

FOOD SECURITY IN A PANDEMIC





PREPAREDNESS

This tool will help you to:

- Provide a thorough introduction to staff and volunteers about the key ways in which a pandemic may cause severe hunger and nutrition problems in your municipality
- Understand what local leaders can do to reduce potential food security problems during a pandemic

Who will implement this tool:

- The mayor
- Members of the *municipal leadership team*, emergency response team, disaster management team, and communications support team
- Lead staff from relevant sectors and agencies of your municipality

This tool will introduce you to the basic elements of food security and ways in which an influenza pandemic may impact it. You will also find measures that can be taken to prevent, alleviate, and respond to many of a pandemic's negative consequences on food security.

WHAT IS FOOD SECURITY?

Food security in a community depends on three main pillars:

- food availability
- food access
- food utilization

Food availability means that enough food is physically present for the entire population. It is in markets and shops, is grown on farms or home gardens, or has arrived as the result of food aid. **Food security** in a community exists when all people at all times have both physical and economic access to sufficient food to meet their dietary needs for productive and healthy lives.

Food access means that individuals can obtain available food. Households may access food in many ways: growing, buying, and bartering; or through gifts, welfare programs, or food aid. Food access is ensured when households have enough resources, like land, money, or social connections, to obtain nutritious foods in adequate amounts.

Food utilization refers to the way people's bodies are able to use the food they eat. Making the best use of foods depends on proper food storage and processing, overall nutrition and health status, the availability of clean drinking water, and adequate health and sanitation services.

WHAT ARE THE FIRST SIGNS THAT A PANDEMIC HAS AFFECTED FOOD SECURITY?

The global health impact of an influenza pandemic may affect workforces, transportation systems, and supply chains. The impact of the virus in other areas of the world may result in your community experiencing a food crisis even before the influenza virus causes severe health problems in your municipality. Some of the first things that you will notice that indicate a pandemic could cause a food security problem are:

- Industries that rely on import and export are struggling.
- Food supplies are hard to get locally.
- Economic activities are disrupted.

DID YOU KNOW: The first sign that a community may experience a food security crisis due to pandemic influenza may NOT be an outbreak of disease.

For more information, see Tool 1, *Priority Actions to Lead Your Municipality Through a Pandemic* and Tool 2, *Presentation on the Threat of a Severe Influenza Pandemic*.

WHO MIGHT BE MOST AT RISK FOR FOOD **SECURITY PROBLEMS?**

Some groups will be more at risk than others for the food security impact of a pandemic. The most at-risk populations in most emergency situations are those that are already struggling with hunger, health, and poverty. These populations will be at great risk during a severe pandemic. In addition to these groups, many other households are vulnerable to the impact of a severe pandemic because of the way it may affect economic and social systems. Any household that has not taken necessary actions to prepare for a severe pandemic will face greater difficulties in coping with the impacts of spreading disease.

Groups typically at risk in all emergencies	Additional groups at risk in a pandemic
 People with limited or irregular income People who cannot build up emergency reserves of money or food People in poor health (especially malnutrition, chronic disease, and compromised immune systems) Those living with stigma (people living with HIV, prisoners and their families, the mentally ill, the disabled) The isolated (living in a remote location or having no social network) The homeless or internally displaced The elderly Those with little or no transportation Orphans and vulnerable children 	 Those who rely on markets for the majority of food purchases (experts believe that market systems may be severely impacted) People without knowledge about how to prepare for a pandemic Those employed in occupations that may be severely impacted (tourism, restaurants, taxi drivers, etc.) People who rely on public transportation to get to job People who migrate for income Caregivers

For more information, see Tool 8, Classification of Food Security Risk Locations and Tool 9, Identification of People Most at Risk of Food Insecurity.

THE SUCCESS OF MUNICIPAL EFFORTS TO **ENSURE FOOD SECURITY COULD HINGE ON THREE IMPORTANT FACTORS:**

- The degree to which the public is informed about the necessity of household and community preparedness
- The capacity of public and private agencies to organize and provide basic services and needed assistance under stressful circumstances
- The degree to which mass confusion, civil disorder, and conflicts over resources disrupt or complicate response efforts

WHY SHOULD MUNICIPAL AUTHORITIES TAKE ACTIONS TO PROTECT FOOD SECURITY **RIGHT NOW?**

Municipalities can help reduce possible food emergencies by paying close attention to what is happening at the local level in terms of food security. Building community resilience is key to surviving disasters. The way to build resilience is to communicate, plan, prepare, and invest time and money long before a disaster is present in your municipality. Your immediate actions can help reduce the negative impact that a pandemic, or other emergency, may have on the food security of your municipality because:

- By the time you notice food shortages it may be too late to produce more food locally or to expect that national governments or international agencies can get food to you in time.
- Transporting food to your communities will be difficult if transportation systems break down.
- Even if you can get food to your communities, purchasing and stockpiling food to get through a 6-12 week pandemic wave will become very expensive if food prices rise as expected.

WHAT DOES THE MUNICIPAL LEADERSHIP **TEAM NEED TO DO?**

In many countries food security is handled at the national level. However, during a severe pandemic, national governments may be overwhelmed and may be unable to provide timely assistance to every municipality. The most important thing to do is start planning for your municipality now, in the likely event that your municipality will have to become food self-sufficient for a period of time.

Municipal leaders will want to take the necessary steps to:

- Work with national governments and private sector providers to secure essential food stocks (food availability) during successive periods (waves) of 6-12 weeks when normal supplies of food may be disrupted.
- Ensure that the population can obtain the food they need (*food access*), especially the most vulnerable individuals (infants, young children and women, elderly people, homeless people, people living with HIV/AIDS and other chronic illness, disabled people, and homebound individuals).
- Educate the public about the necessity of increased hygiene, nutrition, and safe food and water storage. Work with national and regional governments to reduce malnutrition and other debilitating diseases so that people's bodies can make the best use of the foods they eat (food utilization).

HOW CAN MUNICIPAL LEADERSHIP PROTECT **FOOD SECURITY?**

A wide range of actions can support and protect food security in a pandemic. Most of these responses depend on early planning, which is why *preparedness* is so important. After considering a range of responses, the municipal leadership team should determine which actions best suit the local context. You may find that many of these responses are also appropriate after the pandemic, during the recovery period.

The charts on the following pages describe conditions in a municipality that could impact food availability, food access, and food utilization. Each chart provides a menu of potential responses to consider based on the conditions of your municipality. The chart also suggests the stage of the pandemic where these actions will be most helpful.

Tools which offer more guidance on how to put these actions into place are listed in the last box of each of the three charts (availability, access, and utilization).

REMEMBER!

Effective public messages about local food availability will be critical during a pandemic to provide credibility to "do not flee" messages. For more information, see Tool 12, Fundamentals of Communication During Crises and Emergencies.

The overall challenge for local leaders is to guarantee enough nutritious food for each community as well as fair distribution of that food for several months at a time. This means that after each wave, food stocks need to be replenished before the next wave arrives.

Conditions that Could Cause Food Access Problems	Actions to Reduce Potential Food Access Problems	Timing of Support
	Accurately identify those most at risk	Before pandemic Early pandemic
 Food prices may drastically increase and make many food items unaffordable to those on limited incomes Shopkeeper bias during times of limited resources may result in poor bias truesd succes form and succes because of their succes 	 Encourage cooperative sharing/barter of food and resources (while respecting social distancing measures if in place) 	Before pandemic Early pandemic During pandemic
 people being united away notifying real because of their face, ethnicity, religion, political beliefs, or disability Households may have less money available to purchase food due to: reduced income due to illness, care giving, or job loss more money must be used to pay high medical fees or funeral expenses 	 Organize food voucher programs with local shopkeepers that allow at-risk households to obtain food in exchange for a voucher Organize fair price shops that sell basic items at controlled prices Provide food in exchange for assisting in key response areas during a pandemic 	Before pandemic Early pandemic During pandemic After pandemic
	 Distribute food to the most vulnerable residents in a way that minimizes contact between people when social distancing measures are in place 	During pandemic
People who live alone may become too ill to physically get to a market or food distribution site	Deliver food and water to isolated households and individuals	During pandemic
 Those who are able to afford extra food may hoard more than they need 	 Initiate widespread public campaigns about the devastating consequences that hoarding can have on at-risk populations—specifically targeted at those who can afford to buy extra, and merchants and traders who may speculate Determine whether to place purchase limitations on specific products likely to be hoarded 	Before pandemic Early pandemic During pandemic
Merchants and traders seeking higher profits may withhold available food until prices spike	 Implement a price freeze on staple and nutritious food items that form important parts of local diets 	During pandemic
Due to economic disruptions, local shopkeepers may stop offering credit to customers	 Facilitate low-cost credit arrangements with local shopkeepers, medical facilities, and those who provide funeral services Negotiate short-term debt relief programs (to preserve assets and cash reserves) Determine whether cash transfer programs are available through regional or central government. If so, provide at-risk households with links to these programs 	Before pandemic Early pandemic During pandemic After pandemic
Producers/distributors may not have the fuel or other means to get available harvests and livestock to central locations	 Provide transportation support that allows producers to get products to market or community food warehouses 	During pandemic After pandemic
These are just a few examples. What else might work? Fo	These are just a few examples. What else might work? For more information, see Tool 9, Identification of People Most at Risk of Food Insecurity;	irity;

POTENTIAL FOOD SECURITY ISSUES AND ACTIONS DURING A PANDEMIC

Conditions that Could Cause Food Availability Broblems	Antions to Doduce Detential Food Availability Droblems	Timing
		ot support
 Restrictions on transportation and disruptions in the markets may quickly create shortage problems 	 Educate the public about the critical need to prepare for food shortages at the household level: Promote stockpiling, home production, canning, and food preservation 	Before pandemic Early pandemic
 Many communities (especially urban centers) rely on markets, with limited home food production and/or processing Local production/harvests are insufficient to begin with People are not able to work because they are sick, which leads to less local food production and smaller harvests 	 Increase household and community food production: Distribute seeds, tools, and fertilizers for small rural farms and urban gardens Provide local agricultural and livestock extension (technical assistance) services 	Before pandemic Early pandemic After pandemic
	 Transport and stockpile basic, high-energy, and high-nutrient foods for the community: Contact central government representatives to find out about availability and location of national food stocks for emergencies and prepositioned donations from national and international food aid agencies Purchase extra stock from local and regional food suppliers and growers Request donations from local retailers 	Before pandemic Early pandemic During pandemic After pandemic
 Acquired food spoils due to improper storage 	 Take an inventory of public and private storage facilities that could be used for emergency food stockpiling 	Before pandemic
	 Restrict the export of locally produced food crops that are necessary to 	During pandemic

Tool 10, Household Food Security Preparedness ē

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Conditions that Could Cause Food Utilization Problems	Actions to Reduce Potential Food Utilization Problems	Timing of Support
 Lack of knowledge about hygiene, nutrition, sanitation, and proper child feeding practices Contaminated water may increase intestinal illnesses that will contribute to malnutrition and dehydration; these illnesses will make it more difficult for people to fight off the pandemic virus 	 Educate households about the nutritional food requirements of short- or medium-term emergencies like the pandemic Educate households about water treatment and storage Educate households about the need for increased hygiene 	Before pandemic Early pandemic During pandemic After pandemic
 Power outages could impact safe food storage causing food to spoil Service outages could affect the ability to properly cook food 	Distribute containers for proper water storage	Before pandemic Early pandemic During pandemic
 People may resort to using unsafe water sources if water shortages occur 	 Implement contingency plan to maintain essential services such as water, power, and basic sanitation during a severe pandemic 	Early pandemic During pandemic
	Distribute vitamin supplements	Before pandemic Early pandemic During pandemic After pandemic
 Lack of food variety may prevent people from consuming essential micronutrients 	 Encourage households to grow fruits and vegetables to provide essential micronutrients Assure that municipality-acquired foods for community stockpiles will meet the nutritional energy needs of your populations when they are combined into food baskets for distribution 	Before pandemic Early pandemic During pandemic After pandemic
• Widespread illness: malnutrition, HIV, and other debilitating diseases	 Work with national and regional governments to reduce malnutrition and other debilitating diseases so that people's bodies can make the best use of the foods they eat 	Before pandemic After pandemic
These are just a few examples. What else might work? For more info Food During an Influenza Pandemic; and Tool 10, Household Food Security Preparedness.	These are just a few examples. What else might work? For more information, see Tool 16, Maintenance of Essential Services; Tool 11, Distribution of Emergency Food During an Influenza Pandemic; and Tool 10, Household Food Security Preparedness.	bution of Emergency

FOOD SECURITY IS A MULTISECTORAL CHALLENGE

Food insecurity during an influenza pandemic is not a threat that stands separate from the sectors of health, family welfare, commerce, or governance and public services. Now that you have explored how a severe pandemic may impact each pillar of food security, it is time to examine why the protection of food security must be integrated into all sectors. Key partners may include, but are not limited to, the following:

- Agricultural producers and processors
- Commerce and industry employers
- Labor and farmer associations
- Humanitarian and development nongovernmental organizations (NGOs)
- National emergency management agencies
- Public works and water agencies
- Community leaders and teachers
- Food wholesalers and retail markets
- Transportation companies/associations
- Community-based and religious organizations
- Health centers and hospitals
- Public security agencies

The chart on the following page will help the municipal leadership team understand how the potential problems that a municipality may face in a pandemic are interconnected. It offers some main points to consider as the team begins to prepare for and meet the challenges of a pandemic. It also offers a menu of potential responses to consider based on the conditions in the municipality.

Following the comprehensive one-page chart are expanded sector-specific charts that explain what might happen if a municipality does not prepare for a severe pandemic, and actions that each sector can take to protect food security. Local geography, demographics, economic and social structures, as well as the severity of the virus in the region will determine the specific preparation and response actions most appropriate for each community.





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	Potential Events What can happen if the pandemic arrives in full force to the municipality	Consequences What might happen if local authorities do not prepare before the pandemic virus arrives	Preparedness What you can do before the pandemic virus arrives to reduce death and suffering	Responses Actions that you can take to lessen the impact once the pandemic virus has arrived in your municipality
			Stay Informed	Continuously Monitor
۲	Large numbers of sick and dying people	Healthcare facilities overwhelmed	Create pandemic continuity of operations plan for health sector	Implement measures to limit the spread of the pandemic virus
	High levels of grief	due to death and illness	Assess the expected health impact	Encourage and support home- based healthcare for those able to
	High rates of work absenteeism in all sectors	Dehydration due to pandemic illness and/or water shortages	Training for home- and community-	be cared for at home
	A need to provide most healthcare in homes or in the community	Increased non-pandemic deaths due to compromised healthcare service delivery, shortages of	based care Continue health services for life- saving non-pandemic care	Encourage community-based healthcare for sicker persons from whom facility-based care is not available or for whom home care is
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	Potential Events What can happen if the pandemic arrives in full force to the municipality	Consequences What might happen if local authorities do not prepare before the pandemic virus arrives	Preparedness What you can do before the pandemic virus arrives to reduce death and suffering	Responses Actions that you can take to lessen the impact once the pandemic virus has arrived in your municipality
Sector			Stay Informed	Continuously Monitor
A Health and	Large numbers of sick and dying people	Increased demand on clinic and hospital services	Develop municipal health sector plans Medical supply stockpiling	Implement measures to limit the spread of the pandemic virus
Medical Services	High levels of grief High rates of work	Shortages of medications and supplies Disruptions in essential services	Develop plan to prioritize care	Encourage and support home- based healthcare for those able to be cared for at home
	absenteeism in all sectors	resulting in diminished sanitation and shortages of clean water and food	Provide training in home and community-based healthcare	Encourage community-based healthcare for sicker persons
Ð	Topponer family disability			Dispitize who gets food transform
Family			of food insecurity	
Welfare and Food	food production, cash earned, childcare,	Less cash available to buy essentials	Acquire community food stockpiles for later distribution	distribution centers
Jecuity	homemaking, and educational activities	Negative coping strategies used by	Increase household food stockpiling,	Deliver food to isolated households
		Social disintegration	יר התהרוהו, זי בוכו אשוהון או	using social distance measures
C	Restrictions on movements of neonle	Disruptions in food delivery (import,	Assess all resources	Implement social distancing
Commerce, Trade,	goods, and services		Plan to address gaps	Allocate scarce resources
and Travel		households and businesses	Create business continuity plans	Create alternate employment schemes
				Organize barter and fair trade shops
D	Strain on public services	Rumors, misinformation, panic	Review national food security plans	Keep government running
Governance		Conflicts over public resources		Implement risk/crisis communication
Services				
			Develop information and communication systems	

Make direct food transfers to medical facilities	Conduct ongoing observation, monitoring, and treatment of child malnutrition	Provide psychosocial support and grief counseling			
Make sure foods acquired for emergency distribution meet nutritional energy needs	Educate households about proper water treatment and storage and the need for increased hygiene	Provide training in mental health and grief counseling	Negotiate low-cost credit for medical and funeral expenses		
Increased medical and funeral expenses	High levels of anxiety and uncertainty				
ervices	edical S	4 pue 4	Healt		

KE ACTION	Responses Actions that you can take to lessen the impact once the pandemic virus has arrived in your municipality	Continuously Monitor	Enforce social distancing measures Set up fair trade and barter shops Develop alternate employment plans	Restrict export of locally produced food crops that are necessary to feed the population of the municipality Provide transportation support that allows producers to get products to markets or community stockpiles Mandate a price freeze on staple and nutritious food items that form important parts of local diets Encourage businesses and clients to use the Internet and telephone for transactions
NG AN INFLUENZA PANDEMIC – AN HAPPEN, BE PREPARED, AND TAKE ACTION	Preparedness What you can do before the pandemic virus arrives to reduce death and suffering	Stay Informed	Assess all resources and plan how you will address gaps Determine the status of supply chains for food, medical supplies, fuel, and other essential goods	Organize and initiate local purchases of food stocks and essential goods Identify temporary employment opportunities in key sectors and prioritize public works projects Develop a continuity of operations (COOP) plan
20	Consequences What might happen if local authorities do not prepare before the pandemic virus arrives		Market closures Hoarding of food, fuel, and other basic necessities Merchant and trader speculation	Food spoilage in fields due to disrupted transportation systems Large quantities of refrigerated foods spoil due to power outages Economic impacts on households and businesses such as inflation, rising unemployment, loss of land and leases, resulting in tenants that have nowhere to live
SURVI UNDERSTAND WHAT	Potential Events What can happen if the pandemic arrives in full force to the municipality		Restrictions on movements of people, goods, and services Limitations on social gathering and travel that affects schools, religious groups, public meetings,	family visitation Workforce absenteeism leads to breakdown of commerce and trade that affects food, energy, business inputs and sales, banking, and medical supplies
			υ	Commerce, Trade, and Travel

SURVIVING AN INFLUENZA PANDEMIC -UNDERSTAND WHAT CAN HAPPEN, BE PREPARED, AND **TAKE ACTION**

	Decreased personal and business transactions	Decreased household food production, cash earned, childcare, homemaking, and educational activities Decreased participation in social and political activities	Potential Events What can happen if the pandemic arrives in full force to the municipality
	 coping strategies to obtain food or cash (e.g. sale of productive assets, hoarding theft) Foreclosure on debts and loans Social disintegration collapse of social relationships emerging pockets of famine mass migration 	Less food produced in rural areas Less food available to eat Less cash available to buy essentials Households resort to negative	Consequences What might happen if local authorities do not prepare before the pandemic virus arrives
Acquire community food stockpiles for later distribution Construct community and household food storage facilities	Provide agricultural extension services Hold community meetings to plan food sharing Encourage households to save a portion of their wages Take an inventory of available food and crops in the municipality	Identify households and regions most at risk of food insecurity Encourage households to increase food production, preservation, and stockpiling	Preparedness What you can do before the pandemic virus arrives to reduce death and suffering Stay Informed
	Provide home food delivery to isolated or ill households Negotiate debt relief and suspensions on foreclosures	Distribute food rations Distribute food rations to at- risk households using small decentralized drop-off points Encourage barter among households using social distancing measures	Responses Actions that you can take to lessen the impact once the pandemic virus has arrived in your municipality Continuously Monitor

Family Welfare and Food Security

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Governance and Public Services		
sanitation, electricity, natural gas, transportation Loss of revenues from reduced collection of fees and taxes	Strain on public services Reduced capacity to provide services such as police, justice, communications, water and	Potential Events What can happen if the pandemic arrives in full force to the municipality
and rights People are excluded from obtaining necessary survival items due to bias or stigma Civil disorder, including riots over unsatisfied demands, rise in insurgent group activities, vandalism, armed attacks	Rumors, misinformation, panic Conflicts over public resources Reduction of basic privileges	Consequences What might happen if local authorities do not prepare before the pandemic virus arrives
 Develop COOP plans Identify services that must be continued Train and organize volunteer staff to keep these services running in the event that regular staff are ill Develop information mechanisms Develop public awareness programs Develop measures to ensure equal access to food and services Conduct trainings for conflict resolution services Establish procedures for community input and government transparency 	Review national food security plans and available resources Strengthen local expertise in food security	Preparedness What you can do before the pandemic virus arrives to reduce death and suffering Stay Informed
Continuously share updated information about the municipality's food supply with the population Use volunteer staff to make sure that basic goods and services are provided Provide security services to community food warehouses and distribution centers, and to the transportation services that supply them Provide conflict resolution services using community advocates	Keep government running Implement effective crisis and emergency risk communication to prevent public panic and conflict	Responses Actions that you can take to lessen the impact once the pandemic virus has arrived in your municipality Continuously Monitor

SOURCES

UNDERSTAND

SURVIVING WHAT CAN

AN INFLUENZA PANDEMIC -HAPPEN, BE PREPARED, AND

TAKE ACTION

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LEADERSHIP DURING A PANDEMIC: WHAT YOUR MUNICIPALITY CAN DO