

**Natural Hazards Observer**  
**Flu Pandemic—A Northwest Perspective**  
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Influenza pandemics are naturally occurring events that impact our world on a recurring basis. Flu pandemics have occurred three times in the last century, in 1918, 1958 and 1967. The 1918 pandemic was the most severe disease outbreak in the history of the world with an estimated 20-40 million people dying of the disease world-wide. The question we should be asking is not *if* there will be another pandemic, but rather *when* the next pandemic will occur and what the lethality will be.

Our collective experience comes from a Northwest perspective. King County is the 12<sup>th</sup> largest county by population in the nation, with Seattle being the largest of 39 cities. The county has a complex governance setting, with at total of 168 government agencies within the geographic county. Our hazards range from multiple earthquake faults, volcanic eruption from Mt. Rainier, terrorism, flooding, avalanche, and the list goes on. Despite this significant list of hazards, the impact of a flu pandemic tops the list of catastrophic events that we must be prepared to mitigate, prepare for, respond to and recover from. Flu pandemics are low frequency events that have the capability of being extreme impact disasters.

There are significant challenges that are either unique or accentuated during a pandemic. Some of these include:

- The impact of a pandemic is going to be national and world wide. Events will impact jurisdictions almost simultaneously. This means that there can be no national mobilization of resources to come and help the impacted jurisdiction. Everyone will be dealing with the event with only the resources that they have locally available.
- Local mutual aid resources will also be severely reduced or non-existent due to the significant impacts on each and every jurisdiction.
- It is estimated that 35-40% of the workforce will be absent at any one time. This will be due to illness, at home caring for ill family members, or perhaps some fear of coming to work due to the contagious nature of the disease. Health care workers could have an even higher rate of

absenteeism than that of the general populace. The overall fatality rate could be between 2-3%.

- A flu pandemic may come in successive waves, each lasting up to six weeks. These are long duration events that will occur as noted above during time periods of decrease personnel and other resources.
- Since the viruses that cause pandemics are new, the entire world population is susceptible to illness - everyone is going to be a victim. Typically disasters consist of those impacted by the event and the first responders coming to their aid. In the case of a pandemic the people responding to the event will do so knowing that they are not only placing themselves at risk, but that there is the potential to infect their family's due to their response activities.

King County is often cited along with New York City as being the two local jurisdictions in the nation that have been investing wisely in pandemic preparedness. The reason for our level of preparedness is based on several key actions:

1. Key public and private sector leaders' early recognition of the hazard and the need to aggressively prepare.
2. Obtaining elected official support for preparedness measures.
3. Building coalitions to enhance preparedness within the health care and business sectors, with community based organizations, first responders, critical infrastructure agencies, and emergency managers.
4. Reaching out to the general public through an ongoing education and information campaign, reminding the public of the need for personal and family preparedness for all hazards including a flu pandemic.
5. Recognizing that our preparedness goals, activities and resources must include the most vulnerable of our citizens.

Some of the key strategies we are using to become prepared for a pandemic are available to everyone. They include:

- Plan for a pandemic, but take an all-hazard perspective when doing so. For instance business continuity planning (also known as Continuity of Government (COOP) will pay off for multiple hazard situations and we are not confining our thinking to a flu scenario. The next infectious disease to impact our region could be a SARS-like illness that has not been seen previously.
- Engage all our community partners in planning. Planning for a pandemic is not just a government responsibility. It will take a community working together, public, private business and non-profit sector to face up to the challenges of a pandemic. Public Health has conducted business forums

on the impacts of a flu pandemic and large corporations like Boeing and Washington Mutual Bank have locally been very proactive in planning and exercising for a pandemic scenario.

- We are looking at our healthcare system as a system and not individual entities such as pre-hospital, hospital, urgent care, family practice.
- Our just-in-time inventory system makes us extremely vulnerable to any disruption to the distribution system in this country. Initiate a planning process that is continuous and iterative. The more planning we do the more issues we are uncovering. One of the hardest aspects of planning is to look for the interdependencies that exist within our community. The more modern and advanced a society is, the more interdependent we are upon one another.
- Identify your emergency powers and who has the authority to use them. There is a mixture of Public Health Officer and Chief Elected Official emergency powers authorized by public law here in Washington State and King County. Under what circumstances will they be used and the timing for their use is critical to brainstorm before an event.
- Early enactment of social distancing measures, such as the closing of schools, theaters and large indoor sporting events, is believed to be one key strategy to limiting the rapid spread of the disease.

Additionally we see a coordinated public education campaign and coordinated public information response during a pandemic as being of the highest priority. Given the life threatening nature of the disease, rumor control will be of utmost importance. The rapid dissemination of information to the media and directly to the public is important. Our Regional Public Information Network (RPIN) is a key strategy for sharing of information with these audiences. The RPIN web site, [www.rpin.org](http://www.rpin.org), allows users to get warnings and informational messages “pushed” to them and received via a variety of personal electronic devices.

Previous regional disaster response planning has laid a foundation for us to build our pandemic preparedness efforts upon. From a public health perspective we are concentrating on:

- Building a Health Care Coalition among a wide variety of health care partners in King County including Public Health, hospitals, ambulatory care providers, large medical practices, medical associations, emergency medical service providers, pharmacies and others. The Health Care Coalition will promote coordinated preparedness activities on a daily basis among health care partners, and efficient information and resource management during disasters.

- Connecting with community partners to develop plans for closing facilities during a pandemic including schools, day care centers, theaters, community centers, stadiums and other places where crowds may gather. Although the effectiveness of these “social distancing” strategies has not been proven, their implementation will be necessary in hopes of slowing the spread of disease. The societal impacts of these measures will be extreme; therefore close coordination between Public Health and community partners during the planning phase is essential.
- Augmenting the capabilities of the health care system by increasing local supplies of antiviral medications, enhancing our ability to conduct rapid triage of flu patients, and identifying additional bed capacity to treat the extreme numbers of sick patients that will seek care during a pandemic wave.
- Developing new strategies that will enable all components of the health care system to provide appropriate levels of care to patients, and compassionate counseling to families, during the most challenging periods of a severe pandemic.
- Developing clear public messaging for dissemination during a pandemic that will inform and educate the public on the nature of the threat and, most importantly, how each person can protect themselves.

As a local jurisdiction we don't have all the answers to the issue of preparing for a pandemic. We are struggling to deal with an event the magnitude of which we have never experience in our lifetimes. However, we do believe that our regional approach to preparing together with our partners is the best option for getting through this worst case event.

We also know that taking advantage of the time available to us now will serve us well when the World Health Organization does declare a Phase 4, 5, or 6 pandemic has commenced. Failing to plan and prepare for a pandemic, and only hoping for the best is not a strategy, it is rather a prescription for failure--for which there is no cure.

The products of our pandemic preparedness activities are all available on the Public Health – Seattle & King County web site ([www.metrokc.gov/health](http://www.metrokc.gov/health)) and the King County Office of Emergency Management web site ([www.metrokc.gov/prepare](http://www.metrokc.gov/prepare)).