with targeted outreach to Tribes and, therefore, cannot speak to the unique sovereign relationship Tribes have with the federal government that may impact emergency response.

Best practices were drawn from the greater Puget Sound area in Washington State and PNWER's U.S. and Canadian jurisdictions across the greater Pacific Northwest.

An Advisory Committee of experts in various fields was critical to the creation of this Guide, with representation of emergency managers and public health experts from the Puget Sound Region. A list of these Advisory Committee members can be found on the inside cover.

Guiding Principles for an Economically Resilient Pandemic Response

This Guide was developed with the perspective that economic and social activity is necessary for holistic public health. Economic activity is necessary for workers to earn incomes that provide food and shelter for themselves and their families. Social activity is a major element of overall well-being and a critical component of mental health. Business activity, and businesses themselves, are not in competition with public health; they are part of a comprehensive view of public health.

Based on this concept, this Guide encourages decision makers to take a multidimensional approach to maximizing individual and community health, and to work across sectors to solicit business and industry input and buy-in to proposed public health safety measures. Communities and industries that are engaged in policy decision-making often become the best advocates and enforcers of those policies.

The following principles inform the approach taken in this Guide:

- **Collaboration across the public, nonprofit, and private sectors is critical** for developing balanced strategies that reduce or prevent the spread of disease while allowing continuity of economic and business activity.

- **Interventions should evolve as knowledge of the disease evolves**. Initial response efforts will likely be broad-based with wide-reaching impacts. As more is understood about the disease, more targeted interventions can be implemented that cause fewer unintended consequences.

- **Flexibility and communication are key to an effective response**. While collaboration can lead to results that could not be achieved by one sector acting alone, effective collaboration requires communication, coordination, and adaptation.

- **The most successful outcomes stem from alignment and creativity.** Novel diseases require novel solutions. Effective solutions may require breaking with traditional and pre-emergency boundaries, such as:
  - Giving decision-makers latitude to respond creatively and with the clarity and singularity of purpose created by an emergency.
  - Identifying and breaking down bureaucratic barriers.
  - Experimenting and innovating –sustaining successful adaptations after the crisis has subsided.

- **Caring for employees and workers is critical to economic continuity.** Businesses rely on employees for ongoing operations. Pandemics and other emergencies can create challenges for retaining existing employees and attracting new ones. Attention to, and care for, the

everyday needs of workers (e.g., providing childcare, paid sick leave, mental health care access, and physical safety) are critical to workforce continuity.

- **Investing in disaster preparation today reduces the cost of response tomorrow**. This includes the hard costs of investing in planning exercises, equipment, and staff training, but also the social investment of developing robust relationships with peers and organizations outside your sector and industry.

Using the Guide

The Guide allows users to focus on topics of interest as they emerge. It is a starting point to generate ideas and is intended as a tool, not a template. Throughout the Guide, there are references to worksheets contained in a standalone **Workbook** (external link) that you can fill out, save, and continue to update for your own organization.

As you work through this Guide, always be sure that you're checking in with relevant city, county, state, and federal public health and emergency management officials to get the most accurate and up-to-date information about the crisis at hand.

The following icons are used throughout the Guide:

Icon	Description
🏛	**Public Sector**
✴	**Non-profit Sector**
💼	**Private Sector**
↑	**Strategic Priority**
👥	**Priority Population**
📋	**Pre-Pandemic Preparation**

Navigation

Going somewhere?

➔ Underlined text contains links that take you to other sections of this Guide.

Want to get back?

➔ After clicking an internal link, you can return to the source page using the following keys if you're using a PDF reader.

PC   Alt + ←

Mac   ⌘ + ←

Links and hotkeys may not work if this Guide is viewed in a browser or browser-enabled PDF viewer. It is currently optimized for desktop-based PDF readers.

Looking for something specific?

➔ You can find a specific topic by referencing the Contents and list of worksheets.

➔ You can find a specific word, phrase, or page by using the keys below and typing your query into the search bar.

PC   Ctrl + F

Mac   ⌘ + F

Emergency Management and Public Health 101

This section gives a brief overview of Emergency Management and Public Health to help those outside the sector understand the basic principles of those disciplines as they respond to a pandemic. Please note that this is not a comprehensive overview of either discipline.

The authority given to emergency management and public health departments can vary state-to-state, and even at the city or county level. Your local emergency management and public health departments have resources outlining their authority and responsibilities during emergencies on their website.

Emergency Management Basics

Emergency management begins at the local city, county, and state level and may include both professional and volunteer emergency management officials responsible for coordinating responses to emergency events. Emergency events include natural hazards like floods, earthquakes, drought, wildfires, etc. and human-induced disasters like pandemics, cyber incidents, terrorism, agricultural disease outbreaks, and more [1].

All levels of government are involved in regional and local emergency planning and response efforts, with specific roles played by federal, state/provincial, and local governments. General emergency management plans are often augmented by specific plans for specific types of emergencies, which are informed based on geography, precedent, and an understanding of the types of hazards a community can experience.

Who Makes Decisions During an Emergency?

In the United States, the most local government to the disaster is the first to respond, followed by the county, state, and then regional emergency management teams. Often this means that neighborhood or city emergency management services are called first, and keep the county and state emergency management departments informed and on call to dispatch if needed. Washington State's Emergency Operations Center (EOC), for example, coordinates the resources and activities of state government, voluntary organizations, and the private sector in support of local and tribal jurisdictions responding to incidents and disasters – including pandemics [1].

When an emergency becomes too large or resource-intensive for the local emergency managers to handle at the state level, the Federal Emergency Management Agency (FEMA) is contacted to help respond. FEMA activation requires a Major Disaster Declaration by the President of the United States. Federal assistance is supplementary to the efforts and available resources of states, local governments, and relief organizations [1]. FEMA is largely responsible for training and providing operational guidance and resources to more local emergency management departments.

Most emergency management teams follow the National Incident Management System (external link) established by FEMA, which includes using the streamlined Incident Command System (ICS) structure to manage the incident. Pandemic emergency management is especially complicated because public health and emergency management professionals must closely coordinate their activities with the executive branch and elected leaders in their jurisdiction, and because pandemics are long-term emergencies that can last several years. As noted in Pre-Pandemic Preparations, significant work can be done following the COVID-19 experience to build relationships, update plans, and make other preparations in advance of the next pandemic.

FEMA's Four Phases of Emergency Management:

Below is FEMA's four phases of emergency management [2]:

Prevention & Mitigation

Preventing or reducing the cause, impact, and consequence of disasters.

Preparation

Planning, training, and exercises for situations that cannot be mitigated.

Response

Actions immediately before, during, and after an incident.

Recovery

Actions taken to return a community to normal or near-normal conditions.
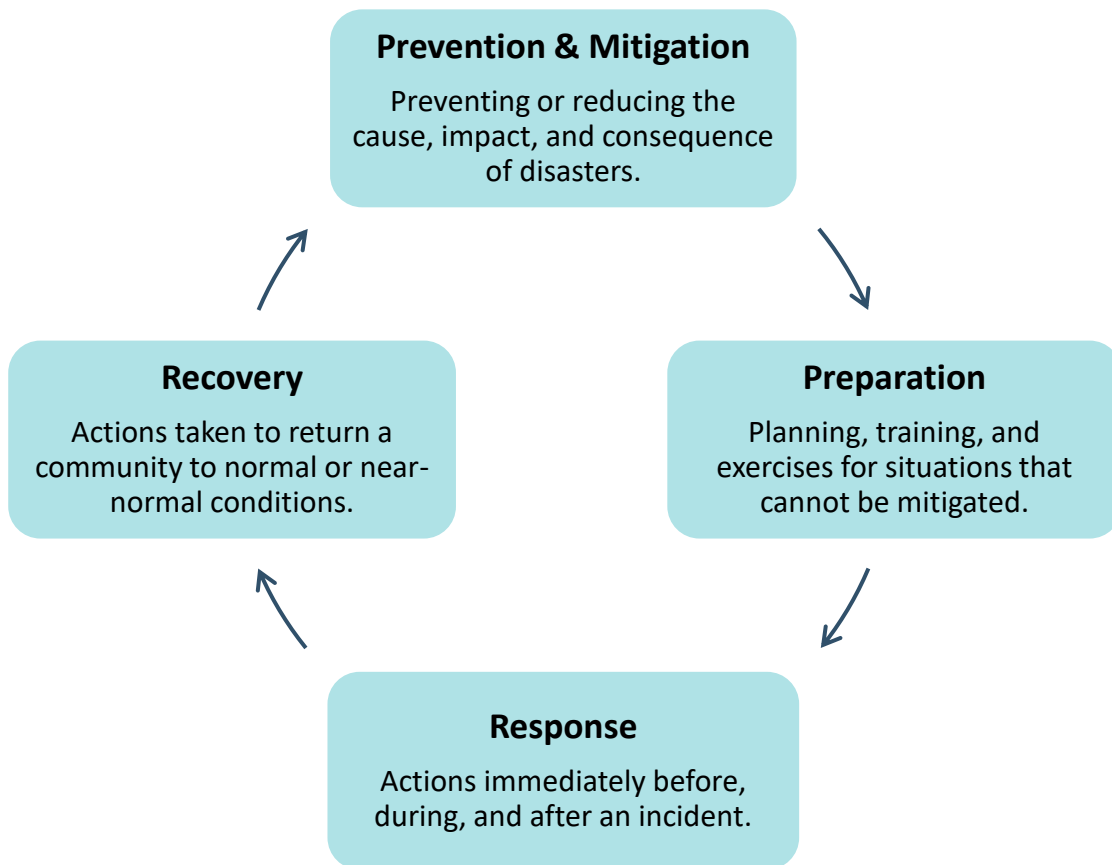
While response is the most visible phase, considerable effort is expended before an emergency to prevent or mitigate harm and to plan, train, and exercise as a way of preparing to respond. Recovery efforts begin as early as possible during or after an emergency to help populations and organizations resume more normal activities, even if they must be adapted in the face of new conditions.

Continuous learning is an important aspect of emergency management, with after action reviews and other tools used to ensure that successes are celebrated, and failures (which are expected) result in lessons learned and improvement plans that can be implemented before and during the next emergency.

Considerations for Those Outside of Emergency Management Sector

At an organizational level, entities in the public, nonprofit, and private sectors can and should plan and prepare for how to respond to a pandemic. Larger organizations may have dedicated professionals (business continuity specialists) and formal plans in place, which benefited these organizations during the COVID-19 pandemic. Smaller, less well-resourced organizations should

plan and prepare at a scale they can accommodate, using this Guide and other resources offered by regional emergency management agencies, FEMA, or business and industry associations.

Common emergency considerations include:

- Workforce safety.
- Continuity of governance: the ability of policy makers or a board to continue to make decisions or update policies during an emergency.
- Business continuity: the ability to maintain operations during an emergency.
- Emergency communications protocols.
- Pandemic-specific issues may include disease management measures, Human Resources policies, remote work policies and capacities, and safe work plans for continued production and interaction with customers.

If you have further questions or want to learn more about how to get involved in your local emergency management efforts, please visit your city, county, and state EOC or emergency management websites for more information!

Public Health Basics

Public health agencies and organizations often inform and guide decision making during a pandemic or other emergency. This section provides a high-level introduction of public health concepts that may guide the design of plans, policies, and interventions during a pandemic. It's a general resource to help those outside of this sector get baseline information and knowledge so they can ask public health professionals informed questions.

The information here may also change over time. Always refer to your local, state, and federal public health agencies for the most up-to-date information about existing and emergent diseases.

What is Public Health?

Public health is the scientific approach of protecting and improving the health of communities and entire populations. The public health discipline promotes health lifestyles, researches disease and injury prevention, and is responsible for detecting, preventing and responding to infectious diseases [3].

Medical and behavior health disciplines, by contract, tend to focus on the health of individuals. For example, if you are experiencing abdominal pain, you may contact your doctor who can help diagnose and treat your symptoms. If they discover your abdominal pain is due to food poisoning, you could contact your local public health officials and inform them that there may be an outbreak.

What is an Infectious Disease?

Infectious diseases are illnesses caused by germs (such as bacteria, viruses, and fungi) that enter the body, multiply, and can cause an infection.

- Some infectious diseases are contagious or communicable, meaning they are capable of spreading from one person to another.
- These and other infectious diseases may also be spread by germs carried in air, water, food, or soil.
- They can also be spread by vectors (like biting insects) or by animals to humans.

Infectious diseases are a common part of everyday life. However, when humans encounter an emerging infectious disease, our bodies often aren't equipped to fight back against the germs and our healthcare systems may not diagnose, treat, or respond to these emerging diseases as quickly and efficiently as they could with well-established diseases.

Infectious Diseases. Illnesses caused by germs (bacteria, viruses, and fungi) that enter the body, multiply, and can cause an infection.

Emerging Disease. Infectious disease that have appeared or increased recently, or are threatening to increase in the near future. These infections could be:

- "novel" or completely new (like COVID-19).
- completely new to an area (like chikungunya in Florida).
- reappearing in an area (like dengue in south Florida and Texas).
- caused by bacteria that have become resistant to antibiotics, like MRSA (methicillin-resistant Staphylococcus aureus), C. difficile, or drug-resistant TB.

Zoonotic Disease. A disease that is spread between animals and people. Examples include:

- Lyme disease (spread by ticks).
- Salmonella (spread by poultry).
- Rabies (spread by mammals).

Definitions from the CDC National Center for Emerging and Zoonotic Infectious Disease (NCEZID) [4].

Epidemic, Pandemic, Endemic – What's the Difference? [19]

The terms outbreak, endemic, epidemic, and pandemic are often used when describing the spread of an infectious disease. A disease can move categories based on the number of cases present compared to the expected number of cases over a set period of time and the geographic reach of the cases.

Endemic: a health condition that is present at a fairly stable, predictable rate among a group of people—the observed number of cases are approximately the same as the number expected.

Outbreak: when there is a sudden increase in the number of people with a condition greater than is expected. Either there are more cases of an endemic condition than expected or the condition is found somewhere it has not been before, so a single case can be an outbreak. Outbreaks are limited to relatively small areas.

Epidemic: An outbreak that has spread over a larger geographic area.

Pandemic: A health condition that has spread globally.

Preventing the Spread of Infectious Disease

Infectious diseases are spread when germs leave their reservoir or host through a portal of exit, are conveyed by a mode of transmission, and enter an appropriate portal of entry to infect a susceptible host. This process is often called the Chain of Infection.

The best way to prevent the spread of infectious diseases is to 'break' the Chain of Infection at any of the six 'links,' as explored in the graphic below. Ultimately, each of the measures tries to prevent contact between infected people and those not infected, to mitigate exposure to the infectious disease, and to reduce severity of disease if someone becomes infected.

Some of these strategies for interrupting the chain of infection can be applied individually or at an organization level. However, during a pandemic, public health departments and various levels of government may recommend or mandate infection reduction strategies at a community or societal level.

Several of these strategies have broad social and economic impacts, especially those focused on reducing gathering sizes and person-to-person contact. The effectiveness of specific interventions relies heavily on social perception and acceptance of the measure – a metric that may change over the course of a pandemic.

For a full overview of infectious disease related definitions, visit Appendix 3. Public Health Key Definitions.

Breaking the Chain of Infection

Break the Chain!
- Diagnosis and treatment
- Antimicrobial stewardship
- Research

Break the Chain!
- Cleaning
- Disinfection
- Sterilization
- Pest Control

Infectious Agent
- Bacteria, Viruses, Fungi, & Parasites

Susceptible Host
- Any person who could get sick, especially those receiving healthcare or otherwise at risk.

Reservior
- Dirty surfaces and equipment, people, water, animals, insects, and soil

Break the Chain!
- Immunization
- Treatment of underlying diseases
- Patient education
- Support healthy lifestyles

Break the Chain!
- Social distancing
- Isolation of ill patients
- Personal Protective Equipment (PPE)

Portal of Entry
- Broken skin/incisions, Respiratory tract, Mucous Membranes

Portal of Exit
- Open wounds/skin, splatter of body fluids, aerosols from coughs or sneezes

Mode of Transmission
- Contact (direct & indirect), Ingestion, & Inhalation

Break the Chain!
- Hand Hygiene
- PPE
- Food Safety
- Water Treatment
- Isolation of Infected Individuals

Break the Chain!
- Personal Protective Equipment (PPE)
- Respiratory Etiquette (including Masks)
- Cough and Sneeze into Sleeve or Tissue, not hands

Information from the graphic sourced from the CDC [5], Association for Professionals in Infection Control and Epidemiology [6], and the Laborers' Health and Safety Fund of North America [7].

Case Study from COVID-19: Challenges Implementing Mask Interventions

COVID-19 demonstrated that the success of public health interventions depends on how they are implemented and received by the public. For example, despite masks being efficacious in ideal/controlled circumstances, the implementation of masking mandates was less than effective as the result of supply issues (portions of the public found it difficult to find high quality masks), misinformation (not believing masks worked), and a highly politicized environment around wearing a mask. These factors made the overall uptake of this public health intervention low and less effective than it could have been.

Multi-Dimensional Public Health Considerations

Decision makers in all sectors and industries are encouraged to approach pandemic response goal setting and interventions from a multi-dimensional perspective, drawing on the social determinants of health, including the ability to make a living, learn, and socialize. As decision-makers consider strategies to reduce infectious disease spread, the impacts of these actions on economic, social, and emotional well-being must also be considered, especially for the most marginalized groups.

Infection prevention and reduction, and overall well-being (including economic well-being), are not necessarily in opposition to one another. While disease-related public health safety measures may impact the economy, unchecked infectious disease can have dramatic effects on workforce availability and consumer demand for goods and services.

Clear communication to stakeholders and coordination across sectors can provide a solid framework to balance public health and economic continuity.

To consider interventions from a multidimensional perspective, decision-makers should:

- **Clearly communicate objectives of disease management measures.**

  Keep these goals clear, concise, and realistic. Communicating the current goal can provide clarity around why specific approaches are necessary for period of time. For example, if the objective of the disease management measures is to keep hospitalization under a certain rate to avoid overwhelming the healthcare system, clearly articulate this to constituents.

- **Ask "What do we need to do to be able to make a living, learn, socialize, and offer goods and services safely?"**

While disease management measures are crucial, consider how these measures will impact other parts of the public's daily lives, including accessing economic opportunities, education, and social connection.

- **Track health (including economic, social, and behavioral health) metrics to consider the multidimensional impacts of disease management measures**.

    Decision-makers should weigh the impact of potential interventions on disease spread and key elements of economic, social, and emotional well-being. Key public health metrics in a pandemic will include case counts, hospital capacity, and deaths, but may also include economic and social metrics related to employment, education, hunger and nutrition, mental health, and housing.

- **Convene experts with different perspectives on health and well-being**.

    This includes experts in infectious disease and other areas of public health, psychology, sociology, and communications, all of whom will have valuable insights for decision-makers.

- **Prioritize shortening the period of uncertainty and using more targeted disease management measures**.

    Seek to get clarity on the nature of novel diseases and effective management measures as soon as possible. This requires a robust and well-funded public health system. While broad disease management measures can be effective at preventing disease spread, they also typically have more intense social and economic impacts. The public benefits when decision-makers can learn more about the disease and utilize that to create targeted disease management practices. A robust and well-funded public health system is necessary to properly identify targeted disease management measures for novel diseases.

The Arc of a Pandemic

While pandemics do not occur in discreet phases, there is an arc to pandemic progress that affects what information is available to support decision making.

The early days of a pandemic fall into the **Period of Uncertainty**, when the general society has little understanding of how the disease is spread. During this period, public and private sector decision makers may be unsure how to optimize disease management measures. This uncertainty is not necessarily at the scientific community level nor does it represent total ignorance. Rather, it highlights the general public's lack of nuanced understanding of the disease and how to respond effectively with targeted interventions.

As the scientific and medical communities better understand and communicate about disease spread and develop measures to combat the pandemic, society enters the **Period of Knowledge**. Public and private sector practitioners can use this information to implement more targeted disease management measures that allow communities to safely return to daily activities. The hope is that for future pandemics, the transition from Period of Uncertainty to

Period of Knowledge will be quicker than during the COVID-19 pandemic due to the valuable lessons learned.

Over time, communities enter the **Period of Recovery** as they adapt to life with the disease, and the full impact of actions taken during the earlier periods are seen in society and the economy. Daily life resumes, though it may continue to be different than it was prior to the pandemic or require occasional reversions to more strict management measures as caseloads fluctuate. In this way, the arc of a pandemic may be considered an asymmetric arc.

Eventually society enters the **Post-Pandemic Period**, during which the public and private sector can prepare for future pandemics and emergencies.

The table on the following page shows these phases for the COVID-19 pandemic. While the described arc of COVID-19 can be broken down into the following phases, future pandemics may be even more messy and nonlinear, without steady progress or clear delineation between neat phases.

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Phases Timeline for COVID-19 Pandemic	Defining Characteristics	Primary Focus
Pre-Pandemic	• No emerging diseases of concern are detected in communities.	• Preparing for the next pandemic based on previous experiences.
Period of Uncertainty *January – November 2020*	• Emerging disease identified; communities begin to see widespread transmission. • Medical and scientific community are learning how disease spreads and/or which preventative measures are best. • Population gets sick, potentially overwhelming the health care system. • Widespread use of quarantines - commerce and daily life may be disrupted to reduce spread of disease.	• Application of broad interventions with the objective of limiting spread of the disease. • Learning to identify, prevent, treat, and limit transmission of the disease through targeted interventions.
Period of Knowledge *December 2020 – September 2021*	• Scientific and medical community have more knowledge about the disease and how to prevent its spread. • Responses and interventions become targeted to the specific disease. • Effective treatments, vaccines, and tests identified and made available.	• Application of targeted interventions that reduce transmission while allowing safe interactions. • Testing, vaccine, treatment, and PPE distribution.
Period of Recovery *October 2021 – Spring 2023*	• Disease may evolve or mutate such that supplemental tests, treatments, vaccines, and interventions are needed. • Daily life resumes, though it may continue to be different than pre-pandemic and communities may cycle between periods of less and more strict disease management measures as caseloads vary. • People transition from communal risk aversion and decision making, to individualized risk and decision making based on their personal risk profile.	• Resumption of pre-pandemic community and economic interactions. • Maintenance of best practices identified during response.
Period of Uncertainty *To Be Determined*	• Disease management measures are dropped for extended periods of time without interruption to daily life. • Disease is considered either irradicated or endemic. • Life enters a "new normal," though conditions may not exactly resemble the pre-pandemic period.	• Revisiting lessons learned, updating pandemic resilience plans.

Responding to a Pandemic

Now that you have an understanding of the purpose of this Guide and the Emergency Management and Public Health context in which pandemics occur, the rest of this document and the accompanying Workbook will help you think critically about your own response and coordinate your efforts with other sectors and organizations through all phases of a pandemic:

- Assess and Strategize
- Communicate Effectively
- Collaborate Across Sectors
- Adapt and Maintain Your Operations
- Reflect and Prepare

Assess & Strategize | **Communicate Effectively** | **Collaborate Across Sectors** | **Adapt & Maintain Operations** | **Reflect & Prepare**

Assess and Strategize

Effective response begins with understanding what you know, what you *don't* know, and what your risks are. The following section helps you:

- Identify your Response Team.

- Clarify your Purpose/Mission.

- Recognize Regulators And Points Of Influence.

- Map Your Relationships With Other Sectors And Organizations.

- Assess The External Environment.

- Evaluate Your Assets And Risks.

- Determine Your Priorities.

Assess & Strategize **Communicate Effectively** **Collaborate Across Sectors** **Adapt & Maintain Operations** **Reflect & Prepare**

Identify Your Response Team

Articulating your organization's governance structure and identifying key internal decision makers is an important piece of effectively responding to any emergency situation. It's important to have a core team working together on response so employees, board members, customers, and other stakeholders know who to come to with questions and concerns. **Worksheet 1** helps walk you through some of the initial questions you need to answer to help ensure an effective response.

Worksheet 1: Identify Your Response Team

- Who is responsible for planning pandemic response?
- Who is responsible for economic continuity?
- Who has final authorization over financial decisions?
- Who has final authorization over personnel decisions?
- Who has final authorization over operational decisions?
- Is there an oversight board? If so, what are their decision-making powers?
- How can each of these actors stay engaged in the pandemic response and recovery planning process?

Clarify Your Fundamental Purpose and Role

Throughout this document we refer to mission and fundamental purpose in the same way, recognizing that the term "mission" may not resonate for private businesses in the same way that it may for public and nonprofit organizations.

Every organization has a fundamental purpose or mission that guides their work. They also have a role within their community, and relationships with other organizations that influence their work. **Worksheet 2** provides prompts to help you identify your organization's mission and explore your relationship with organizations and communities in your area. Short-term operational priorities and objectives will come up as you move through pandemic response, but your fundamental purpose or mission should remain consistent.

Worksheet 2: Ground Yourself in Your Fundamental Purpose and Role	
Your Fundamental Purpose or Mission	• What is your mission or fundamental purpose as an organization? • What are your top priorities as an organization to support this mission? • What metrics do you use to track your organization's progress on those priorities?
Your Relationship with Others	• Who do you serve? • What customers, industries, businesses, or organizations depend on your products or services? • Who are your peer organizations and/or competitors? • What inputs do you depend on to do your work? This includes supplies, information, workers, and other factors. • What supporting entities enable your organization to continue operating by providing infrastructure, consulting services, permitting, oversight, or other functions? • What government agencies regulate your operations? This may include multiple agencies at different levels of government and is additionally complex for organizations with regional operations. See **Worksheet 3** for a step-by-step overview of how to identify those agencies. • Whose behavior does your organization influence, regulate, or guide? This includes employees and customers.

Identify Regulators and Points of Influence

Most workplaces and industries have some degree of city, county, state, and/or federal government regulatory oversight to ensure a safe, healthy work environment. Regulations are enforceable policies or laws issued by a government agency that controls the ways organizations can operate. With a few exceptions, nonprofits and businesses must operate under the most local guidelines (usually city or county guidelines), which may differ from state or federal guidelines.

Worksheet 3 helps you identify which agencies and levels of government have:

- **Direct** regulatory influence on your organization.
- **Indirect** regulatory influence on your organization by affecting your workforce or other inputs your operations rely on, including nonprofits and businesses in your community.

With this assessment complete, you can:

- Provide input on policies and regulations relevant to your industry by communicating with regulators directly, or through intermediaries (like a business association) that represent your sector.
- Share this information with others, including businesses and business associations in your cluster, and encourage their input in the regulatory process.
- Collaborate with the public sector to establish policies and safe work plans.

Worksheet 3: Identify Regulatory Bodies and Points of Influence				
Level of Government	**Agency**	**Role**	**Direct or Indirect Influence**	**Points of Contact** (or Points of Influence through an intermediary)
Federal				
State				
County				
City				

Map Your Relationship with Other Organizations

Your organization relies on a complex network of relationships and interdependencies between interconnected organizations, suppliers, institutions, and agencies to maintain daily operations. A cluster is a "geographic concentration of interconnected companies and institutions in a particular field." Cluster mapping can help you visualize these interconnected relationships among businesses and other organizations.

You can use the cluster mapping exercise for your own organization. If you are a public sector or nonprofit organization that supports others, you can also map the clusters you serve or your community's whole economy.

Carry the results of this mapping exercise, particularly identified interdependencies, into the next steps of assessing the external environment and evaluating assets and risks.

As you work through the cluster map in **Worksheet 4**, consider the following questions:

- Who are the primary producers of goods and services in the cluster? Place organization names in cell B2 (at the intersection of Column B and Row 2).
  - Which government agencies regulate these producers? List them in cell B1.
  - Which entities support* these producers? List them in cell B3.
- Who are the customers or end users of the goods and services produced by the organizations listed in cell B2? List them in cell C2.
  - Which government agencies regulate these customers or end users? List them in cell C1.
  - Which entities support* these customers or end users? List them in cell C3.
- What inputs are needed by the producers in cell B2? List them in cell A2.
  - Which government agencies regulate these suppliers? List them in cell A1.
  - Which entities support* these suppliers? List them in cell A3.

* When thinking of supporters, consider: government agencies; nonprofits; business or industry groups and organizations; educational institutions; providers of physical or electronic infrastructure; transportation providers; or others who enable the activities of the producers of goods and services. Examples include permitting agencies, legal advisors, marketing firms, and technology support firms.

The cluster mapping and identification of interdependencies described in this section can be done during Pre-Pandemic Preparations as part of item A3.

Worksheet 4: Create a Cluster Map (example)			

Cluster Being Mapped: *Restaurant Industry*

	Column A: Inputs	Column B: Goods & Services	Column C: Customers or End Users
Row 1: Regulators	USDA	Department of Health Labor & Industries Liquor & Cannabis Board	
Row 2: Primary Producers of Goods & Services	Dry Ingredient Providers Meat & vegetable providers Paper product suppliers Cleaning Supplies	Fast Food eateries Full-service restaurants	Individuals & families Nearby workers Tourists
Row 3: Supporters*	Trucking companies	Oure employees Delivery services Marketing firms Accounting firms Equipment repair	Nearby employers Cruise industry

Above is an example of a cluster map created for the restaurant industry. Use the Workbook to think through what the cluster map is for your organization, industry, or even your local economy.

Assess the External Environment

Now that you have a better understanding of your organization and how its activities are influenced by regulations, you need to evaluate what you know and what you don't know about the pandemic in question to help assess your risks.

Pandemics are dynamic situations with rapidly changing circumstances, often including an evolving understanding of a novel disease. Maintaining a current understanding about the disease through trusted sources is key as you assess risks and vulnerabilities for your organization and key stakeholders.

Worksheet 5 helps you evaluate what is currently known about the disease, the disease management measures in place, and who is likely to be most impacted by the disease. This general assessment will help public and nonprofit service providers determine key audiences, communication priorities, and risks faced by employees, suppliers, and others you rely on.

Continue to come back to these questions over the course of the pandemic, updating your answers as necessary.

Worksheet 5: Assess the External Environment	
What is known about the disease?	• Where are we in the Arc of the Pandemic? • How well understood is the disease? • What is known about how the disease is spread? • What actions are understood to reduce spread of the disease?
Who is getting sick?	• Who is most vulnerable to getting sick? Vulnerability may be the result of preexisting conditions that may be exacerbated by the pandemic. • What populations are most at risk of significant impact from the disease? • How severe is the sickness among different population groups? • How is your community affected relative to others?
What disease management measures are in place to try to reduce spread of the disease?	• Are current interventions relatively broad, or relatively narrow and focused? • How do current disease management measures impact person-to-person interaction? • How do current disease management measures impact business activity, including manufacturing, office-based business, retail, and restaurants? • What activities or cultural practices are limited by current regulations, policies, and guidelines to prevent disease? • How do those limitations impact different population groups? • What social practices are present in your community related to disease management measures?

Social practices, including how people act and what is deemed acceptable in a community, may differ from behavior advised by public health guidance or mandated by regulations. Social practices may be more strict or more relaxed than guidance or regulations and may differ by geographic location and the social or political orientation of different populations.

Evaluate Assets and Risks

This module will guide you through identifying risks faced by members of the public, your organization, other organizations, and in your economy overall. These risks are generated by a combination of factors, including:

- Characteristics of the disease, and population groups that are most vulnerable.

- Current policies and regulations enacted because of the pandemic, and the impacts they may have on economic and social activity.

- Structural inequities that may be caused by an inequitable distribution of resources, structural racism, language barriers, etc.

The first two dimensions build on your work to Assess the External Environment. Especially for an organization in the public sector, the third dimension is essential to identifying specific populations, organizations, and businesses within your community who will benefit most from assistance and resources. They may also require tailored, proactive efforts to reach. These organizations will be identified as priorities in the worksheets that follow.

As you evaluate risks, it is important to consider direct and indirect risks which can be aided by cluster mapping as explained below.

- **Direct risks** affect an organization directly, without an intermediary.

- **Indirect risks** may result from direct impacts on others, including impacts on workers, their children or families, suppliers, and consumers.

It is also important to consider population-level risks, organizational level risks, and economic risks, each of which is considered on the following pages.

Definitions (modified from United Nation Office for Disaster Risk Reduction [20]):

- **Risk:** the potential for loss based on the hazard, exposure to that hazard or situation, vulnerability, and capacity.

- **Risk Tolerance:** Willingness to be exposed to risk.

- **Vulnerable**. The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets, or systems to the impacts of hazards. The identification of populations or businesses that may be particularly vulnerable can be an important step in determining your priorities.

The work you've done so far can help identify risks to your organization. Consider the following as you answer the questions in **Worksheet 6**:

- **Worksheet 4** and your relationship to others.

- What's known about the disease and the population level risks identified in **Worksheet 5**.

Public sector entities and business associations can use these questions and the cluster mapping exercise from **Worksheet 4** to identify the risks faced by the businesses and nonprofits they serve, as well as their own organization's risks.

Worksheet 6: Evaluate Assets and Risks	
1) Assets	
a) Community Assets	• Who are your strongest supporters within your local or regional community? • How can you maintain that support within your community? • What is the value of maintaining this community support to your organization?
b) Business Operations Assets	• What operational assets can you rely on? Consider your people and relationships, brand, competitive advantages, and physical infrastructure or equipment. • What is your organization doing now that could support ongoing pandemic response efforts? • What can you modify within your operations to strengthen an existing advantage? • What are ways you could change your current operations to fill a stated need in pandemic response efforts? ○ How much (approximately) would this cost?
c) Summary of Assets	• What are the top five most existing assets for your organization? • What strategies will help maintain and grow these assets as you respond to the pandemic?

2) Risks	
a) Information Risks	• What information gaps are likely to persist or increase, making it difficult to make informed decisions?
b) Regulatory Risks	• Given what is known about the pandemic, how might regulations change to further impact your business?

c) Business Operations Risks	• How will your customers be impacted?
	• How will your ability to interact with your customers be impacted?
	• How many of your employees may be impacted because they are vulnerable?
	• How might your employees' families be impacted by the disease?
	    ○ How will this change the risk tolerance of your employees?
	• What industries, businesses, or organizations do you depend on in your normal operations?
	    ○ How do you anticipate them being impacted by the pandemic?

d) Summary of Risks	• What are the five most pressing risks facing your organization? • What strategies may help address these risks?

Public Sector: Evaluate Economic Assets, Risks and Segment your Business Community

If your organization is a public sector agency, it's important to remember that the business community is a very broad and diverse group of companies that will have different needs, risks, assets, and resources. Your organization will need to tailor communications, direct support, and engagement efforts accordingly.

As you go through the following worksheet, keep the following ideas in mind:

- Not all businesses can be reached the same way.

- Businesses may experience the pandemic in vastly different ways depending on how the disease management measures affect their customer base, workforce, and partners.

- Depending on their size and relationship to others, different businesses will have different impacts on the local or regional economy and offer different opportunities to contribute to the broader pandemic response.

Use **Worksheet 7** to help identify different segments within your business community. Solicit input from local economic development and business agencies or organizations. Use **Worksheet 4** to develop cluster maps of key industry sectors as another way to identify the interdependencies in your local economy.

Worksheet 7: Segment your Business Community

- What industries or businesses are most important to:
  - Your community's employment base?
  - Tax collections and sustainability of important public sector services?
  - Other businesses and service providers in your community?

- Which businesses are vulnerable, and would most benefit from outreach and resources? This assessment should consider:
  - Which businesses will experience the largest impact to daily operations because of pandemic prevention measures?
  - Which businesses or sectors (if any) have had operations shut down due to pandemic prevention measures?

- How will the pandemic impact a business or sector's customer base, workforce, or operations?

- Which businesses are primarily owned and/or operated by, or serve members of, historically marginalized communities?
  - What resources, if any, does your agency have to support members of these communities?

- What are some of the supportive resources available through federal, state, or local providers?

- How accessible are these resources to business owners? Accessibility includes availability of resources in multiple languages, English language proficiency required to understand how to access these resources, the ability to complete applications, and the level of financial or other documentation required to access these resources.

- What can your agency do to supplement these resources?

- Which businesses could be good partners in cross-sector collaborations?

- Which businesses and sectors have a large number of employees or important assets that can be leveraged in the broader response?

- Which businesses can serve as role models for other businesses, serving as examples for others to follow?

Determine Your Priorities

Now that you have identified your fundamental purpose, mapped your major relationships, identified regulatory bodies, assessed what is known about the disease, and evaluated your own assets and risks, use **Worksheet 8** to state your organization's pandemic focus and priorities. This is an essential step that will provide guidance for your ongoing response efforts.

Worksheet 8: Determine Your Priorities

What are the top five strategic priorities for your organization as you respond to the emergency? You will revisit these priorities as the pandemic progresses and conditions change. While they may stem from point-in-time challenges and opportunities, they should always be aligned with the fundamental purpose of your organization identified in **Worksheet 2**.

Your priorities may be determined by:

- Concerns based on identified population, organization, or economic risks.

- Opportunities to best achieve your mission or organizational purpose. These opportunities may be market- or customer-driven as you adapt and meet emergent needs, based on where you can most add value given gaps in services provided by others, or related to your specialized knowledge or relationships.

Top 5 Priorities for Our Organization

1)

2)

3)

4)

5)

Worksheet 8: Determine Your Priorities

Non-profit and Public Sectors: Consider Equity & Priority Service Populations

- Consider the deployment of other resources, including federal, state, and regional efforts. Where are there gaps, particularly for vulnerable populations or businesses that you might be able to serve?

- How can you most effectively target limited resources to make the greatest positive impact?

- Based on your answers to these questions, which populations or business types will you prioritize in your pandemic response? These are your **priority populations**.

- Consult legal advisors to ensure that this prioritization of scarce resources is defensible and non-discriminatory.

- Communicate your priorities to your policy makers, your workforce, your partners, and other stakeholders.

Carry this focus forward as you consider how to communicate, provide direct assistance, and take other actions.

Strategies for Incorporating Equity in Decision-Making

Equity recognizes that groups and individuals do not all have access to the same resources, circumstances, and privileges. Especially in a pandemic, these inequities can become more prominent. Include equity considerations in your decision-making structure and process by:

- Appointing, training, and equipping individuals charged with evaluating options from an equity perspective.

- Using data to identify vulnerable populations being left behind by existing supports and strategies.

- Discussing what is working with your peers and adopting and adapting successful strategies.

- Partnering with community-based organizations to gather input from hard-to-reach populations

Case Study from COVID-19: City of Seattle – Clarity of Mission and Targeting "Those who Couldn't Get Help Otherwise"

Following a three to six month learning process of "defining who we were going to help," the City of Seattle clarified its mission and the best use of the City's limited resources, which were found to be inadequate to help impacted large businesses or sectors. The decision was made to focus on "those who couldn't get help otherwise" and had encountered barriers accessing other financial assistance.

Federal and state support programs such as the Small Business Administration's Paycheck Protection Program required businesses to provide financial statements for multiple years. Therefore, Seattle focused on businesses with fewer resources and more informal financial records. The City allowed applications from any business in sectors impacted by capacity restrictions under the Governor's Stay Home, Stay Healthy guidelines. Seattle also provided technical assistance for business to update their business licenses and catch up on Business and Occupation (B&O) tax payments to become eligible for support.

The City's Small Business Stabilization Fund (SBSF) was repurposed in March 2020 to provide $10,000 grants to support businesses with 25 or fewer employees, as well as workers in the hospitality industry. Two-thirds of funding in each round were set aside for businesses determined to be at greatest risk. Business vulnerability was at first evaluated with the City's Risk of Displacement Index, and later, the Race and Social Justice Index, which was seen to be legally defensible and less likely to omit targeted businesses than the Displacement Index.

These targeting efforts were highly successful. Over $10 million was granted to 1,466 businesses over the course of these six rounds between April 2020 and April 2021. People of color owned 66% of the businesses awarded in Rounds 1 to 5 and the round for restaurants and bars.

Next Steps

Based on the assessment and priorities you've established above, you now have a foundation to build out your pandemic resilience plan. You can continue into the next section which focuses on how to Communicate Effectively or jump to other sections of this Guide.

Because a pandemic and response changes over time, it is important to occasionally return to this Assess and Strategize section to make sure the conclusions you've reached are still valid before continuing to communicate, collaborate, adapt, and reflect.

Communicate Effectively

Many businesses state that their greatest need during an emergency is for information. Public sector entities, business associations, nonprofit service providers, and others have a responsibility to communicate as effectively as possible with their employees, customers, and clients. This section will help you:

- Assess Your Communications Assets and Needs
- Develop a Communications Plan

Assess & Strategize | Communicate Effectively | Collaborate Across Sectors | Adapt & Maintain Operations | Reflect & Prepare

Assess Your Communication Assets and Needs

Depending on the size, scope, and reach of your organization, you have a responsibility to receive information from and transmit information to your stakeholders. This includes your workforce, customers, clients, contractors, shareholders, supervising agencies, board of directors, community, and others who rely on your organization.

- **Internal audiences** may include employees, Board of Directors, and others.

- **External audiences** may include customers, regulators, suppliers, business associates, and other intermediaries.

When communicating, organizations often use a combination of two strategies:

- **Pull strategy** where you passively provide information to your audience through a website, portal, or other mechanism that pulls them to you for information.

- **Push strategy** where you proactively engage with your audience through targeted outreach to provide information, including emails and calls, pushing information out to them.

Clear, effective communication is key to maintaining trust in your organization during a pandemic. If you have a communications team or primary point of contact, have them help you work through this section of the Guide.

Worksheet 9 will help you identify your communications assets and needs, which will help you complete **Worksheet 10**.

Worksheet 9: Assess Communication Assets and Needs
Communication Assets

- What information do you rely upon to perform your function effectively?
  - Where do you obtain that information?
  - How might that information gathering be impacted by the pandemic?
- How does information flow through your community?
- How does information flow through your organization?
  - How do you communicate to individuals in different parts of your organization?
  - How has that changed during the pandemic?

- Who relies on communications from you, considering both internal and external audiences?

  - Internal audiences may include Board of Directors and employees.

  - External audiences may include customers, regulators, suppliers, business associations, and other intermediaries.

- Which business or industry associations represents your interests?

  - What information do they share? What information would you like them to share, potentially including market data, resources, and best practices?

  - What interests would you like them to represent on your behalf?

- What are your existing means of communicating to internal and external audiences?

Communication Needs

- What kinds of information would be helpful to your organization to know as you begin making decisions?

  - Can this information be known? If so, what organizations are most likely to have that information available?

- Which groups in your service community or target audience may not be receiving your communications?

  - Do you have any contacts within those communities (or with organizations that represent them) that you could reach out to directly?

  - What are other ways you could reach people to provide relevant information?

- How can you make your communications accessible to all audiences, including those who rely on interpretation, translation, or the use of adaptive technologies such as screen readers?

  - How can you reduce translation timelines and other barriers to immediate access to information and services?

  - Where do you need to enhance your access to interpreters and translators?

Establish Central Information Sources

If you know that your organization is seen as a centralized resource for high-quality information or identify an information gap that your organization is particularly suited to fill, consider establishing a go-to place that others can go to for up-to-date information. Options for information sharing include websites, dedicated web pages, printed materials, conference calls, and webinars. These are pull strategies that bring people to your information.

Government agencies at the city, county, state, and federal level, business associations, and some nonprofits are well-suited for this task.

Important Principles

- **Maintain current information as conditions change.** Delete or archive out-of-date information to avoid confusion.

- **Share information that is based on science, facts, and data.** Share in language that is useful, simple, clear, and accessible to non-technical users.

- **Provide information in multiple formats and languages.** Align formats and languages with the demographic makeup of your community to ensure timely information is accessible to all.

  o Establish streamlined processes for translating materials into target languages to reduce the time lag between publication of materials in English and their publication in other languages.

  o Integrate real-time interpretation, including to American Sign Language, into live events and webinars.

- **Solicit feedback from the business community** about what information they need and how to improve your information portals and calls.

- **Where possible, establish regional information sources** that aggregate information for businesses with regional or multi-state operations. This eliminates the need to sit on multiple calls or visit several different websites to locate relevant information.

- **Provide industry with messaging around public health goals and related regulations.**

- **Encourage industry associations to eliminate membership paywalls** during the pandemic, seeking public sector financial support for this service.

- **Promote website portals and information calls to your business community.**

Proactively Engage Prioritized Audiences

Centralized information sources are a great place to start, but passive information sharing through web-based information portals or regular conference calls should not be seen as sufficient. Your organization should identify the communities or organizations who will need additional outreach via push strategies to receive necessary information.

Proactive efforts should be made to reach prioritized populations or those who will be disproportionately impacted by the pandemic. These may include businesses or communities that are critical to the economy, particularly vulnerable to economic shocks, difficult to reach, or at risk of being overlooked or underrepresented in other efforts to support the business community.

Use **Worksheet 9** to think through:

- Who is *not* attending these calls, webinars, or visiting the website?
- Do we have any contacts with people at that organization or within that community we could reach out to directly?
- What are other ways we could reach people with the relevant information?

Potential Engagement Strategies

- **Engage business associations,** chambers of commerce, neighborhood business districts, and other business-centric networks.
- **Contract with intermediaries** who are well suited to reach target populations. Flexibility in existing contracts with community-based partners can allow for more seamless contracting.
- **Send emails to businesses directly,** including contacts gathered through business license applications or other internal database systems.
- **Advertise** in mainstream, business, and language-specific media. This can include digital marketing platforms.
- **Implement multi-media efforts** to reach audiences who consume information in different ways, including fact sheets, FAQs, audio recordings, videos, phone help lines, and in-person events.
- **Leverage social media** to increase engagement and reach. Having a cohesive, planned social media strategy across various platforms with mixed media content including pictures, graphics, videos, and other content can help reach a broader audience.

Develop a Communications Plan

Now that you have identified your communications assets and needs, and discussed ways to conduct outreach to prioritized communities, it's time to create a pandemic Communications Plan. This can augment your organization's existing communications plan or give you a starting place to build one.

The elements of a Communications Plan may include:

- Overarching communication goals: what are you trying to achieve?

- Segmented communications matrix: target audiences with objectives and tactics (how, who, and when you will reach them).

- Strategies for coordinating with others to prevent conflicting information.

- Schedule for updating the Communications Plan.

- Additional resources, such as:

  o Library of talking points.

  o FAQ.

  o Reference URLs.

  o Contact information for key partners.

Public Sector: Communicate Differently to Different Segments of your Business Community

Identify types of business that you can reach:

- Via pull strategies such as a web-based portal or conference calls.

- Through intermediaries such as business associations, chambers of commerce, or others identified in **Worksheet 7**.

- Only through push strategies and proactive engagement. This effort may include communities with limited English proficiency, immigrants and refugees, small business owners, and gig workers.

> Significant communications-related work can be done during Pre-Pandemic Preparations as part of item B2.

Worksheet 10: Develop a Communication Plan

AUDIENCE	OBJECTIVE	DELIVERY METHOD	SCHEDULE	MESSAGE SOURCE
Identify the audience: customers, clients, Board of Directors, staff, etc. List one audience per row.	**Determine the primary and secondary objectives**: inform, assure, solicit input, etc.	**Determine the delivery method**: email, social media post, status report, presentation, meeting, press release, etc. Anticipate the need for interpretation and translation.	**Determine frequency**: daily, weekly, monthly, quarterly, etc.	**Determine the right messenger**: CEO/president/director, Board, emergency manager, health official, etc.

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Next Steps

You can continue into the next section which focuses on how to collaborate across sectors or jump to other sections of this Guide.

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Collaborate Across Sectors

"If you invite them in and allow the private sector to be part of understanding the problem, you'll find that they have very unique, interesting, innovative, creative ways to address it that you never thought of because they're in the business of that. Our failing as the public sector is that we don't ask the private sector for help. I have yet to see them deny an ask, but the government often doesn't ask. If you just ask, they can tell you no if they want." – Stakeholder Interview

This section focuses on collaboration among public, nonprofit, and private sector actors, including how to:

- Align Public, Nonprofit, and Private Sector Resources
- Collaborate on Policies and Safe Work Plans
- Support Vulnerable Nonprofits and Businesses
- Maintain Public Sector Services Critical to Business and Nonprofit Operations

Assess & Strategize | **Communicate Effectively** | **Collaborate Across Sectors** | **Adapt & Maintain Operations** | **Reflect & Prepare**

Align Public, Nonprofit, and Private Sector Resources

Public and private sector actors may find themselves at odds during a pandemic. Public sector agencies with regulatory authority and responsibility for public safety may focus primarily on disease management while private sector businesses seek to balance business continuity with workforce safety.

The strategies below focus on cross-sector collaborations to advance towards shared goals. When the public sector asks for private sector assistance in solving problems, they better leverage the region's full set of human, technological, and financial resources.

Build on work you've done to segment your business community and put your communications plan to work as you share information about current needs and opportunities to contribute.

Collaboration Opportunity	Example
Collaborate to implement solutions to identified projects or urgent needs.	● Partner on the acquisition and distribution of vaccines, PPE, food, and other supplies. Coordinate consistent public information.
Use company networks as an efficient way to communicate to large numbers of employees and their families.	● Ask employers to communicate public health goals to their employees. Large employers could ask employees to donate blood or time or support critical services.
Capture lessons learned from cross-sector collaborations and seek to strengthen relationships following the emergency.	● Use existing relationships across sectors and make calls to offer or ask for assistance.

Plans for cross-sector collaborations can be established during Pre-Pandemic Preparations as part of item A1.

Collaborate on Policies and Safe Work Plans

Public and private sector entities can work together to establish policies and work plans that reduce disease spread while allowing the safe continuation of work.

This effort should be informed by the informational section that explores **Public Health Basics**.

🏛 The Role of Public Sector Regulators

While the public sector has regulatory authority and responsibility, business involvement in reviewing regulations during emergencies can lead to creative and targeted solutions that help businesses survive, keep services online, and protect employees' jobs and wages. Involvement of private sector representatives may also facilitate industry acceptance of the rules that are established.

- **Identify where your agency has regulatory or rule-making authority** that impacts nonprofits and businesses.

- **Identify where other government agencies have overlapping or adjacent authority.** Many industries are impacted by regulations from multiple agencies or levels of government with jurisdiction over their activities. The Food and Drink Sector is a good example, with regulation by public health and alcohol control agencies, as well as agencies with general oversight over businesses.

- **When possible, coordinate with other government agencies to streamline regulatory guidance.** Uncoordinated, conflicting, or competing regulations create uncertainty within the business community. Engage identified agencies in collaborative efforts to coordinate and align policies. This can be done prior to a pandemic in pre-emergency planning.

- **Conduct outreach to sectors experiencing closures.** Consider convening a coordinating body with multi-agency and industry representation to understand industry challenges and coordinate the regulatory environment.

- **Encourage and support industry in developing safe work plans by providing funding, templates, and technical assistance.** Consider using relief funds to pay private sector business continuity managers to develop safe work plans for their own industry and for other industries, including those without paid professionals in such roles. Give guidance and feedback on work plans to guide better implementation.

The Role of Nonprofit and Private Sector Participants

- **Conduct outreach to understand industry challenges and needs**. Pulling together a combination of economic data and industry narratives around and needs challenges helps identify places for cooperation and collaboration with the public sector.

- **Engage public and occupational health and safety professionals to develop industry- or business-specific work plans**. Share what is working - or not working - to inform safe and effective work plans. Coordinate the development and sharing of plans through industry associations. This can be done before and during a pandemic.

- **Implement and adjust work plans as new information is learned about the virus.** Communicate early and often with your public sector partners to ensure work plans are adjusted as needed to reflect updated information on the virus.

Public and private sector collaborators can use **Worksheet 11** to understand each other's primary objectives and find shared objectives. While priorities may not match perfectly, there are often areas of public/private collaboration that can help both sectors respond more effectively to a pandemic. Nonprofit organizations may be good facilitators of these conversations.

Case Study from COVID-19: The British Columbia Construction Industry

In March 2020, while several industries that required close personal contact shut down, the construction industry in the Canadian province of British Columbia (B.C.) allowed construction activities to continue due to active collaboration between the public and private sector on safe working policies.

Worker safety in the province is overseen by WorkSafeBC, but a small percentage of each industry's insurance payments to WorkSafeBC can go towards industry non-profits that invest in researching and promoting industry-specific worker safety best practices.

The B.C. Construction Safety Alliance (BCCSA) and Council of Construction Associations (COCA) are the non-profits that represent the construction industry's safety interests and work closely with WorkSafeBC in the public sector. They also work closely with the B.C. Construction Association (BCCA), which represents contractors.

With this framework and place, WorkSafeBC and BCCSA came together in early 2020 to produce clear guidelines that enabled construction work to continue in B.C. during the pandemic. BCCSA Executive Director Mike McKenna noted "our organization helped B.C. construction keep its workers safe in two ways. As a curator of information, we collected information on workplace safety from WorkSafeBC and large construction companies, updated it, packaged it, and distributed it to the rest of the B.C. construction industry."

BCCSA, COCA, and BCCA also consulted with an infectious disease expert, who provided them guidance on topics including handwashing and mask wearing. BCCSA brought this guidance to WorkSafeBC, who approved their plan and allowed the construction industry to continue operating.

Dr. Dave Baspaly, President of COCA noted that "construction in B.C. was able to maintain an essential service by keeping everyone safe."

Work related to regulations and safe work plans can be done during Pre-Pandemic Preparations as part of items B2 and B3.

Worksheet 11: Find Shared Priorities

List the Strategic Priorities that you identified in **Worksheet 8**. Work with other sectors to include their priorities or use your insights into the other sectors to hypothesize what is most important to them.

Public Sector Strategic Priorities

1.

2.

3.

4.

5.

Private Sector Strategic Priorities

1.

2.

3.

4.

5.

What are common themes or ideas present in both sets of priorities? Use these to identified shared priorities below:

Shared Strategic Priorities

1.

2.

3.

Continue to the discussion questions and Worksheet 12 on the next page.

Discussion Questions for the Collaborating on Policies

After you have identified a few shared strategic priorities, use the discussion questions below to identify opportunities to collaborate on policies that can promote safe working conditions during the pandemic. The goal is to identify ways the public and private sector can work together and support each other. Nonprofits may be effective facilitators of the discussions required for this process.

Worksheet 12: Collaborate on Policies

- What are the fundamental goals of existing policies?

- How do existing policies align with what is currently known about prevention of this disease?

- Would significant changes to these policies disrupt economic and social activities? If so, how?

- Are there cases where rigid enforcement of existing policies may be counter to consideration of multiple dimensions of public health? If so, what does that look like?

- How do business operations need to change to continue working safely?

- What changes are allowable under existing laws and regulations?

- For changes not currently allowed, do these qualify as reasonable, allowable accommodations or will additional action need to be taken to enable safe working conditions?

- What resources are needed to make the changes?

  - Can businesses afford to make these changes?

  - What support may be available from the public sector to accelerate the changes?

- What legislative changes might be needed to allow safe working conditions during the disease outbreak in question?

  - What legislative committees have rulemaking power over the industry?

- Once an agreement has been reached on one or two (or more) changes, what next steps need to be taken to continue working safely?

Support Vulnerable Nonprofits and Businesses

Given the importance of small businesses to the local, regional, and national economy, and their relatively high level of vulnerability during disaster events, the public sector is encouraged to lead efforts to support vulnerable businesses. Stay focused on the **priority populations** you identified and find ways to work closely with the nonprofit and private sectors as you conduct this outreach.

Public and Nonprofit Sectors

- **Focus support to businesses in more impacted industries** rather than first-come, first-served funding for all industries. Increase assistance to local areas that depend on the hardest-hit industries. Consider waiving potential onerous application or reporting requirements.

- **Establish resource portals with information** about the current regulatory environment, consumer behavior, and funding and assistance opportunities that are tailored for small businesses. Push accessible information out via business associations, chambers of commerce, neighborhood business districts, and contracted liaisons.

- **Provide direct financial support** or **access to Personal Protective Equipment** and other key supplies.

- **Provide technical assistance for small business owners**. Support them in adapting their business for online sales, contactless transactions, and hyperlocal marketing. Assist them in applying for funding opportunities and work with financial institutions, including regional credit unions, to improve access to credit and reduce barriers for business owners of color and women.

- **Streamline public sector procurement processes and incentivize small business participation in procurement**. Extending contract terms, improving payment terms, and including, and paying receivables promptly or even ahead of schedule can provide much needed stability to businesses.

- **Catalog available business assistance resources from federal, state, and local sources**. Evaluate these resources against the local economy, identifying eligibility gaps and barriers to participation. Barriers may include complex or onerous application processes, processes that favor applicants with strong financial records, lack of comfort with online forms, or English language proficiency.

Private Sector

- **Set an example**. Modeling desired behavior, including shutting offices and moving to a remote work model if appropriate, can influence how smaller firms model their response.

- **Share information and best practices with others in your network.** Use existing relationships with community organizations and other businesses to share information, increase collaboration, and encourage resource sharing.

- **Provide technical or financial assistance when possible**. Donating staff time, supplies, or financial resources to support other organizations can be crucial when the public sector is overwhelmed. Supporting others during a time of crisis may strengthen your business position and your brand.

- **Continue to advocate for favorable financing and needed support**. Smaller businesses, businesses owned by people of color, and nonprofits may not have the same access to resources or time that your company has – use your position to lobby the public sector for support that benefits others.

Maintain Public Sector Services Critical to Business and Nonprofit Operations

Business operations may stop, or experience investment delays, if supportive public sector services are disrupted. For example, labor shortages or prohibitions for on-site interactions may limit the ability of the government to provide counter services or field-based services that businesses rely on.

Public Sector

- Identify government functions that are necessary for ongoing private sector activity. These are often offices with "counters" that serve the private sector, such as building and business permits.

- Designate staff to be responsible for implementing online service alternatives during a pandemic. Identify major steps in processes impacted by likely short- and long-term closures due to health restrictions.

- Supplement existing staff capacity with third-party support as needed. Prioritize the use of field staff to critical projects. Determine needs and options to expand remote work.

- Expand the capacity to respond to permitting and approvals through electronic submissions.

- Determine long-term needs for supporting electronic submissions and online options for meeting building requirements.

- Appeal to large businesses to treat the pandemic as a humanitarian crisis, broadly asking the business community to model behavior and contribute resources that will benefit everyone, including themselves.

Nonprofit and Private Sectors

- Communicate needs to public sector partners, identifying processes that must be maintained and suggesting means of safe continuation of services.

> Plans for maintaining critical services can be prepared during Pre-Pandemic Preparations as part of item C2.

Next Steps

You can continue into the next section which focuses on how to adapt and maintain operations or jump to other sections of this Guide.

Adapt and Maintain Your Operations

This section focuses on helping you adapt to changing conditions that may disrupt your supply chain, your customers and clients, or your workforce. These considerations apply to members of the public, nonprofit, and private sectors directly, and can also be helpful for organizations that focus on supporting businesses and nonprofits.

- Retain and Support Your Workforce
- Address Potential Supply Chain Disruptions
- Adapt Your Business Practices

Enhancements to business continuity can be made during Pre-Pandemic Preparations as part of item C2.

Retain and Support Your Workforce

Part of managing disruptions during a pandemic is maintaining your workforce, including providing support for employees. Use **Worksheet 13** to begin to understand your workforce and what changes may needed as the emergency develops.

Worksheet 13: Consider your Workforce

Understanding your Workforce	• What are the demographics of your industry or organization's workforce? • On average, how vulnerable is your workforce to the disease outbreak in question? • If the average worker is not vulnerable to the disease outbreak, how might the disease impact their families and/or communities who may be vulnerable?
Internal Policy Analysis	• What is the organization's paid sick leave policy? • Does the organization have a plan to implement disease management measures for sick employees? • Does the organization have the ability and capacity to track infection rates and infection transmission from employee to employee (known as contact tracing)? How might contact tracing be received by the workforce?
Communicating	• How does the organization communicate with employees? • How can you ensure employee buy-in for the disease management measures you enact?
Staff Planning	• Which staff perform mission critical functions? • Are there other staff members trained to perform these functions if the lead is out sick? • If not, how can the organization train additional employees on the functions in question? • How might the organization's daily functions and activities change if staff is reduced due to illness, position vacancies, etc.?

Protecting your Workforce	• What types of Personal Protective Equipment (PPE) will your organization need to operate safely and within appropriate regulations?
	• Where can you source that PPE?
	• Are there public sector programs that can help you pay for PPE?
Supporting your Workforce	• What are the physical and mental health needs of your employees?
	• What stresses are they subject to and how can you support them?
	• What are the needs of your employees' families? Consider factors such as childcare, food security, and housing stability.

Support Workers and Address Potential Labor Shortages

Employees may face challenges related to closure of childcare or schools, increased elder care responsibilities, and mental and physical stress that result in labor shortages for employers and difficulty hiring new staff. Supporting staff with resources and flexibility can provide stability for employees and help maintain operations for employers.

- **Prioritize staff safety.** Consider providing PPE or coordinating with public health officials to determine if employees are eligible for priority access to public health services (e.g., vaccinations, testing). If yes, coordinate with public health officials to offer these services to employees.

- **Consider all staff essential.** Strategize ways you can keep your existing staff employed by leveraging new technologies and engage staff to identify ways to redeploy them to help with operations.

- **Offer benefits and support for staff as resources allow.** Offering flexible or secure scheduling, paid or unpaid leave to care for family members, childcare, safe transit options, mental health benefits, and remote work options.

- **Increase workplace flexibility.** Identify ways to increase workplace flexibility to accommodate pandemic conditions. Evaluate the benefits and potential risks associated with bringing remote staff back to the office. Consider incentives if mandates risk staff departures.

- **Communicate effectively.** Build employee confidence through aligned words and actions that acknowledge and seek to address these challenges.

Public Sector

- Enhance labor protections for gig workers and other vulnerable populations.

- Invest in workforce education programs for highly-impacted sectors.

- Seek to use furloughed employees to staff intensive response efforts such as food distribution, grant administration, or testing and vaccine distribution.

> Enhancements to workforce resilience can be made during Pre-Pandemic Preparations as part of item C5.

Case Study from COVID-19: City of Seattle Gig Worker Protections

When it became clear that delivery drivers and other gig workers were in high demand due to shut downs and other regulations, two new ordinances were enacted in Seattle to protect workers:

- The Gig Worker Paid Sick and Safe Time Ordinance. This went into effect in July 2020 and required paid sick leave for gig workers working for transportation network companies (such as Uber and Lyft) and food delivery network companies (such as Door Dash). This provision was set to expire 180 days after the end of the Mayor's declaration of emergency.

- The Gig Worker Premium Pay Ordinance. This became active in June 2020, requiring food delivery network companies to provide at least $2.50 of premium pay for each order with a pick-up or drop-off in Seattle.

Supporting K-12 Education and Childcare

Business enterprises cannot function without workers who are healthy and able to focus on performing the duties of their job. The COVID-19 pandemic dramatically interrupted K-12 education for all students – suspending learning for a period of time and then transitioning to remote instruction. This had a major impact on parents and guardians who were responsible for their own work duties plus managing education for their children.

Continued, long-term disruptions resulted from school building closures and extended absences of teachers, staff, and students due to infection or exposure and the need to quarantine. Food supply chain issues also impacted school food programs.

While recommending a comprehensive array of strategies for the safe continuation of K-12 education and childcare services is beyond the scope of this Guide, we offer the following observations and recommendations.

Lessons Learned

- Employees were impacted by school and childcare closures. Remote education was problematic and when children suffer from isolation, it also impacts parents.

- Many women left the workforce to take care of their children.

- While some larger businesses could offer childcare, smaller businesses generally could not.

- Childcare providers are also businesses, employing and owned by a disproportionate number of women and POC. Subsidies should support, not compete with these existing providers.

- Schools and childcare centers may face increased operation costs (cleaning, pay, etc.).

🏛 🗠 **Potential Strategies for the Public and Nonprofit Sectors**

- Prioritize support for K-12 education and childcare as essential to public health, including the social and mental health of children, educational outcomes, and economic well-being.

- Strive to ensure that schools are the last to close and the first to open. Help schools operate safely, which could be an opportunity for public-private collaboration.

- Subsidize existing childcare providers rather than investing in public options that compete.

- Support the health and well-being of students and families through enhanced provision of food, nutrition, and mental health supports.

- Explore opportunities to engage private sector businesses in supporting education and childcare.

Adopt Remote Work Models Where Appropriate

Nationally, the percentage of employees working remotely was as high as 35% early in the COVID-19 pandemic. Some positions can be conducted effectively from remote locations while others cannot. Allowing employees out-of-state employment may generate considerable complications for small businesses in terms of employment regulations, benefits, and tax filings. Use **Worksheet 14** to determine what remote work could look like at your company or organization.

Worksheet 14: Evaluate Opportunities for Remote Work

- What positions or tasks could be performed remotely?

- What should the parameters be for remote work?

    o What are the standards you should set for video and audio participation in calls or meetings?

    o What are the expectations for evening or weekend responsiveness?

- Can employer-owned equipment be brought home (computers, monitors, chairs, etc.)?

- Should employees be allowed to work from out-of-area locations?

Remote Work Best Practices

- Provide clear parameters to employees about remote work and include updates in a communication plan. Incorporate updated expectations in job description, recruiting, and onboarding processes.

- Track employer-owned equipment if it is allowed to be brought home.

- Enhance cybersecurity to address increased risk associated with greater offsite exposure to network vulnerabilities.

- Recognize what is not working well and seek to alleviate the negative impacts of remote work conditions, considering impacts on collaboration, organizational culture, and connections with external partners and customers. Impacts may be felt differently by individuals according to their role, tenure, workstyle, and home environment. Be vigilant of individuals who may be isolated, unproductive, exhausted, or even physically unsafe at home, all of which may be harder to spot.

- Navigate the imposition of return-to-office mandates with the flexibility that may be valued by employees.

Address Potential Supply Chain Disruptions

Pandemic-related disruptions to supply chains can cause significant delays of inputs that are important to business operations. While global and national disruptions may be outside of the control of state and city governments, supporting regional and local logistics can address some potential obstacles.

Analyzing Your Supply Chain

	Public Sector 🏛	Private and Nonprofit Sectors
Identify	**Task specific staff** with responsibilities for overseeing local/regional supply chain issues. **Identify critical regional and local suppliers** that may be impacted by disease management measures.	**Identify critical regional and local connections** in the supply chain that would disrupt activities if halted, coordinating with the public sector as needed. **Provide clear communications** with clients about the impacts of potential disruptions.
Coordinate	**Develop options for allowing critical suppliers** and other components of the supply chain to be operating early, potentially with reduced capacity and more stringent on-site disease management measures.	**Increase coordination with suppliers** and other supporting businesses to identify potential slowdowns or delays in providing necessary inputs.
Adapt	**Enact measures for critical elements** of the supply chain to maintain supplies.	**Identify and secure alternative suppliers** and supply chains if existing alternatives are disrupted.
Monitor	**Maintain long-term monitoring of supply chain activity** to highlight ongoing challenges that may occur as disease becomes endemic or long-term impacts to supply chains are realized.	**Evaluate options to contract with regionally based suppliers**, reducing the vulnerabilities inherent in global supply chains.

Worksheet 15: Analyze Your Supply Chain

Initial discussion questions to begin analyzing your supply chain:

- What are the physical inputs my organization uses in daily operations?

- Where do those inputs come from? Does that place have a disease outbreak and/or measures in place that may prevent my inputs from getting to you?

- What alternative inputs are available?

- How do they compare in price, quality, quantity, etc.?

	Private Sector	Public and Nonprofit Sectors
Identify	Who is responsible for overseeing local and regional supply chain issues in our organization?	What activities occur in our region that connect to broader supply chains? How are these activities impacted by disease mitigation measures?
	Which of our critical suppliers may be impacted by disease management measures?	How can we best communicate with stakeholders about the impacts of potential or planned disruptions?
Coordinate	How can our organization work with suppliers to ensure they understand our on-site disease management measures and can follow those appropriately?	How can we coordinate with suppliers and supporting businesses to help them prepare for slowdowns or delays?
Adapt	How can we find alternate suppliers for our critical inputs? If those do not exist, how might we work with the public and non-profit sectors to help ensure we continue receiving inputs?	How could we help the private sector businesses in our region connect and identify if other local organizations could fill supply-chain induced gaps?
Monitor	Who is responsible for long-term monitoring of supply-chain issues?	How can we promote regional production of critical inputs to create a supply chain more resilient to disruptions?

Enhancements to supply chain resilience can be made during Pre-Pandemic Preparations as part of item C4.

Adapt Your Business Practices

Successful businesses adapt constantly to changing market conditions. Regulations and consumer behavior may shift multiple times over the course of a pandemic as uncertainty gives way to greater knowledge and vaccines, seasons, variants, and the simple passage of time affect what consumers are comfortable doing. Use Worksheet 16 to identify potential challenges and opportunities for your business or organization.

Worksheet 16: Identify Opportunities for Adaptation

- What are your traditional customers experiencing? How could you best meet their changing needs?

- What activities do current regulatory conditions and disease management measures allow? What *opportunities* does the pandemic create?

  o How can you leverage your assets, expertise, and customer relationships for opportunities created by the pandemic?

  o How can you repurpose day-to-day operations to respond to pandemic needs?

- What technologies could reduce person-to-person contact to make customer operations safer?

  o What functions can be done remotely and how do you protect workers that have to work in-person? → Adopt remote work models where appropriate.

- What is your plan for employee absenteeism? → Support workers and address potential labor shortages.

- What kind of assistance do you need to continue operating?

- How might you collaborate with other sectors to get what you need or to provide a resource to others?

Case Study from COVID-19: Canlis Restaurant in Seattle

Changing regulations and consumer behavior will also create new opportunities and creative solutions for some businesses. Canlis, a fine dining restaurant in Seattle, launched several creative initiatives during the COVID-19 pandemic, including a drive-in movie theater in the restaurant's parking lot; bingo; and "Canlis Community College," an online and interactive program with cooking classes, Seattle history lessons, and outdoor activities.

Evaluating Disease Management Measures

The public, private, and non-profit sectors can all contribute to preventing the spread of infectious disease and breaking the Chain of Infection, as explored in Public Health Basics. However, efforts to prevent the spread of infectious disease may impact an organization's daily operations, and have real social, economic, and hard costs associated with them.

Worksheet 17 presents a model for evaluating potential infectious disease interventions in terms of:

- Their ability to prevent spread of infectious disease, both as directed and as implemented;

- Their social impacts, as directed and as implemented;

- Their economic impact, as directed and as implemented; and

- Their direct costs, as directed and as implemented.

The direct cost category refers to the costs incurred by public and private sector actors to implement the interventions. Wage, job, and price impacts are included under the economic impact category.

Knowing where you are in the Arc of a Pandemic is also important, as the interventions available and the effectiveness of infection reduction strategies will generally improve as more is understood about the disease in question. Given that pandemics and how disease management measures are received change over time, you should repeat this through the different pandemic phases as more information is available.

Assignment of "high," "medium," and "low" costs for each potential is subjective and best determined in comparison to other interventions.

The Guide contains an example of this worksheet filled out from the hypothetical perspective of an owner of an office-based business such as a professional services firm relatively late in the pandemic when much is known about how the disease is spread.

This template can be used in Worksheet 20: Develop an Improvement Plan to assess potential interventions for future pandemics.

Worksheet 17: Evaluate Disease Management Measures (example)

Interventions		Disease Management		Social Impact		Economic Impact		Direct Costs	
		As directed	As implemented	As directed	As implemented	As directed	As implemented	As directed	As implemented
Reservoir	Interventions that reduce contact between people and where the pathogen lives (the reservoir)								
Portals of Exit	Interventions that prevent pathogens from leaving their hosts (via portal of exit)								
Mode of Transmission	Interventions that reduce the likelihood that an infected person has contact with others								
Portal of Entry	Interventions that prevent pathogens from entering a susceptible host (via portal of entry) Interventions that reduce the likelihood of transmission during contact between an infected person and others								
Susceptible Host	Interventions that reduce the likelihood a person will be infected with a pathogen								

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Core Business Skills Needed in a Crisis

- Know your customer: understand current, changing consumer desires.

  o Update business and marketing plans, even informally, based on local consumer behavior.

- Raise awareness of your value and identity.

- Seek new opportunities, but don't stray from your foundational value and core competencies.

- Strengthen communication and relationship building with your employees, recognizing your mutual dependency. See other suggestions for supporting workers and address potential labor shortages.

- Form mutually-beneficial partnerships with businesses serving the same market or neighborhood.

- Engage with the public sector: ask for regulatory changes; participate in procurement opportunities, particularly if you can adapt to meet pandemic-related needs; and apply for direct assistance.

- Train and incentivize employees about the heightened importance of providing exceptional customer service, acknowledging the difficulties posed by the pandemic. Businesses in the food and drink sector may face particular challenges in this regard.

- Cultivate customer loyalty through marketing with personality and local appeal, loyalty programs, and, when conditions allow, in-person events. Continue to emphasize the fact that the business is local, independently owned, and dependent upon local customers for survival. Keep business hours up to date on online platforms.

Given fewer resources than their larger peers, small businesses are generally less-well positioned to pivot to technology, including online sales. Small businesses can seek to differentiate themselves and cultivate loyalty by focusing on customer service and the fact that they are local, community-based businesses.

Public Sector and Business Associations: Support

- Provide information, which is what businesses most value.

- Provide business support services, including training on current issues.

- Provide financial support and technical assistance for technology-based improvements that can be costly and difficult for smaller businesses to adopt.

- Provide support for small businesses by messaging to the public, promotions and - when feasible - programming and events.

Next Steps

You can continue into the next section which focuses on how to reflect and prepare or jump to other sections of this Guide.

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Reflect and Prepare

In this section, you can reflect on your experiences during this or previous pandemics, and use your learnings to create plans to prepare for the next pandemic.

- [Determine When to Modify or Deactivate Your Response](#)
- [Identify Successes and Establish an Improvement Plan](#)
- [Pre-Pandemic Preparations](#)

Assess & Strategize → **Communicate Effectively** → **Collaborate Across Sectors** → **Adapt & Maintain Operations** → **Reflect & Prepare**

Determine When to Modify or Deactivate Your Response

As conditions change over the course of the pandemic, revisit the questions you asked yourself earlier as you assessed the external environment. Consider when you may safely deactivate your response.

Worksheet 18: Plan to Modify and Deactivate Response

- What metrics are being used to measure when disease management measures implemented by your organization can be relaxed?

- What is your plan for scaling down disease management measures?
    - What pandemic adaptations will you retain because of health and safety benefits, efficiency improvements, or customer service enhancements?

- How might the disease management measures be re-engaged if there is a new outbreak or variant of concern?
    - What are the signs or metrics you will track to identify when these events occur?

- Does it make sense to return to a pre-pandemic or pre-outbreak workplace scenario?
    - If not, how can your organization codify changes made during the pandemic?
    - If yes, see the next module for suggestions on how to reflect on your experience and leverage lessons learned as you prepare for future emergencies.

- When was your communications plan last updated?
    - Refer to your Communications Plan as you communicate with staff, customers, and other stakeholders.

Identify Successes and Establish an Improvement Plan

As your organization deactivates its pandemic response, it is critically important that you reflect and learn from your experience with the aim of identifying and celebrating what went well in addition to determining where there are lessons learned and room for improvement. **Worksheet 18** can be used to guide your organization's internal reflections.

Worksheet 19: Reflect on Your Experience

Preparedness	• In what ways were you (as an organization) prepared for the pandemic? • In what ways were you not prepared?

Response	• What were the one or two most significant challenges you experienced during the COVID-19 response?
	• What necessary resources did you have challenges accessing during the response?
	• What new patterns and processes in your work emerged during the response? Did you establish any noteworthy ways of working differently with your partners?
	• What are successes and lessons learned for each of the following?
	   ○ Focusing on your mission while adapting to emergent **strategic priorities**.
	   ○ Adapting your service delivery for the benefit of **prioritized populations**.
	   ○ Communicating with key internal and external audiences.
	   ○ Adapting to the changing business climate and needs of your customers.
	   ○ Adapting to the needs of your workforce?

Overall Learnings	• What are you most proud of in your organization's response? • What would you do differently in a future pandemic response? • What are the one or two most important actions your organization can take now to be prepared for a future pandemic response?

Worksheet 20: Develop an Improvement Plan

This worksheet contains a structure for an Improvement Plan which can be used to manage your organization's efforts to prepare for future pandemics.

Guidance:

- Identify major areas for improvement and list one or more corrective action for each area.

- Identify no more than one Lead for each area.

- Resource needs may include staff time, equipment, or other factors, as well as financial resources.

Topic or Area for Improvement	Corrective Action/s	Roles	Resource Needs (if any)	Target Completion Date
1.	● ●	Lead: Support/s:		
2.	● ●	Lead: Support/s:		
3.	● ●	Lead: Support/s:		
4.	● ●	Lead: Support/s:		
5.	● ●	Lead: Support/s:		

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Pre-Pandemic Preparations

The ideas described on the following pages may be advanced in preparation for the next pandemic or significant emergency. These opportunities are organized in three categories, with specified roles for public, nonprofit, and private sector:

A.   Build Relationships and Understanding of Others' Roles and Priorities

A1.   Invest in cross-sector relationships at the state and regional level, both informally and formally.

A2.   Strengthen informal and formal relationships among emergency management professionals, public health professionals, policy makers, and staff in the public sector.

A3.   Maintain an up-to-date understanding of your organization's role relative to others. Understand the dependencies of sectors, clusters, and industries you care about.

B.   Prepare for Future Public Health Emergencies

B1.   Strengthen communications protocols and methods.

B2.   Map out overlapping areas of regulatory authority among different agencies and different layers of government.

B3.   Prepare potential regulations and safe work plans that would apply to pandemics with various characteristics.

C.   Invest in Regional and Organizational Resilience

C1.   Increase investment in the capacity and sustainability of our emergency management, public health, and healthcare systems.

C2.   Develop organizational plans and capacity for emergency management and business continuity.

C3.   Enhance regional and local economic resilience.

C4.   Enhance regional and organizational supply chain resilience.

C5. Enhance regional and organizational workforce resilience.

A. Build Relationships and Understanding of Others' Roles and Priorities

The COVID-19 pandemic illustrated again how important individual, as well as organizational, relationships are. Trust, communication, and coordination are essential to effective complicated responses that benefit from collaboration across disciplines, sectors, and jurisdictional lines. Post-pandemic turnover makes investment in relationships all the more important.

A1. Invest in cross-sector relationships at the state and regional level, both informally and formally. This effort will require leadership and investment of time and resources by the public sector, and the active participation of the nonprofit and private sectors.

   i. Talk, meet, debrief, and get to know one another. Host and participate in cross-sector networking events.

   ii. Plan, train, and exercise jointly.

   iii. Outline cross-sector (public, nonprofit, private) collaborations in advance of a crisis, building the foundations upon which effective partnerships can develop during an emergency.

A2. Strengthen informal and formal relationships among emergency management professionals, public health professionals, policy makers, and staff in the public sector.

   i. Clarify roles and responsibilities for decision making, particularly within the context of a pandemic.

   ii. Ensure policy makers and organizational leaders are well-versed with emergency plans and their role.

A3. Maintain an up-to-date understanding of your organization's role relative to others. Understand the dependencies of sectors, clusters, and industries you care about.

   i. **Public sector.** Know your business community. Build relationships and understand priorities, vulnerabilities, and interests. Understand how to connect and communicate.

   ii. **Nonprofit and private sectors.** Know your public sector partners, particularly those with relevant regulatory authority and those who provide critical services. Know your business or industry association, making sure they know you and your interests and potential vulnerabilities in an emergency.

B. Prepare for Future Pandemics

The COVID-19 pandemic revealed the complexities associated with a pandemic. Learnings from this experience contribute to ideas for what can be improved prior to the next pandemic.

B1. Strengthen communications protocols and methods.

   i. Establish guidance and best practices for effectively communicating public health information to inform business and public decision

making, drawing on lessons learned from COVID-19 After Action Reviews by the CDC (external link), your jurisdiction, and others.

ii.   Build capacity for the rapid translation of materials into languages other than English. This may require use of technology and coordinated contracts to ensure that emergent demands on contractors do not exceed capacity. Also enhance access to multi-lingual interpreters, including those fluent in American Sign Language.

iii.   Develop and test communication plans and tools for future events.

B2.   Map out overlapping areas of regulatory authority among different agencies and different layers of government. Build on coordination advanced during the COVID-19 pandemic, seeking to streamline and align regulations that apply during and outside of emergencies.

B3.   Prepare and vet potential guidelines, regulations, and interventions that could be applied during pandemics with various characteristics (public sector lead). **Pre-develop industry specific safe work plans** (private sector lead, with opportunity for the public sector to support with guidance, funding, templates, and technical assistance).
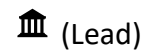
CDC Moving Forward Summary Report (external link) [8]

C. Invest in Regional and Organizational Resilience

The COVID-19 pandemic revealed the fragility embedded in many existing systems that have been underinvested in and/or that have been developed in ways that are inequitable. The opportunity described in these items is for significant reinvestment in and rethinking of foundational public infrastructure. In many cases, there are parallel opportunities at the industry- or organizational level.

C1. **Increase investment in the capacity and sustainability of our emergency management, public health, and healthcare systems.** We cannot continue to underinvest in these critical systems and then expect them to perform effectively during an emergency. We cannot continue the 'boom and bust' cycle of funding, with funding flowing into emaciated systems during periods of crisis.

C2. **Develop organizational plans and capacity for emergency management and business continuity.** This may be obtained through investments in staff, consultants, and/or associations and other intermediaries.

  i. Develop pandemic continuity of operations plans, prioritizing services that are required for ongoing private and nonprofit sector operations. Train and exercise on those plans.

  ii. Enhance business and business association capacity for emergency planning and response coordination. Larger businesses with business continuity professionals were better prepared to handle the shocks of the COVID-19 pandemic. When this expertise cannot be afforded at the individual business level, enhance the capacity of business associations and other intermediaries who can provide support to multiple businesses.

  iii. Develop pandemic business continuity plans (private sector, with potential for public sector support). Build on the learnings and investments in technology and other adaptations from the COVID-19 pandemic.

(Support)

C3. Enhance regional and local economic resilience.

i. Continue the core economic development work of diversifying regional and local economies. Diversification contributes to economic resilience in emergent and non-emergent conditions by diminishing the impacts that ripple out from sectors of the economy negatively affected by a pandemic or other economic shocks.

🏛 (Lead)

🎖 💼

ii. Diversify downtown economies, seeking to integrate housing in particular. While remote work requirements or options eliminated a significant consumer base for businesses in tech-dependent downtowns, neighborhood businesses with a nearby residential consumer saw less of an impact.

🏛 (Lead)

🎖 💼

C4. Enhance regional and organizational supply chain resilience.

i. Strengthen regional economies and cultivate regional resilience. Improve resilience in supply chains and strengthen regional manufacturing and agricultural production capacity.

🏛 (Lead)

🎖 💼

ii. At the organizational level, pre-plan for supply shortages, identifying alternative suppliers and other strategies to address the disruption of critical inputs.

🏛 🎖 💼

C5. Enhance regional and organizational workforce resilience.

i. Strengthen laws and policies that protect workers.

🏛

ii. Invest in the pandemic resilience of education and childcare systems for the social and educational well-being of children, as well as for benefits to workforce availability.

🏛

iii. Address inequities in access to technology and broadband.

🏛

iv. At the organizational level, prepare to address labor shortages by maintaining strong labor-management relations and planning and practicing emergency plans, including the use of technology and the ability to reassign employees to areas of emergent need.

🏛 🎖 💼

Appendix 1. Sector-Specific Considerations

This appendix supplements the general strategies described above with sector-specific context and strategies for the sectors listed below. These sectors were selected based on their importance to the Puget Sound economy.

- Construction
- Food Services and Drinking Places
- Information Technology
- Manufacturing
- Small Businesses
- Transportation and Warehousing

Construction

Challenges of the COVID-19 Pandemic

With respect to the COVID-19 pandemic, there were several major considerations that impacted the sector and should be evaluated as part of future responses.

- **Treatment of the sector as "non-essential."** Although the construction industry faced distinct challenges in meeting timelines to address necessary construction projects, the sector was considered to be "non-essential" under Washington State regulations. This meant that there was a shutdown of construction activity across the state early in the pandemic, though other states classified construction as "essential."

- **Disruptions to construction supply chains.** The effect of the pandemic on supply chains also had a considerable impact on the ability for businesses to continue working on construction projects. These impacts are multidimensional, ranging from impacts of lockdowns on local inputs such as concrete to delays with accessing building materials that need to be shipped from other regions or countries (e.g., softwood lumber from Canada).

- **Impacts on supporting government services.** In many jurisdictions, permits and documentation that must be filed with local governments prior to construction could not be submitted in-person or reviewed and approved in a timely fashion. Similarly, after construction was complete, the capacity for local governments to issue certificates of occupancy and other final approvals for construction was impacted by the lack of available inspectors to visit job sites.

- **Uncertainties regarding financing and future demand.** As with many other sectors, the pandemic resulted in significant uncertainties with regard to future demands for the products of the construction sector. For some construction projects, the pandemic led to greater difficulties in securing financing, and often resulted in projects being deferred or canceled.

Specific Considerations for the Construction Sector

The following factors will influence the applicability of cross-sector strategies to the construction sector:

- The construction industry is composed of a range of businesses, from large multinational construction companies to small businesses including builders and contractors. Providing a solution for the sector requires acknowledging that policies and programs will need to meet the needs for a range of business sizes.

- The nature of construction is such that some (but not all) activities can be conducted with social distancing and reduced staffing levels on site. In tandem with targeted interventions

to reduce transmission, construction activities are likely to be able to continue before many other types of business activities.

- The sector must meet requirements under local building regulations at key points in the process, including permit reviews and final inspections. This means that construction activities will be significantly impacted by disruptions to permit review and inspection times with local governments. If the construction industry is to be supported, these functions should be prioritized.

- Construction activities are more strongly impacted by supply chain disruptions than many other sectors given the amount and range of inputs necessary for construction projects. While there may be limited options available for nationwide and international disruptions to supply chains, ensuring that local logistics and manufacturing can support their share of necessary inputs will be essential.

- Given the magnitude of the capital assets involved with the construction sector, planning for targeted support to allow the sector to continue to function can result in significant and positive economic effects.

Best Practices for the Construction Sector

- **Provide rapid-response guidelines to allow safe, early operation of construction-related businesses.**

- **Support broader implementation of online government services related to the construction industry.** Identify major steps in permit approvals and building inspection processes impacted by likely short- and long-term closures due to health restrictions. Allow for expanded electronic/email submissions of necessary plans, applications, and other documentation.

- **Restrictions on on-site labor at construction sites may not be as applicable as in other sectors,** given the potential for social distancing and reduced workforces on site. Coordinate meetings with representatives from labor unions and the construction industry to determine appropriate on-site measures to control transmission. Implement key measures in partnership with the public sector and ensure that they are effective on the ground through regular review. Minimize on-site personnel and implement contact tracing.

Food Services and Drinking Places

Challenges of the COVID-19 Pandemic

Food and drink establishments were among the hardest hit businesses and have experienced a variety of challenges through the pandemic.

- **Reduced Demand and On-Site Dining Prohibitions.** The restaurant industry experienced some of the most immediate and visible impacts from the COVID-19 pandemic and subsequent public health interventions as customers avoided public spaces over fears of being exposed to the virus. The National Restaurant Association estimated that, nationally in 2020, restaurants lost $240 billion in sales, more than 100,000 restaurants closed permanently or long-term, and the industry lost more than 2.5 million jobs.

- **Hiring and retention challenges.** Many employees left the restaurant and food service industry, affected by challenging work conditions and opportunities in other sectors. Owners reported that recruiting and retaining employees was among their top challenges in 2022, and two-thirds of restaurant operators say they have reduced business hours because of labor shortages. Many restaurant operators raised wages and expanded benefits and some began offering flexible scheduling or family/elder care leave to hourly employees.

- **Supply chain issues that cause shortages and higher prices for inputs.** Nearly all restaurant operators reported delayed shipments or shortages of food and beverage items or equipment and service items. Nearly all said food costs were higher than they were pre-pandemic and that their profit margins were lower.

- **Challenging customer interactions.** Restaurant operators and staff have noted experiencing negative reactions from customers, including frustration due to longer wait times (due to understaffing), enforcement of COVID-19 restrictions (legally required by local and state government, in many cases), and the perceived unsafe behavior of other customers (not wearing masks, sitting too close). Staff at restaurants have reported that some customers have yelled at restaurant staff, sworn and used insulting language towards staff, left without paying for food consumed, and thrown items.

- **Due to the nature of their business and the high degree of regulation, businesses in the food and drink sector may face particular challenges in operating during a pandemic.** During COVID-19, operating at reduced capacity was not financially feasible for some due to the fixed costs of opening. In addition, financial assistance was tied to businesses being under closure orders, which they no longer were when capacity-limited dining was allowed, putting restaurants in a bind.

Specific Considerations for the Food and Drink Sector

The following factors will influence the applicability of cross-sector strategies to the food services and drinking places sector:

- Many restaurants and drinking places are small businesses. Many are owned by people of color, including refugees and immigrants for whom communication in English may be challenging.

- Given the presence of many small businesses, restaurant and hospitality associations are particularly important in representing the interests of this sector.

- Given the highly regulated nature of restaurants and liquor sales, the need for coordination among agencies with regulatory authority is particularly high. In Washington State, this includes the Department of Health, Labor & Industries, and the Liquor and Cannabis Board.

- Restaurant owners and managers must keep up with rapidly changing regulations for their staff and customers. Industry associations may play a particularly important role in providing access to consolidated, current regulatory information, as well as recommendations and best practices.

- Many, but not all, food service workforce are relatively younger and more mobile (changing jobs more frequently). They may not work 9-5 Monday to Friday and may use different tools to communicate with their coworkers and managers than office employees (e.g., texting and in-person, rather than by email).

Best Practices for the Food and Drink Sector

- **Adapt regulations and shift business models to allow safe operations.** Creative adaptations can support continued business activity during a pandemic. Moving to outdoor dining, evaluating the comprehensive public health benefits and costs of allowing to-go alcohol sales, offering delivery, and pivoting to fast-changing best practices could all be helpful in a future pandemic.

- **Direct food waste and industry resources to areas of need.** To mitigate diminished sales at the same time that the volume of public sector food assistance is increased, collaborating with the public sector to direct food waste could be beneficial. The public sector can work to contract with local restaurants to provide food services for emergency workers and people experiencing food insecurity. Businesses can identify surplus resources and employees that can be deployed to meet emergency needs.

- **Address challenge of enforcement of restrictions falling on restaurant employees.** Providing training and support for staff, banning problematic clients, and enforcing restaurant rules can all help when the burden of enforcing restrictions falls on restaurant employees. Seek to collaborate on policies and safe work plans for continuing business

operations, identifying opportunities to modify regulations and adapt safe work plans that relieve burden on clientele and staff.

- **Leverage technology to reduce risk of infection and improve experience for customers.** Online ordering for pick-up and delivery orders, digital menus, web-based reservations, mobile POS tools, and cashless systems were all changes made during the COVID-19 pandemic, to varying degrees. These modifications can be costly and challenging for establishments to implement (though they may come with long-term benefits) and hard for some customers to use. The terms offered to access these technologies by intermediaries may vary, with some more costly than others. The public sector can support by providing financial support and technical assistance to support establishments making technology-based adaptations. Restaurants and drink establishments can prioritize making changes that offer long-term benefits.

Case Study from COVID-19: Regulatory Flexibility and Targeted Assistance in the City of Seattle

The Seattle Department of Transportation (SDOT) took an intentional and creative approach to allowing restaurants, as well as other retailers, to extend outdoor dining and other services onto the sidewalk or into the street. The City's Safe Start Program was designed to allow this use while ensuring pedestrian access was preserved. SDOT staff also provided technical and financial assistance to targeted neighborhood business districts with a high percentage of business owned by people of color and relatively less access to open space to address barriers for participation and support community ideas for activating public space. Staff noted that the Safe Start Program demonstrates that outdoor dining can be successful in Seattle in non-pandemic times despite the rainy climate. SDOT relaxed other regulations that allowed outdoor merchandise displays and provided free mobile vending permits.

Information Technology

The information technology sector is composed of a number of subsectors, listed here from those with the largest national employment base to the smallest according to the Brookings Institute (external link) [9]:

- Computer systems design and related services (e.g., IBM, Accenture, and Tata Consultancy Services)
- Software publishers (e.g., Microsoft, Salesforce)
- Data processing, hosting, and related services (e.g., Amazon Web Services)
- Semiconductor and other electronic component manufacturing (e.g., Intel, Nvidia)
- Other information services (e.g., Google, Meta, Netflix)
- Computer and peripheral equipment manufacturing (including companies such as Dell, Apple, and Western Digital)

The U.S. tech sector has grown significantly over past decades while other industries have declined. This trend continued through the COVID-19 pandemic, with the technology sector continuing to add jobs over the course of the pandemic despite losses in the first year and albeit at a slower rate. Growth was strongest in software publishing, data processing, and information services as e-commerce increased and demand for IT services grew as other functions shifted online, accelerating a move towards a technology-based economy.
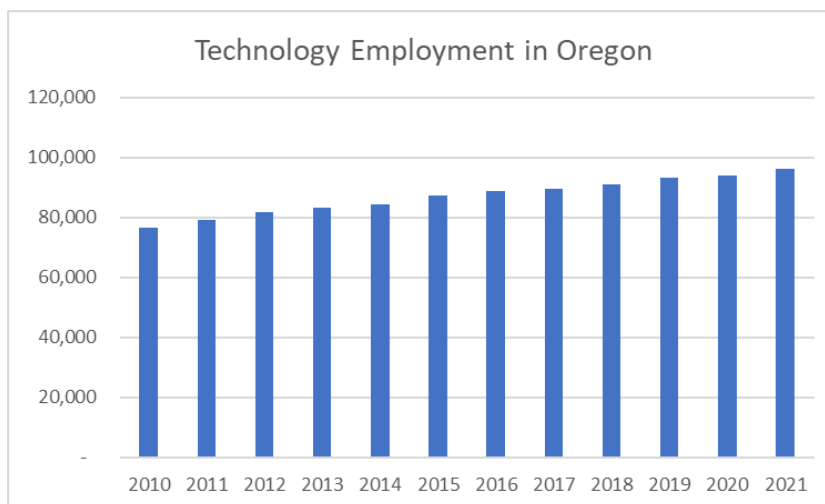
Source: Technology Association of Oregon, 2022. [10] (external link)

The resilience of the sector during the COVID-19 pandemic was facilitated by the fact that many IT work functions can more easily be done in a remote work environment than in the service sector or other sectors which require in-person presence. Some studies show that employee productivity increased in the tech sector as remote work conditions reduced meetings, commute time, and other functions that take away time from work tasks.

Challenges of the COVID-19 Pandemic

Despite the strong performance of the IT sector during the COVID-19 pandemic, the sector faced real management challenges, including:

- Responding to increases in demand from consumer behavior and increased reliance on technology for delivery of everything from public sector business permits to contactless solutions in retail and restaurants. Similarly, a shift to remote work may increase demand for laptops, cellphones, networking devices, and other hardware.

- Effectively managing the impacts of a shift to remote or hybrid work environments, particularly over the long-term.

- Helping employees navigate disruptions in childcare, K-12 education, and transit systems.

- Increasing competition for workers and a need to focus on talent retention.

- Disruptions in global markets, affecting demand for firms that sell internationally.

- Disruptions in financial markets, affecting access to capital.

- Disruptions in supply chains, affecting both hardware manufactures and software publishers that require hardware and other inputs to support internal operations.

Opportunities

The shifts caused by COVID-19 also generated many business opportunities for the tech sector:

- A shift towards tech-enabled and online solutions for everything from healthcare and mental health support to contactless service in retail and restaurants.

- A move towards online permitting and other public sector functions.

- An increased need for home-based technology to support increased e-commerce and online service delivery, as well as more home-based employment.

- An increased need for cyber security solutions.

- Opportunities to address labor shortages, supply chain disruptions, and other challenges.

Specific Considerations for the Information Technology Sector

- The tech sector is not monolithic. While some tech firms serve broad, cross-sector markets, others focus on support for specific sectors. Firms that support pandemic-vulnerable sectors, such as the hospitality sector or commercial real estate market, will be negatively affected as those sectors are impacted by diminished demand. It is important to remember that some IT functions require an in-person presence and that many IT businesses have limited resources and may face the same challenges as other small businesses.

- While the IT sector, particularly in software-focused businesses, embraced remote work models and experienced increases in worker productively, remote work also creates significant challenges. There are important considerations to consider in adopting remote

work models where appropriate. Given the ease with which many tech firms have adopted remote work models, the biggest challenges may be managing the potential negative long-term impacts on culture and employee retention, carefully navigating the imposition of return-to-office mandates with the flexibility valued by employees.

- While larger technology firms may be able to provide or subsidize childcare or transit options, smaller firms will need to focus on supporting workers and addressing potential labor shortages.

- Some tech businesses must address potential supply chain disruptions.

IT Businesses are Well-positioned to Contribute to Market- and Policy-based Solutions

The technology sector is well-positioned to be part of the solution given the sector's importance to the Puget Sound economy, its resources and profile, and the role technology can play in finding safe ways for economic, social, and educational activity to continue during a pandemic. The public sector should:

- Identify technology sector and businesses that can contribute to the pandemic response through technology-based market solutions, cross-sector collaborations and problem solving, and by modeling desired behavior.

- Consider engaging the sector as a model. "A lot of companies have used Amazon as a litmus test, they will just do whatever Amazon does and when they have their employees return to the office." Engage larger tech businesses, and other larger employers as a way to efficiently communicate to large numbers of employees and their families. Call on tech employers and their employees to model desired behavior: while remote work enables them to continue operations, compliance with public health requirements - including masking, social gathering limits, and social distancing - is critical for ensuring the safety and health of essential workers and those who cannot work remotely.

For their part, technology businesses should identify opportunities to provide market- and policy-based solutions by asking:

- How can we adapt our business model to take advantage of emerging conditions?

- How can we contribute to regional solutions, recognizing that the well-being of our employees and the sustainability of our business is tied to the region's well-being?

- What is our civic responsibility, particularly if our business is faring better than other businesses?

Manufacturing

Challenges of the COVID-19 Pandemic

The COVID-19 pandemic and associated lockdowns presented several sector-specific issues for manufacturing businesses to manage.

- **Diversity of activities and considerations under manufacturing.** Although the manufacturing sector covers different and comparable businesses, there can be a range of needs across this category, more so than with most sectors covered in this material. Specific factors that can differ include the nature of the labor, inputs, and products; format of work environments; importance of outputs; and regulatory requirements, all of which can be impacted by a pandemic. For example, food or medical device manufacturing may require coordinating greater safety and inspection requirements, but these efforts would be seen as more critical than manufacturing retail consumer goods during a pandemic. This should be specifically considered in planning for these businesses.

- **General changes in consumer and business demand can adjust production requirements.** Although there may be a consistent need for certain goods during a lockdown or other pandemic-related disruptions, consumer and business demands for products may have distinct shifts in consumption patterns. These shocks can have different effects on businesses depending on the nature of these goods and the ability for production to accommodate a shift to address these new demands.

- **Upstream and downstream disruptions in supply chains.** Secondary industries such as manufacturing are impacted by supply-chain disruptions in two distinct ways. First, businesses can be affected by shortfalls and delays with key inputs, which can impact production. However, internal delays caused by employee scarcity and workplace limitations can also disrupt downstream supply chains, including retail and other manufacturing businesses. While these disruptions can be national or even global in scale, focusing on minimizing local supply chain disruptions can be essential in maintaining these operations and delivery of key products.

Specific Considerations for the Manufacturing Sector

- **Identify and protect critical manufacturing operations.** Identify manufacturers who provide critical inputs that should be prioritized. Coordinate with critical industries in the manufacturing sector to determine the short-term risks of shortfalls to business inputs from impacted suppliers. Develop emergency guidance to critical manufacturing operations to keep key manufacturing businesses in operation to meet basic needs.

- **Minimize overall disruptions to manufacturing operations and supply chains.** Private and public sectors should collaborate across different industries to identify options for safely

operating businesses with necessary disease management measures. Other actions could include:

○ Identify supply chains that support local manufacturing operations that are at risk of disruption.

○ Businesses can designate employees that can work off-site and coordinate on-site labor needs with staff.

○ Identify potential changes to business and consumer demands that would impact product demand and require adjusting production.

○ Investigate local options for suppliers that can provide inputs that are less vulnerable to short-term disruption.

● **Potential for retooling operations to meet pandemic-specific needs.** While certain manufacturing businesses may face shifts in demand due to changes in consumer and business consumption, others may adjust their production to manage significant pandemic-specific needs. For example, shortfalls of sanitizers and disinfectants due to increased demands by healthcare led many businesses in alcohol manufacturing to adjust their production to meet these needs. Coordinate with the public sector.

Small Businesses

Small businesses are present in most economic sectors.

Challenges of the COVID-19 Pandemic

The vast majority of businesses in the United States have fewer than 500 employees and constitute about half of the country's total employment base. The U.S. Small Business Administration defines small businesses as those with fewer than 500 employees. By this definition, 99.9% of all U.S. businesses are small, employing 46.4% of U.S. employees. The statistics for Washington State are similar, with nearly 50% of employees working for the 99.5% of enterprises that qualify as small businesses. Of these businesses, 97% employ fewer than 20 people.

Prior to the pandemic:

- Women made up 47.3% of workers and owned 43.2% of businesses.

- Veterans made up 5.0% of workers and owned 6.4% of businesses.

- Hispanics made up 17.6% of workers and owned 13.8% of businesses.

- Racial minorities made up 24.8% of workers and owned 19.4% of businesses

Small businesses are also uniquely vulnerable to the economic impact of the COVID-19 crisis. A study by the Federal Reserve found that only 35% of small businesses were economically healthy in 2019, prior to the impacts of the pandemic. This precondition of poor economic resiliency has been compounded by the fact that small businesses are concentrated in sectors that rely on person-to-person interaction and have been most affected by COVID-19, including accommodations and food services; educational services; arts, entertainment, and recreation; healthcare and social assistance; and retail trade. See the exhibit on the following page.

These businesses account for a disproportionate number of low-wage workers, people with less formal education, and minority business owners. This means that economic disruptions have been experienced by those least resilient to such shocks. The pandemic has been hardest felt by business owners of color, particularly Black business owners.

It is simply harder for small businesses to adapt to rapidly changing business conditions than it is for larger businesses.

- They have less capacity to track changing policies and less access to sophisticated market analysis that describes changing consumer behaviors.

- They have fewer resources to put toward expensive and challenging technological innovations.

- Many small business owners had trouble keeping up with their businesses due to childcare issues. This issue was especially prominent for businesses owned by people of color.

- Fewer have an online presence to support e-commerce and contactless transactions [11]. The percent of Main Street businesses with an online component increased from 37% to 44% between 2020 and 2022. In 2022, 79% of small businesses using e-commerce report that online sales bring in 25% or less of overall revenue and more than half say e-commerce accounts for less than 10% of revenue.

- Businesses focused on discretionary products will be most impacted.

Small Businesses Vulnerable to Permanent Closure (national data)
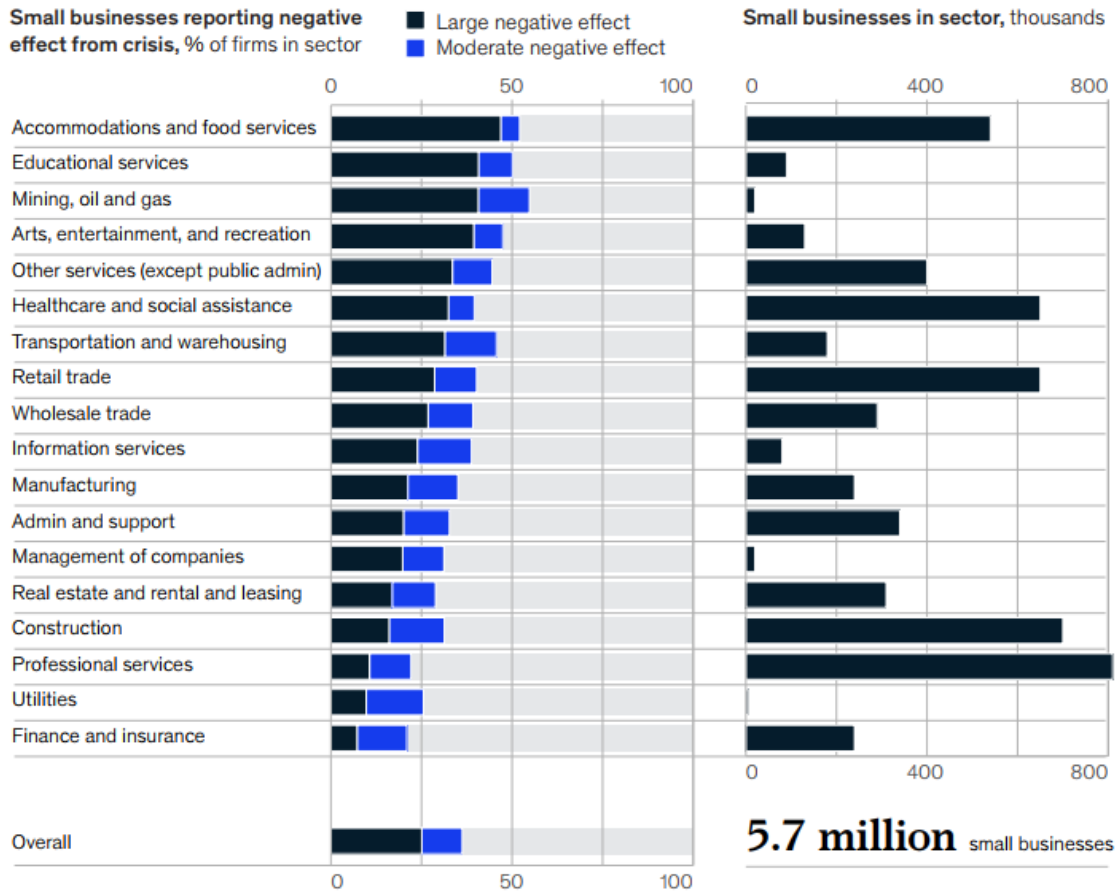
Note: Small and medium-sized businesses in the agriculture, forestry, fishery, and hunting sector were excluded because of inconsistent data reporting. Small and medium-sized businesses in the religious, grant-making, civic, professional, and similar organizations (NAICS 813), funds, trusts, and other financial vehicles (NAICS 525), and rail-transportation (NAICS 482) subsectors also excluded because of inconsistent data reporting.
Source: Statistics of US Businesses, 2017, Federal Reserve Banks' Small Business Credit Survey, 2019, Annual Business Survey, 2018, Census Bureau Small Business Pulse Survey Week 4, 2020; "How are small businesses adjusting to COVID-19? Early evidence from a Survey," 2020; Labor CUBE

Source: McKinsey & Company, 2020. [12] (external link).

Specific Considerations for the Small Retail and Service Business Sector

The following factors will influence the applicability of cross-sector strategies to the small business sector:

- Small businesses are highly fragmented and present in every industry sector. Because of their limited resources, they are likely to be more vulnerable and to face different needs than their larger peers.

- Some small businesses are owned by non-native English speakers, which should be a consideration in considering appropriate communications and engagement strategies.

- Given their limited capacity, it will be difficult for small businesses to participate in collaborating on policies and safe work plans. It will be important to ensure that the needs of small businesses are not eclipsed by those of their larger and better resourced peers.

- They may be less aware of and require more support in accessing available financial support and technical assistance.

- Small businesses have fewer resources to put towards pandemic-related adaptations. They will require funding support and technical assistance to be successful in all adaptive strategies.

Transportation and Warehousing

Challenges of the COVID-19 Pandemic

The pandemic and lockdowns posed different regional issues that needed to be managed.

- **Transportation and warehousing activities were strongly impacted by measures in other jurisdictions.** In addition to general disruptions due to supply chain issues, transportation and warehousing were very strongly impacted by measures put in place by other states and countries. For example, trucking in the Seattle area was heavily impacted by border closures with Canada, while air and marine shipping were affected by restrictions put in place in China and other Pacific Rim countries. This meant that local policies working to assist regional logistics companies needed to be reflective of the measures put in place in these other areas

- **Upstream supply chain disruptions provided increased uncertainty.** Even though the economy as a whole faced uncertainty about the availability of materials and labor, logistics companies in transportation and warehousing were working to manage and mitigate these delays directly. For many businesses, these disruptions could mean significantly reduced demand during some periods and increased demand when backlogs were looking to be cleared. Given capacity limitations, this often meant a downward pressure on revenue and activity.

- **A rise in e-commerce increased the importance of last-mile delivery.** Although overall transportation and warehousing activities were impacted by significant uncertainty, there was an increase in activity in the sector overall due to the rise of home delivery of online shopping during lockdowns. This provided alternatives to brick-and-mortar retail locations, which were often shut down or seen as a risk by the public. This significantly increased the demand for distribution hub facilities, delivery fleet vehicles, and drivers to meet these needs.

- **Changes in consumer and business needs plus backlogs contributed to significant changes in demand for warehousing space.** Although changes in consumer demands and backlogs in supply chains and distribution represented significant disruptions to activity in this sector, this also increased the need for warehousing space. As just-in-time approaches were subject to greater disruption, there was a growing demand for inventory on hand to deal with disruptions in supply. The focus on distribution for online consumer sales also pushed warehousing towards more distributed models closer to customers, and the need to accommodate backlogs has meant that additional capacity has been needed, especially at locations close to major bottlenecks such as ports or distribution centers.

- **Demand for passenger transportation collapsed due to lockdowns and requirements.** Although logistics are a notable part of the transportation and warehousing sector, passenger transportation was significantly disrupted during the pandemic due to lockdowns

and other measures. This disruption was present across different modes of transportation, ranging from ground transportation by transportation network companies (TNCs) such as Uber and Lyft, to air and marine transportation such as airlines and cruise ship companies.

Specific Considerations for the Transportation and Warehousing Sector

- The transportation and warehousing sector is often the most important when considering issues of logistics and supply chains as challenges within this sector can result in impacts which are felt across the entire economy. Prioritizing strict disease management measures ensures that impacts across these interconnected sectors can be mitigated.

- Many of the impacts to the sector are not just shaped by local policies, trends, and demands, but also by elements of the supply chain in other areas as well. For example, ports in the Puget Sound area may present an important connection in shipping primary agricultural products to Pacific Rim countries. In such cases, demands for logistics may depend on impacts to consumer demand and supply chains outside the region.

- Shifting labor demands present probably the greatest consideration with transportation and warehousing. In some cases, such as with airlines or cruise ships, broader measures to control infections resulted in business activity being dramatically reduced. In other cases, such as with activities with distribution hubs and last-mile delivery to consumers, demand for labor increased significantly during the pandemic.

- In cases where labor demands have changed, pivots in company activities can help to meet new needs. The clearest example of this was with transnational organizations that shifted to a business model focusing on last-mile delivery for restaurants and other consumer goods.

Best Practices for the Transportation and Warehousing Sector

- **Coordinate information exchange.** Changes in requirements in other regions and countries can have a substantive impact on how locally based transportation and warehousing businesses will function.
    - Develop estimates of short- and long-term needs to meet current and expected demands
    - Provide scenarios for situations where there are significant shifts in demand.
    - Coordinate with the public sector, suppliers, and customers on potential challenges with capacity and scheduling that will impact the availability of goods and services.
    - Public Sector. Encourage long-term information sharing with other jurisdictions on logistics challenges from disruptions. Support development of connections with the public sector to provide timely information for future public health events.
- **Manage capacity challenges.** Substantial delays due to upstream disruptions can have ripple effects throughout the entire economy, especially with carriers that require fleet management over a broad area.

○ Coordinate an assessment of suppliers and downstream elements of the supply chain to determine the potential for disruption.

○ Leverage short-term approaches such as contracts with third parties to make additional capacity available, including both carriers and warehousing space. Public sector can support local, short-term options for warehousing and storage that would require government action for permitting and regulatory approvals.

○ Public sector: Institute ways for logistics firms to collaborate with the public sector on immediate solutions to short-term capacity issues.

● **Address shifts in labor needs in the sector.** Changes in demands for logistics during a pandemic can result in rapidly shifting labor needs, as well as pandemic-related public health measures.

○ Coordinate assessments of available capacity, labor needs, and shortfalls or excess capacity available.

○ Evaluate critical short-term needs during staffing shortfalls and determine potential options for meeting immediate needs (e.g., third-party agencies, temporary workers). Provide support for workers in businesses with severely diminished demand, potentially through shifting product offerings or matching these workers with other employment opportunities in the sector.

○ Pursue immediate opportunities for automation of critical functions that would be impacted by a shortfall of labor.

○ Implement strong infection and transmission control approaches that can protect the health and safety of critical workers.

Best Practices for the Public Sector

• Support opportunities for logistics, including implementing emergency measures for companies working to bring warehousing space online and helping match logistics firms with alternate providers and suppliers to continue to meet needs for additional capacity.

• Coordinate with transportation and warehousing companies to provide strong short-term transmission/infection control measures that can protect the health and availability of critical labor.

• Promote economy-wide assessments to evaluate ways of increasing resiliency and reducing costs during disruptions.

• Coordinate policies to help build additional capacity into local and regional logistical systems for future shocks.

Appendix 2. Stakeholder Interviews

The following individuals graciously shared their time and insights with the team that developed this Guide.

- Anthony Anton, President & CEO, Washington Hospitality Association

- Ginger Armbruster, Chief Privacy Officer, City of Seattle

- Chris Atchison, President, British Columbia Construction Association

- Pamela Banks, Director, Office of Economic Development, Seattle Office of Economic Development, Small Business

- Dr. Dave Baspaly, President & CEO, Council of Construction Associations

- Jeff Bray, Executive Director, Downtown Victoria Business Association

- Roberta Byker, Sr. Project Manager Business Continuity, Starbucks

- Greg D'Avignon, President & CEO, Business Council of British Columbia

- Carina Elsenboss, Preparedness Director, Public Health - Seattle & King County

- Joy Emory, President & CEO, Workforce Snohomish

- Nicole Errett, Assistant Professor, UW School of Public Health

- Rep. Noel Frame, Legislator, Washington State Legislature

- Chris Gregoire, President & CEO, Challenge Seattle

- Katherine Hattori, Founder & President, Botanical Colors

- Andy Heily, President & CEO, Continental Mills

- Len Jordan, Managing Director, Madrona Venture Capital Group

- Ryan Lambert, Editor-in-Chief, Puget Sound Business Journal

- Greg Lane, Executive Vice President, Building Industry Association of Washington

- Ann Lesperence, Director, Northwest Regional Technology Center for Homeland Security, Pacific Northwest National Laboratory

- Onora Lien, Executive Director, NWHRN

- Jim Maltby, Director of Health, Safety, Security & Environment, Lynden

- Curry Mayer, Director, Emergency Management, City of Seattle

- Mike McKenna, Executive Director, British Columbia Construction Safety Alliance

- Dan McKisson, President, Washington Area District Council & Member of ILWU 19, ILWU Longshore Union

- Timothy Narby, Owner, Nota Bene Cellars

- Skip Newberry, President & CEO, Technology Association of Oregon

- Rick North, Sr. Business Continuity Planner, Talking Rain

- Representative Cindy Ryu, Legislator, Washington State Legislature

- Jon Scholes, President & CEO, Downtown Seattle Association

- Craig Smith, Director, Government Affairs, Food Northwest

- Dr. Umair Shah, Secretary of Health, Washington State Department of Health

Appendix 3. Public Health Key Definitions

Infectious diseases are spread when germs leave their reservoir or host through a portal of exit, are conveyed by a mode of transmission, and enter an appropriate portal of entry to infect a susceptible host. This process is often called the Chain of Infection.

Infectious agent. The pathogen (germ) that causes diseases.

Reservoir. Places in the environment where the pathogen lives, sometimes known as the host. This includes people (human reservoirs), animals and insects (animal reservoirs), medical equipment, soil and water (environmental reservoirs).

Portal of exit. The way an infectious agent leaves the reservoir, including through open wounds, aerosols (by air), and splatters of body fluids including coughing, sneezing, and saliva.

Mode of transmission. The way an infectious agent can be passed between a reservoir and susceptible host through direct or indirect contact, ingestion, or inhalation.

- **Direct transmission**. The infectious agent is transferred from a reservoir to a susceptible host by direct contact or droplet spread.
  - o **Direct contact**. Occurs through skin-to-skin contact, kissing, and sexual intercourse.
  - o **Droplet Spread**. Spray with relatively large, short-range aerosols produced by sneezing, coughing, or talking.
- **Indirect Transmission.** The infectious agent is transferred from a reservoir to a host by suspended air particles, inanimate objects (vehicles), or animate intermediaries (vectors).
  - o **Airborne transmission.** Occurs when infectious agents are carried by dust or droplet nuclei suspended in air.
  - o **Vehicles.** An inanimate object that transmits an infectious agent, including food, water, biologic products (blood), and fomites (contaminated surfaces). Vehicles can passively carry a pathogen or can provide an environment for the pathogen to grow.
  - o **Vectors**. Mosquitoes, fleas, ticks, and other living organisms that can carry an infectious agent through mechanical means, or by supporting growth and changes in the infectious agent.

Portal of entry. The way an infectious agent can enter a new host through broken skin, the respiratory tract, mucous membranes, ingestion, or through equipment like catheters or needles.

Susceptible host. Any person who can become sick from the infectious agent. Other factors including overall health, nutrition, age, specific immunity, and genetic makeup can increase or decrease susceptibility to an infectious agent.

Definitions for this section were sourced from the Association for Professionals in Infection Control and Epidemiology [6] and the Centers for Disease Control and Prevention course Introduction to Epidemiology Section 10: Chain of Infection [5].

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