Coronavirus and Pandemic Preparedness for the Food Industry

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About FMI
As the food industry association, FMI works with and on behalf of the entire industry to advance a safer, healthier and more efficient consumer food supply chain. FMI brings together a wide range of members across the value chain — from retailers that sell to consumers, to producers that supply food and other products, as well as the wide variety of companies providing critical services — to amplify the collective work of the industry. www.FMI.org
The purpose of this document is to help the industry prepare for the possibility of a pandemic. We are neither intending to be alarmist nor are we predicting with any degree of certainty that a pandemic is on the way. However, global pandemics have appeared with some regularity throughout history. This document is intended to be useful for any type of pandemic including influenza, coronavirus (officially known as COVID-19), or any other infectious disease outbreak.

This document is specifically designed to help food retailers, wholesalers and suppliers undertake the necessary contingency planning to prepare for a pandemic. As you read through this, we would stress that should such an event occur, there will not be enough time to prepare after the crisis arrives.

Should we face an actual pandemic, FMI will serve as a timely, ongoing source of information and advice. In addition to the ways you can access the resources that we lay out in this paper, FMI is working with government agencies to help them understand our industry’s special needs during an outbreak. Included among the priorities we are working on are the need for the Department of Transportation (DOT) to relax their rules and regulations during a pandemic emergency, the need for the government to provide priority medical supplies to food workers, and the need to coordinate government/business messages to consumers to help all of us avoid creating needless panic among shoppers.

As you work through your own contingency planning process, we invite you to share your comments and suggestions with us to improve our ongoing efforts to help the entire industry prepare for this or any other widespread health emergencies.
A Planning Resource for the Food Industry

We are providing this resource document as a starting point for your own planning process. This is not a document that sits on the shelf until a pandemic erupts. It is a resource to help you develop your own action plans well in advance of the actual need.

Not every organization will implement all of these recommendations and certainly not all at once. However, you should review this document to determine your own priorities and timetable. If a pandemic erupts, it will be too late to start planning your response.

Monitoring the Situation

FMI will continue to monitor the progress of all possible pandemic disease threats or any other highly contagious disease and post the most current information on our website. You can find this by visiting: https://www.FMI.org/Coronavirus. This page has background information, a preparedness checklist and links to other useful sites, particularly the official sites of government regulatory and information agencies.

Recommendations

Recommendations in each section of this document are of two types:
- Key Recommendations, and
- Secondary Recommendations.

Overview

All infectious diseases vary, and each outbreak is different.

With recent quarantine orders, the rapid onset of illnesses around the world and the highly contagious nature of the novel coronavirus (COVID-19), all companies should prepare and think through what might happen to minimize the impact.

During a pandemic, consumers would be expected to resist leaving their homes. Grocers would then see their business shift to fewer visits with increased basket size. Demand for online shopping, self-checkout, and home delivery could spike. Consumers could also shy away from products imported from the countries where the pandemic is perceived to have originated or where outbreaks are widespread.

Independent grocers will face the same issues as large chains, but with fewer resources. Of particular concern to their business survival would be the death or prolonged illness of one or more family members key to the business. We should expect that a large number of independent grocers will look to their suppliers and wholesalers for help.
As with most respiratory viruses, we can expect advice for the general public to include avoiding gathering places and exercising social distancing. Restaurants should expect to see their "dine in" business decrease significantly for some considerable period of time. The receivables balances of foodservice customers would then become a big issue for those wholesalers. At the height of a pandemic, we can expect emergency health care facilities to pop up in buildings that will be lacking food preparation facilities because there is simply not enough surge capacity in our hospitals to accommodate those needing care during a full-scale outbreak.

The response of company associates is more difficult to predict, but companies should begin to plan to operate with significant staff shortages. The demands placed on the Human Resources function will be huge as many traditional policies and practices become instantly obsolete. Communication is key in the planning stage as well as immediately before, during and after any type of crisis.

On the vendor side, disruptions to the supply chain and product shortages are highly likely. Initially, given a likely shortage of drivers, fuel shortages are probable.

Previous influenza outbreaks have occurred in waves spreading over many months. Often an initial contagion occurs followed by a more severe, more lethal variation as the virus continues to mutate and adapt with perhaps even a third wave to follow this separated by a few weeks or even months. As a result, business continuity plans must be geared for prolonged emergency periods. Outbreaks are also likely to occur simultaneously in several areas, making normal supply "work arounds" inadequate. It should also be expected that disruptions could very well impact major areas of the infrastructure such as transportation, power, fuel supplies, communications, water systems and even local police, fire and medical services. It is also possible that some regions could actually come under quarantine, although the infections would most probably spread so rapidly that this tactic is not likely to be widespread or prolonged.
Key Business Continuity Recommendations

As a framework for the key planning recommendations set out in the pages to follow, establish a set of “trigger points” that can be activated as the pandemic spreads. Each trigger point needs to have a set of well-defined checklists with clear cut responsibilities. Trigger points might be structured as follows (these will not necessarily unfold in sequence):


- **Phase 1**, no viruses circulating among animals have been reported to cause infections in humans. – Preparedness planning
- In **Phase 2**, an animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans and is therefore considered a potential pandemic threat. FMI will coordinate with government agencies and trade groups to help draft messaging and response scenarios.
- In **Phase 3**, an animal or human-animal influenza reassortment virus has caused sporadic cases or small clusters of disease in people but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. FMI will monitor and continue to remain in contact with public official to promote food industry needs, essentials and support.
- **Phase 4** is characterized by verified human-to-human transmission of an animal or human-animal influenza reassortment virus able to cause “community-level outbreaks.” The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk of a pandemic. Full implementation of preparedness and contingency plans are set in motion. Preparation is made for splitting key head office staff into segregated groups as appropriate to include telecommuting where possible. Enhance communications to staff and consumers.
- **Phase 5** is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication and implementation of the planned mitigation measures is short.
  - Analyze your product lists to anticipate likely demand shifts during a pandemic. Identify “core” items and create emergency purchase orders that can be executed when the appropriate trigger point is invoked. Identify emergency substitution rules that can be implemented to keep products on the shelf. Identify items that should be offered in case quantities and identify foodservice products that should be sold at retail. To the extent possible, begin discussions with your vendors and wholesalers to obtain appropriate emergency commitments. Backup strategies to meet product shortages should also be
discussed.

- Implement a company-wide analysis of “essential” and “nonessential” job functions during a pandemic. Develop plans to appropriately shift resources. Consider cross-training and education that might be appropriate for your company.
- Develop an emergency chain of command so that leadership can be maintained and clearly communicated even if key individuals should become ill.
- Develop emergency communications mechanisms that will be needed during a pandemic. This includes communications to associates and customers.
- Design and develop a personnel database that will be needed to locate and communicate with your key associates and their families. Update regularly. Provide remote access for key personnel needing to make workforce decisions. Inform personnel about communication channels so they know where to obtain information. Redundant systems could be helpful.
- Consider deploying ecommerce or alternative ordering and delivery options.
- Develop essential contacts and relationships with local officials. Understand and document which agencies will be making specific decisions vital to your continued operations.
- Begin working with your Health Plan Administrator to develop emergency health care procedures.

**Summary**

You should deploy or designate a crisis team to review and discuss these key recommendations and reach consensus on which recommendations deserve attention for your company. From this, develop a project plan and assign the necessary resources to make it happen. Should a pandemic strike, it is very clear that this kind of preparation will be essential for your business survival. Historic patterns suggest that absenteeism among associates might be as high as 20% to 30% due to actual illness with another 10% out to care for family members. Individual departments or specific geographic areas could see even higher rates. The magnitude of dealing with this challenge should be readily apparent to everyone in the industry.
Supporting our Consumers

Given the massive media coverage a pandemic would generate, we should anticipate some degree of overreaction and irrational behavior, especially in the first two or three months. It will take some considerable time for consumers to adjust to the new realities of life during a pandemic.

During the initial months we should anticipate a number of consumer behavioral shifts:
- Avoidance of dining out along with shifting to more meals at home, especially where schools might be closed.
- Consolidation of trips to the store by purchasing much larger quantities of products in fewer visits.
- Preference toward non-perishable and prepackaged goods.
- Spike in demand for certain HBC/anti-bacterial products (whether or not they are effective).
- Demand for masks and gloves that can be purchased for personal use.
- Demand to see food handlers wearing masks and gloves.
- Demand to see anti-bacterial wipes in key store locations (whether effective or not).
- Strong interest in online or phone ordering for customer pickup or delivery.
- Strong interest in self-checkout, avoiding cashiers.
- Avoidance of non-essential retail stores.
- An early attempt to stockpile products.
- Strong desire to get accurate information.
- Avoidance of products made outside the United States if that is where the jump to human- transmissible form of the influenza is believed to have occurred.
- Possible demand for expanded country-of-origin information and/or “USA Only” sections throughout the store.

Key Recommendations for Supporting Our Consumers
- Develop a detailed plan that identifies the products that should be carried during the pandemic and those non-essential products that could be scaled back to provide the space needed for demand-spike items.
- Prepare to deliver common sense health recommendations to consumers. Accurate and timely information for local customers can help prevent panic. This would include advice on the importance of hand washing, cough/sneeze hygiene, advice on how to distinguish between the new contagion and common colds or the more traditional annual flu. Monitor FMI’s recommendations on our website as they are continuously updated.
- Prepare to ramp up ecommerce or shop-by-phone where this is feasible. This might involve delivery or might be a click-and-collect model. Where this is not feasible, prepare to communicate with customers the steps you are taking in the store to ensure their safety. If delivery to a home, give consideration to not greeting the person at the door and instead ask them to allow you to exit the property before opening the door.
• Take steps to ensure that any protective steps you decide to implement (masks, gloves, etc.) aren’t perceived by consumers as reflecting a higher degree of risk in your operations versus a competitor slow to react. You will need to communicate any changes clearly to your shoppers and explain that these steps are taken to help protect their health.
• Prepare to ramp up self-checkout where it is available. Customers may wish to minimize contacts with cashiers for some period of time whether rational or not.
• Identify resources in your area that could provide home delivery options as an extension to Internet or phone shopping. Are there foodservice workers who could be out of a job for a period of time who could do this for you?
• Consider the possibility of reducing or modifying store operating hours if staffing becomes difficult.
• Develop a plan to identify foodservice packs of items from your wholesaler or your warehouses that could be moved to retail to meet the need for bulk buying.
• Prepare to educate consumers on why any visible changes you make are appropriate. Provide up-to-date messages for consumers that answer the critical question: “What are you doing to protect me?”
• Explore the potential impact of new people taking on shopping duties who are not familiar with your store layout or procedures (spouses shopping for sick partners, shift to younger shoppers now at home).
• Consider whether it may be necessary to limit purchases of key high-demand products during any initial panic. This would be a very difficult decision for any grocer or wholesaler and it deserves to be thought about well in advance.

Supporting our Associates

In any lethal pandemic, it is a reality that some associates will become ill, perhaps even in significant numbers, and some will die. Others will need to deal with sick family members. In addition to the illness itself, other factors such as school closings will place additional demands and stress on your associates. For unionized companies, your union leaders will need to be educated on the consequences of a pandemic and the changes that you believe will be essential.

Although outbreaks will likely occur over an extended period, there will be inconsistent peaks and valleys (“waves”). For planning purposes, many companies choose to assume that, at times, some departments may need to operate at 50% staffing.

Companies should expect to be particularly hard hit with respect to their part-time and lower-paid positions. For example, it is reasonable to conclude that many two-income households will decide that the risk of exposure for all those currently working outweighs the incremental income. This could hit store operations particularly hard.
Associates facing the natural conflict between the need to earn money and the need to protect themselves and their families will react in a wide variety of ways:

- Some associates could simply not show up.
- Some associates will be highly motivated to remain at work as a way to earn money, protect their families from exposure and serve the company.
- Some associates could want to work even though they exhibit symptoms of the flu.
- Some associates could decline health care for fear of contracting the flu at the doctor’s office.
- Some associates could decline to drive into certain geographies hard hit by the virus or to not perform tasks that are perceived to be higher risk.
- Some associates may demand gloves, masks, etc. for themselves, especially those who staff your stores.

**Key Recommendations for Supporting our Associates**

- Many current employment policies are likely to become instantly obsolete during a pandemic. A thorough review of employment issues and preparation of emergency procedures must be made in advance.
- In advance of any pandemic, companies should ask each department to determine which functions would be critical during a pandemic and which functions would not.
- Identify critical functions that would be at risk if a significant percentage of those associates become ill at the same time. In particular, look for areas in which you are only two-deep or three-deep. Implement appropriate cross-training programs in advance of the pandemic to the extent this is possible for your company.
- Develop a “best practices” plan to minimize the odds of spreading the infectious disease. This could include measures such as minimizing group meetings and communicating via email and voice-only where possible. Provide information on home precautions and home care for ill family members.
- Develop a plan for appropriate personal protective equipment (PPE) that can be used by your associates including training in their use. Determine what should be obtained and how they should be rolled out. PPE is being prioritized to health care at this time, but as supply increases, we expect demand to increase, too.
- Strong reminders should be given to associates not to report for work if they even think they or any family member may be contagious. In the event of a serious local outbreak, some companies are making plans to screen associates when they arrive for high temperatures or signs of excessive coughing or sneezing (although people may be highly contagious for several days before they exhibit symptoms). Any screening procedures should be cleared in advance with your attorneys and Human Resources experts.
- Employee health policies should be re-examined and updated to ensure ill food workers are excluded from working in a food establishment. Allow for flexibility with work conditions in order to encourage employees with symptoms, as well as family members/caregivers with symptoms, to stay at home.
• In advance of a pandemic, identify jobs that will likely face critical shortages (e.g. cashiers, truck drivers) and those jobs that will likely be in surplus (e.g. foodservice workers).
• Develop an emergency plan for reallocating associates to other functions where the need is greatest. Thought must be given to the risk of other organizations attempting to lure away key staff people such as your drivers or your wholesaler’s drivers.
• Develop a plan specific to your own drivers or ask your wholesaler to do this for their own fleet. Since there is already a driver shortage, it is hard to predict how this will play out. It probably makes sense to consider the options (shift drivers to grocery delivery, partner with organizations that will have surplus drivers).
• Develop a plan for communicating with associates during the pandemic both at work and at home. Consider how text messaging options or call centers could simplify this task.
• There will be the strong need to build a personnel database for tracking critical information relating to the infectious disease. During a pandemic, it will be crucial to know which associates are currently sick; which have recovered and may have some degree of immunity; which have lost family members; which have EMT, paramedic, or other health care training; etc.
• Start a dialogue with your health care administrator to develop emergency plans and procedures. This should include careful attention to situations in which it is not possible for associates to get the health care services they need.
• Many aspects of a pandemic will generate significant employment-related costs. This includes direct medical costs, paid sick time, meeting special personnel needs, etc. An examination of all of these costs is appropriate along with discussions about how your organization could sustain them.
• Previous outbreaks point to the need to prepare for associates who may report to work feeling fine but suddenly become severely ill. Shoppers might even collapse in the store. Train personnel as to how they should lend assistance if this occurs, including any policies you may develop on the use of masks, gowns, etc. During prolonged outbreaks, associates who have been ill and recovered may be encouraged to volunteer for assistance since they will already possess some degree of immunity. Some thought might also be given to providing changes of clothes for those who have assisted the suddenly ill.
• Talk with your attorney about the legal ramifications of the steps you plan to take during a pandemic and implement appropriate precautions that may be necessary to minimize your exposure.
• Prepare to make hygiene supplies such as hand sanitizers, tissues, and sufficient waste baskets or special trash receptacles with hands-free lids for disposing of tissues available in key locations.
• For jobs that are likely to be in short supply (cashiers, lift operators, drivers, etc.) examine the opportunity to provide emergency backup. This may be accomplished either through cross-training or partnering with other organizations that have a surplus supply of skilled labor during the outbreak.
• For large organizations, and even for some small ones, develop a plan to shift appropriate
jobs to home offices and the necessary procedures to perform business process in such a distributed fashion. For those jobs that can be adequately performed from home, identify necessary hardware, software, and connectivity requirements to support the plan. This should also consider what investments might need to be made in advance of the pandemic (laptops, mobile devices, etc.).

- If you offer meals to associates, modify cafeteria or break room practices, as appropriate, to minimize the chance of spreading the virus. Follow the advice of agencies like the Centers for Disease Control and Prevention (CDC) on appropriate hygiene practices. The FMI website will provide the necessary links.
- In advance of a pandemic, arrange for 100% direct payroll deposit to the extent possible.
- For those with headquarters staff, most of you assign people in those departments to contiguous office space. Consider the value of moving people around, at least during an emergency, so that a part of a building hard hit by the virus would not expose everyone in a single department at the same time. Consider whether this will require some equipment or files to be propositioned for ease of access.
- As appropriate, have computer-based-training (CBT) readily available to simplify the task of assigning associates to new tasks.
- Develop a plan to staff Human Resources. Many HR functions will be under extreme pressure whether it’s one person in a small company or an entire department in a large one. Incremental resources to handle the work will likely be needed. This plan should include halting all non-essential HR functions.
- Develop a plan for implementing an emergency call center or limited-access website that associates can contact for information and special needs.
- Consider the need to begin familiarizing associates with pandemics before an actual emergency arises. This needs to weigh the value of providing insight into the potential issues against the fear of needlessly alarming associates. Some articles in the company newsletter may be appropriate to let people know you are monitoring the situation and preparing to deal with it should the need ever arise.
- In the event of major fuel shortages caused by the interruption to international trade or the shortage of tanker truck drivers, develop a plan to help associates get to work. Consider whether it might be possible to help associates avoid mass transit.
- Consider the idea of having special “associates only” hours at retail stores to ensure that your staff has access to the necessities. This might be necessary to encourage key associates to continue to work.
- Develop a plan to provide appropriate additional security for associates. For example, drivers and store personnel could be placed at risk if there is panic during a pandemic.
Key Human Resources Recommendations

Based on the numerous employment issues discussed above, it is reasonable to conclude that the Human Resources Department would come under severe strain from the incremental work. Some HR functions can be suspended (example: benefits statements) but the net outcome will undoubtedly be a significantly increased workload.

- Develop an emergency set of procedures that can be used in a crisis. This should include: streamlined hiring policies, short term disability practices, time off policy, emergency personnel assistance policies, medical policies, death-in-family policy, miscellaneous crisis policies and payroll. Review with legal counsel.
- Establish a call center and/or secure communications via text or company intranet for associates.
- Identify sources for supplemental HR resources. Some duties or functions may be allocated internally, for others outside resources may be necessary.
- Address liability and insurance issues for temporary personnel who might be brought in to fill special needs—surplus foodservice workers, for example. Review your total insurance coverage to assess issues that might arise should you need to actually implement your action plans.
Key Retail Store Recommendations

Reactions from consumers and associates will have a strong impact on retail operations. Both groups will place new demands on the retail store.

- Prepare for a run on products consumers will use to stock up for a prolonged stay in their homes. This will also include household cleaning and personal care products. For those stores with pharmacies, prepare for shoppers to stock up on essential medications and supplies, items such as insulin, heart medications, essential prescriptions, respirators, gloves, masks, antibacterial hand soaps, etc.
- Develop plans to deal with consumer demands for your store associates to take special precautions (masks, gloves, cleaning procedures, etc.).
- Identify critical functions and services that would create store vulnerabilities if disrupted. Develop appropriate plans to minimize those risks.
- Develop plans to deal with product and labor shortages. This may include restricting store hours. In some cases, it may be necessary for multi-store operators to consolidate and close some stores.
- Develop emergency plans to minimize unnecessary vendor time on the sales floor.
- Develop emergency policies to minimize unnecessary retail visits from non-store personnel. This would include restricting repair and maintenance of equipment to essential work.
- Revise receiving procedures to minimize contact between drivers and receivers.
- Consider shifting store duties so that more work is performed during non-peak hours to minimize contact between consumers and associates.
- Consider how you could meet a consumer demand for home delivery. Can you partner with other organizations to meet this need? How would you find and recruit foodservice associates temporarily out of a job?
- Develop a cash handling strategy to deal with the potential that your armored security service could be disrupted.
Key Distribution Center and Transportation Recommendations

These are items for those who operate their own distribution centers to consider or for independent grocers to discuss with their wholesalers.

- Coordinate with your buying departments or retail customers to learn about their plans to “bulk up” on core items so that facilities can be secured for emergency storage. It is important that the core items be identified well in advance of any pandemic.
- Develop emergency check-in and receiving procedures to minimize contact between drivers and warehouse personnel. For example, allow drivers to stay in their vehicle to avoid contact.
- Develop emergency store delivery procedures to minimize contact between receivers and drivers.
- Increase security for warehouses and vehicles.
- Develop emergency guidelines for any lumpers you may use to lessen the chance of spreading the virus.
- Develop alternative routing plans that reduce the number of deliveries.
- Develop plans to minimize the potential for a fuel shortage that could occur during an initial panic period.
- Develop backup plans to serve routes should some drivers decline to travel into areas they perceive as high risk.
- Develop cooperative arrangements with other distributors to keep the food supply chain functioning.
- Consider using any excess distribution capacity to help in other emergency areas (for example, medical supplies).
- Since drivers for the delivery of machine parts could be in short supply, or some foreign factories could be shut down, consider appropriate plans to have an adequate inventory of critical parts to keep the fleet and other equipment running.
- Develop relaxed product substitution rules such that products continue to flow to the shelves. These will need to be well communicated and well understood.
- Communicate with FMI store closings or any challenges with logistics so that we can work to help resolve issues.
Key Product Supplier Recommendations

Upstream manufacturers and vendors will certainly be facing the same set of issues faced by grocers. It should be noted that suppliers will face shortages from their suppliers as well. Even obscure shortages, such as packaging material, would negatively impact the suppliers’ ability to provide products. It is also possible that normal terms of trade could be changed with short to no notice. These and other issues are well worth thinking about in advance. Discussions with trading partners should be conducted during Phase 1 or 2 to understand supply chain response plans.

- Identify core items that will be critical to the food supply during any pandemic.
- Develop pandemic trigger points and procedures. When a trigger point is activated, have a ready set of purchase orders for the core items ready for instant release.
- Negotiate as appropriate to attempt to gain reasonable commitments.
- Identify alternatives for core items to the extent possible, and develop a plan to shift demand to these suppliers should it become necessary.
- Develop emergency product substitution rules.
- Recognizing that international and national distribution may be disrupted, perform a geographic analysis to examine ways you could shift to more local or regional supply sources in an emergency.
- Consider a potential for consumer avoidance of products produced in the areas where the human-transmissible form of the disease is thought to have developed or where high levels of illness may be occurring.
- Consider assistance that you might be able to provide to key vendors that are struggling for survival. For example, if demand should plunge for a specific product, how could you help communicate the proper information to the public to calm irrational fears?
- Develop a plan to coordinate backhaul strategies to help address shortages. Consider alternative pickup locations that may be used in the event certain locations are more severely impacted.
**Key Media Recommendations**

- Include an executive who understands the news media on your crisis planning team.
- Prepare a media point person who is well versed with influenza issues. Some companies may have a staff person or department that can do this; others will choose to rely on FMI to fill this role. FMI will be prepared to make statements and answer those questions not specific to individual companies.
- During the pandemic, establish a daily process to stay abreast of recent developments by checking with trusted sources. Several Internet resource sites including FMI have already been identified in this document.
- In communicating with the media, be careful to restrict the content of your statements to fully verified facts. Do not speculate, make off-the-record statements or issue numbers that are not fully verified. Also, be especially careful not to release information about specific individuals until the people named or their families have cleared that information.
- Compile a media list for use in sending out messages efficiently.
- Re-emphasize to all associates the procedures to follow if they are approached by the media. For most of you, this will be instructions to take the name of the reporter followed by an offer to put your designated spokesperson in touch. Everyone should understand that casual, flip, or offhand remarks can lead to devastating consequences for the company.
- After the crisis, thank everyone who helped you through the process.

**Other Considerations**

As extensive as this document may seem, there are many other areas that any operator could identify. For example, the need for additional security in key areas should there be a public panic is obvious. This is not intended to be an exhaustive response blueprint, but it is a good framework for developing your own action plan that can be modified or supplemented as you gain experience with the process.

**Resource list**

- [www.FMI.org/Coronavirus](http://www.FMI.org/Coronavirus)
- [https://www.who.int/health-topics/coronavirus](https://www.who.int/health-topics/coronavirus)