INTRODUCTION TO THE TOOLKIT

IMAGINE...

You are the mayor of a municipality that started seeing influenza pandemic cases a few weeks ago. Each day it has gotten worse, and now the local health facility is completely overrun with patients. People who are sneezing and coughing are waiting for hours to be seen, while patients with other diseases are not only worried that they are being exposed to the illness, but also that they are not getting the care they need.

The Ministry of Commerce reports that due to the impact of the pandemic in other parts of the world, imports have declined by 20%. Crowds of people are out in the streets, buying up food and water and other essentials. A supermarket owner has posted security outside the store and locked the door with a chain. People are now very worried about how to survive the pandemic—and if they survive, running out of food and money.

Attendance in church has increased dramatically. Some fights have broken out, and there is a palpable sense of fear in the air. People are packing up to flee the area, and those with the transportation and other resources to leave have boarded up their homes and businesses and escaped to the countryside in hopes of isolating themselves from the pandemic.

The health director is recommending measures to limit the spread of the disease. She wants to close schools, some local businesses, and churches, and limit public gatherings and public transport in order to prevent deaths. This decision will affect the livelihoods of many in the municipality. Your police chief reports many officers are out sick, despite requests to provide extra security for health facilities, pharmacies, grocery stores, and gasoline stations. He is asking for help from the uniformed services. As if you didn't have enough to worry about, the local media is outside your door and is demanding answers.

What would you do?

It should be clear from this example that the impact of a severe pandemic goes far beyond an impact on health. It will take the effort of all sectors, working together in a coordinated way, to prepare, respond, and recover from this disaster. This toolkit has been designed to assist mayors, their municipal leadership teams, and other local leaders to do just that.

WHAT IS AN INFLUENZA PANDEMIC?

A pandemic influenza virus is strictly a human disease. People will not catch a pandemic virus from birds, swine, or other animals.

An influenza pandemic is an epidemic of influenza that occurs globally. Pandemics occur when a new influenza virus emerges and spreads as easily as seasonal flu does, through coughing and sneezing. A pandemic influenza virus causes more serious disease than the normal flu because it is a new virus against which humans have no immunity.

Severe influenza pandemics are rare but recurring events. In the previous century, three severe pandemics occurred: Spanish influenza in 1918, Asian influenza in 1957, and Hong Kong influenza in 1968. In 1918, the pandemic killed an estimated 40 to 50 million people in the world; the other pandemics were milder, with an estimated two million deaths in 1957, and one million in 1968.

On June 11, 2009, the World Health Organization (WHO) raised the level of pandemic alert from Phase 5 to Phase 6—describing the H1N1 influenza virus as a full-blown pandemic. While the impact of this virus has been relatively mild to date, with low mortality rates and limited economic impact, there is concern that the virus may return with greater virulence in the near future.

A note about severity

Once a pandemic starts, it cannot be kept out of a community because people spread an illness before they know they have it. Many deaths will be due to illnesses not related to the pandemic and from starvation or acts of violence. Many of these deaths are preventable if you work ahead of time to educate yourself and your community.

The term influenza pandemic does not, in and of itself, speak to how severe the effect will be. It primarily refers to the geographic reach, and not severity, of an illness. Pandemics can range from mild to severe, with many factors determining the severity. One factor is the illness itself—what proportion of people that get the illness die from it. However, there are a number of other factors that also determine how severe a pandemic will be, some of which also explain variability in severity from one area to another. For example, the quality of health services influences severity. According to WHO, "the same virus that causes only mild symptoms in countries with strong health systems can be devastating in other countries where health systems are weak; supplies of medicines, including antibiotics, are limited or frequently interrupted; and hospitals are crowded, poorly equipped, and under-staffed."[1]

HOW WILL A SEVERE INFLUENZA PANDEMIC AFFECT YOUR MUNICIPALITY?

Some say that all disasters are local, and this is especially true in a pandemic because national governments, aid agencies, and neighboring municipalities will likely be overwhelmed by the pandemic and unable to provide you with help. *During a pandemic, each municipality will need to be prepared to stand on its own.*

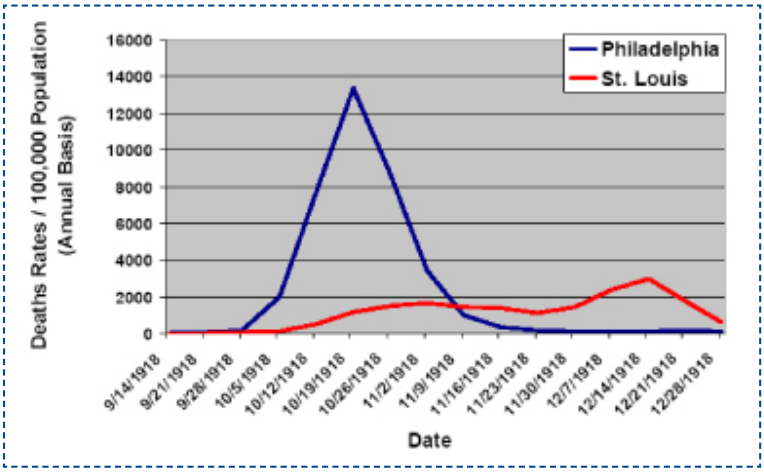
Unlike most disasters, which tend to happen as a single event that ends within a day or so (such as a hurricane or an earthquake), a pandemic may occur in a series of waves, each one lasting approximately 6 to 12 weeks. The very worst week of the first wave is likely to occur around the fourth or fifth week after the pandemic starts in your area.

It is difficult to predict the impact of each subsequent wave. However, because of changes in the virus itself or the additional strain that each successive wave places on a municipality's resources, each wave has the potential to be more lethal than the previous one.

[1] World Health Organization. May, 2009. *Assessing the severity of an influenza pandemic*. http://www.who.int/wer/2009/wer8422.pdf.

Below is a graph of death rates in two U.S. cities during the 1918 pandemic. Worldwide, this pandemic resulted in an estimated 50 million additional deaths compared to seasonal influenza. Note that St. Louis experienced considerably fewer deaths than Philadelphia. The primary reason for the different death rates in these two cities was their response to the pandemic. Which city will your municipality most resemble in a pandemic? That is your challenge.

1918 DEATH RATES: PHILADELPHIA Vs. ST. LOUIS



Collins SD, Frost WH, Gover M, Sydenstricker: *Mortality from influenza and pneumonia in the 50 largest cities in the United States.* First Edition Washington: U.S. Government Printing Office. 1930.

In many respects, how a municipality prepares for, responds to, and recovers from a pandemic or any other large-scale disaster such as an earthquake or hurricane is very similar; however, the box below demonstrates why a pandemic requires special attention.

THE DIFFERENCE BETWEEN A PANDEMIC AND OTHER DISASTERS

PANDEMIC	OTHER QUICK-ONSET DISASTERS
The shock lasts 6 to 12 weeks.	The actual event is of short duration.
It takes place WORLDWIDE.	It usually takes place in a specific area of the country or in a specific area of the world.
Help may not be available from others.	Neighbors, aid agencies, and other countries are available to help.
It involves a contagious disease.	It is usually a natural or man-made disaster, such as a hurricane, earthquake, or bombing.
To reduce the transmission of the disease, people SHOULD NOT be allowed to gather or to seek public shelter.	A municipality can provide emergency public shelter and allow people to gather.

THE ROLE YOU WILL PLAY IN A PANDEMIC

A successful pandemic response requires a leader—or leadership team—trusted by the people of the municipality, who knows how to minimize deaths in this complex disaster, and has the authority to do it.

As the mayor or municipal leader you are in a position to determine what the impact will be on your municipality.

After the next pandemic, we will look back and understand which municipalities were affected the most and which suffered least. Most likely, the differences between the most and least affected municipalities will be related to what each did to prepare before the pandemic, how they responded during the pandemic, and how they helped their municipalities get back to normal following a severe pandemic. As was the case in St. Louis and Philadelphia in 1918, once a severe pandemic starts, the difference in impact at the local level will largely be a direct result of local preparedness and response, and NOT related to actions taken, or not taken, by the national government.

You may well be one of the heroes of the next pandemic, having helped your municipality to emerge with fewer deaths and with less economic impact, and to avoid social collapse. Protecting the people who live within your municipality will be primarily up to you and will require strong leadership during a catastrophic time.

TOOLKIT BASICS

PREPAREDNESS = Tools to be used pre-pandemic

RESPONSE = Tools to be used during a pandemic

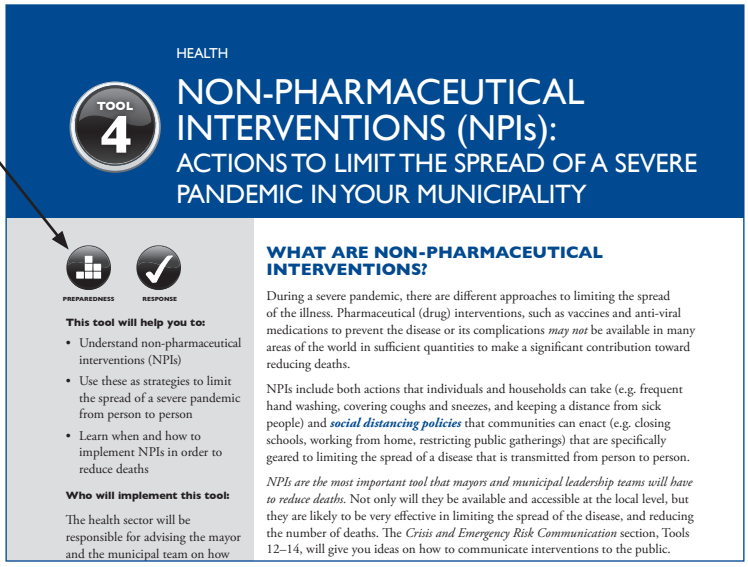
RECOVERY = Tools to be used post-pandemic

The tools that make up this toolkit were developed by a number of experts and organizations working at the forefront of disaster management, emergency preparedness, and pandemic influenza planning. Some of these experts and organizations have helped nations prepare, respond to, and recover from disasters. Others have worked directly in the field with municipalities like those for which this toolkit has been developed.

This toolkit consists of 19 tools or modules that provide guidance for pandemic preparedness and response. While the tools contain guidance that pertains to numerous sectors in your municipality, they are categorized into four key areas: Health, Food Security and Livelihoods, Crisis and Emergency Risk Communications, and Disaster Management.

Several tools specifically offer guidance for situations that you may face during a severe pandemic, but many are also useful in a mild or moderate pandemic.

Some of the tools are meant to be used during a specific stage of a pandemic and some will be used in multiple stages. For example, a tool may help you prepare in pre- and early pandemic stages, it may help you respond during the pandemic, and/or it may help you facilitate the recovery of your community after the pandemic is over. To help you determine at a glance the stage(s) of a pandemic for which each tool can be used, there are symbols that look like this on the first page of each tool. Directly below these symbols are brief descriptions of what the tool will help you to accomplish as well as who might use the tool.


HEALTH

TOOL 4

NON-PHARMACEUTICAL INTERVENTIONS (NPIs): ACTIONS TO LIMIT THE SPREAD OF A SEVERE PANDEMIC IN YOUR MUNICIPALITY

PREPAREDNESS RESPONSE

This tool will help you to:

- Understand non-pharmaceutical interventions (NPIs)
- Use these as strategies to limit the spread of a severe pandemic from person to person
- Learn when and how to implement NPIs in order to reduce deaths

Who will implement this tool:

The health sector will be responsible for advising the mayor and the municipal team on how

WHAT ARE NON-PHARMACEUTICAL INTERVENTIONS?

During a severe pandemic, there are different approaches to limiting the spread of the illness. Pharmaceutical (drug) interventions, such as vaccines and anti-viral medications to prevent the disease or its complications *may not* be available in many areas of the world in sufficient quantities to make a significant contribution toward reducing deaths.

NPIs include both actions that individuals and households can take (e.g. frequent hand washing, covering coughs and sneezes, and keeping a distance from sick people) and ***social distancing policies*** that communities can enact (e.g. closing schools, working from home, restricting public gatherings) that are specifically geared to limiting the spread of a disease that is transmitted from person to person.

NPIs are the most important tool that mayors and municipal leadership teams will have to reduce deaths. Not only will they be available and accessible at the local level, but they are likely to be very effective in limiting the spread of the disease, and reducing the number of deaths. The *Crisis and Emergency Risk Communication* section, Tools 12–14, will give you ideas on how to communicate interventions to the public.

In addition to these identifying symbols, the

matrix at the end of this introduction offers an overview of key tools you may want to reference quickly during a pandemic. Under each of the main actions or interventions listed across the top of the matrix, one or more of the tools you should first look to for guidance in that area is checked. This is not a comprehensive index of all the relevant information contained in the tools, but may help you find the information you need more efficiently.

Some of the tools will be used individually; others complement each other. As you read, you will come across references to other tools that offer additional guidance for decisionmaking or implementation of pandemic preparedness and response activities.

At times, you will come across words in blue type. These words may not be familiar to everyone who reads the tools. Their definitions are included in the glossary at the end of the toolkit.

WHO WILL IMPLEMENT THESE TOOLS?

Each tool has a box on the left side of the page that tells you who will be most likely to use this tool. In most tools you will see the term ***municipal leadership team*** in this box. We use this term to refer to the personnel responsible for the regular, daily functioning of a municipality. Typically, this team will be made up of the mayor or other designated municipal leader, and his or her immediate support staff. If you already have a team in place that goes by a different title, perhaps disaster management team, rapid response team, or emergency response team, there is no reason to form a new team—use what works!

In smaller municipalities, the leadership team may respond directly to the pandemic. In larger cities, the team may provide overall leadership while other groups implement the actual response. This decision should be made at the municipal level, as it will depend on the municipality and its resources. To help you determine who might help the municipal leadership team implement the various activities, tools often list relevant sectors, staff members, and community organizations.

WHERE TO BEGIN

As a municipal leader, be sure that you are most familiar with Tool 1, *Priority Actions to Lead Your Municipality through a Pandemic*. You should also familiarize yourself with Tool 2, *Presentation on the Threat of Severe Influenza Pandemic*; Tool 7, *Food Security in a Pandemic*; Tool 15, *Disaster Management in a Pandemic*; Tool 16, *Maintenance of Essential Services*, and Tool 12, *Fundamentals of Communication During Crises and Emergencies*. But in most cases, the tools will be used by your municipal leadership team. Your role, then, will be to delegate responsibility for these actions as appropriate.

In addition to the tools that will help you achieve pandemic preparedness and response goals, the back of this toolkit contains resources and background information to help you gain insight into the various challenges a pandemic will present.