A NOTE ABOUT CRISIS AND EMERGENCY RISK COMMUNICATION (CERC)

CERC is an introductory course that addresses a number of topics critical to successful public, partner, and stakeholder communication during an emergency situation. CERC is not an in-depth course on risk communication, issues management, or crisis/disaster communication. Rather, it is an amalgamation of all of these elements that have been incorporated into practical applications.

There are currently three modules in the CERC series: Basic, Leaders, and Pandemic Flu.

For more information about CERC Send your email message to: CERCINFO@cdc.gov
CRISIS AND EMERGENCY RISK COMMUNICATION

PANDEMIC INFLUENZA
Quick Guide

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
2008
INTRODUCTION

Which killed more people, World War I or the 1918 influenza pandemic? World War I claimed an estimated 16 million lives. The influenza pandemic that swept the world in 1918 killed an estimated 50 million people. One fifth of the world’s population was attacked by this deadly virus. Within months, it had killed more people than any other illness in recorded history. A pandemic is a global disease outbreak. Influenza pandemics occur when a new influenza A virus emerges for which there is little or no immunity in the human population, begins to cause serious illness, and then spreads easily from person-to-person worldwide. The 1918 virus did not discriminate. It was rampant in urban and rural areas, from the densely populated East coast to the remotest parts of Alaska. Young adults, usually unaffected by these types of infectious diseases, were among the hardest hit groups along with the elderly and young children. The 1918 pandemic flu afflicted over 25 percent of the U.S. population.

In one year, the average life expectancy in the United States dropped by 12 years. While a pandemic will not damage power lines, banks or computer networks, it will ultimately threaten all
critical infrastructures by felling ill essential personnel from the workplace for weeks or months. This makes a pandemic a unique circumstance necessitating a strategy that extends well beyond health and medical boundaries, to include sustaining critical infrastructures, private business in all sectors, the movement of goods and services across the nation and the globe, and economic and security considerations.

For any emergency event, employ the six principles of Crisis and Emergency Risk Communication (CERC).

**Be First.** If the information is yours to provide by organizational authority—do so as soon as possible. If you can’t provide the information, then explain how you are working to get it.

**Be Right.** Give facts in increments. Tell people what you know when you know it, tell them what you don’t know, and tell them if you will know relevant information later.

**Be Credible.** Tell the truth. Do not withhold to avoid embarrassment or the possible “panic” that seldom happens. Uncertainty is worse than not knowing. Remember, rumors are more damaging than hard truths.

**Express Empathy.** Acknowledge in words what people are feeling—it builds trust.

**Promote Action.** Give people things to do. It calms anxiety and helps restore order.

**Show Respect.** Treat people the way you want to be treated, even when hard decisions must be communicated.
MODULE ONE

Severe Influenza Pandemic: What is Different?

✓ Biological Challenges
✓ Psychological Challenges
✓ Social Challenges
Severe Influenza Pandemic: What is Different?

While the basic tenets of Crisis and Emergency Risk Communication (CERC) fully apply to pandemic influenza, the very magnitude of this impending challenge requires communication professionals to delve deeper. What will be different in a severe pandemic and what specific CERC activities should be intensified? Historically, the 20th century saw three pandemics of influenza:

- The 1918 influenza pandemic caused at least 675,000 U.S. deaths and up to 50 million deaths worldwide.
- The 1957 influenza pandemic caused at least 70,000 U.S. deaths and 1-2 million deaths worldwide.
- The 1968 influenza pandemic caused about 34,000 U.S. deaths and 700,000 deaths worldwide.

A pandemic will require planning, preparedness, and action on the part of many individuals, institutions, and industries not accustomed to responding to health crises. Understanding what an influenza pandemic is, what needs to be done at all levels to prepare for a pandemic, and what could happen during a pandemic, helps us make informed decisions, both as individuals and as a nation. When a pandemic occur, the public must be able to depend on its government to provide scientifically sound public health information quickly, openly, and consistently.

Biological Challenges

When a pandemic influenza virus emerges, its global spread is considered inevitable. Death rates for a severe pandemic will be high and largely determined by four factors: the number
of people who become infected; the virulence of the virus; the underlying characteristics and vulnerability of affected populations; and the effectiveness of preventive measures. More than 90 million people in the United States live with chronic illness. More than 36 million people in the United States are 65 years of age or older. People with chronic illness, suppressed immune systems, older adults, pregnant women and young children are at greater risk of serious illness, complications, and death from seasonal influenza, and will presumably be so from a pandemic influenza virus as well. Although no one can be certain which subpopulations will be hardest hit, those who are already vulnerable because of current health conditions or age may feel emotionally vulnerable. They may need special guidance on how they can protect themselves.

When a pandemic influenza vaccine becomes available, communicators should take time to explain who will receive the earliest doses of vaccine, especially if these groups differ from those who are typically recommended to receive seasonal flu vaccine earliest. It is logical to determine that older persons, for example, should not be first in line for the earliest vaccine during a flu pandemic, in order to vaccinate law enforcement and health care workers so that they can stay on the job. However, it may be very difficult to tell a grandmother and her grandchildren that she is not getting the early vaccine for pandemic flu as she does during seasonal influenza outbreaks.

Pandemic flu waves. Perhaps the most daunting aspect of pandemic influenza is that it will likely occur in two or three waves of 6 to 8 weeks duration in a community over about an 18-month time frame. Until the pandemic unfolds, no one can predict which wave could be most severe, strictly from the biological nature of the virus, or how it does or does not mutate between waves. During the first wave, the virus will bring a traumatic experience to a community. Knowing that it will be cycling around a second or third time could be demoralizing. Although
it may seem counterintuitive, people should be given even the
very worst news about what they are facing as quickly as possi-
ble without softening the news. Soft-pedaling what could be
the worst event of their lives won’t increase the credibility of
response organizations in the long run. Most people will use
the information to adapt their environments and engage coping
strategies. The fact that the virus will cycle through a commu-
nity more than once should be made clear before the pandemic
begins.

Psychological Challenges

Planning for a severe pandemic is fraught with uncertainty:
when will it happen, where will it begin, who will be at great-
est risk of death, will vaccines work, will they get to us in time,
will antivirals work, will there be enough, how will I care for my
kids if schools close, what if we put effort into this and the threat
from H5N1 fades, what would I do if I couldn’t drive my taxi or
open my restaurant, will people help each other or take advan-
tage of each other, are we emotionally prepared for death at this
magnitude.

The greatest uncertainty for communities and individuals
occur in the earliest phases of a pandemic. At that time, mes-
sages should include their ques-
tions, explain why the answer
is not available and commit
to a process to try and answer
their questions. If response of-
ficials do not, someone else will
answer the question and it may
be someone who is not invested
in a positive outcome for the
community.
Physical and mental preparation will relieve anxiety despite the expectation of potential injury or death. An “action message” can imbue people with the feeling that they can improve a situation and not become passive victims of threat. By giving persons, who are stressed, a restored sense of control, individuals can manage their stress at a level that will reduce hopelessness and helplessness.

Communication messages surrounding preparedness and response to a severe pandemic should acknowledge different emotions that may arise among the community in addition to stressing the importance of helping others. Likewise, refocusing individuals and groups on the task to be accomplished can reduce harmful conflict.

**Sociological Challenges**

When an infectious disease is transmitted easily from person-to-person, the behaviors of others can either protect or threaten your health. When people are dependent on each other’s behavior for their very lives, there is a strong potential for conflict. As the cost (e.g., loss of social contact or esteem, pay and profit) of a behavior increases, it may be more difficult for people to take recommended actions, even at the risk of severe illness or death. Some people will engage in denial (e.g., it won’t happen to me) and refuse to alter their behaviors. Individuals with high-risk, high-adventure personalities will also not alter their behaviors (e.g., sneezing on each other is Russian roulette). Some will expect the burden of the mitigation measures to be borne by others, not themselves, and will not alter their behaviors (e.g., somebody should do it to protect us, but I’m too busy and/or important to be bothered). Some will be very concerned about the risk but will believe that they can’t alter their behaviors (e.g., if I don’t go to work, even though I’m sick, I won’t be able to feed my family.). Social and community norms may be challenged. Most people in the United States have a strong work ethic, with
a concomitant belief that one should “tough it out” and come to work when ill. People will need permission to go against societal norms that could hurt them during a pandemic; they will need to hear from people who influence them that they are taking the right step by staying at home. Formal and informal messaging, including public service announcements, should reinforce this. Of course, barriers to adherence generated by something other than cultural dissonance could prevent people from taking a life-saving action. These must also be addressed and communicated (e.g., adjustments to sick-leave policies).

Voluntary quarantine, (i.e. exposed persons removing themselves from contact with well, unexposed persons) is a legitimate public health intervention. The communication challenge is in re-introducing the concept of quarantine. How do communications officials promote quarantine in today’s society and convince the public that this intervention is worthwhile? People will need to understand the difference between isolation (of someone who is sick) and quarantine (of someone who is not sick but could be due to contact with a sick person). Additionally, communicators will face an even bigger challenge when trying to manage rumors related to “imposed” quarantine. Again, people will need clear and concise information to help them learn and understand the concepts related to virus transmission, infectious disease controls, clinical symptoms versus pre-clinical viral shedding, and incubation periods.

A substantial percentage of the world’s population will require some form of medical care during a flu pandemic. Nations are unlikely to have the staff, facilities, and equipment needed to cope with large numbers of people who suddenly fall ill. The need for vaccine is likely to outstrip supply. The need for antiviral drugs is also likely to be inadequate early in a pandemic. A pandemic can create a shortage of hospital beds, ventilators, and other supplies.
Individuals and populations who traditionally have unlimited access to health care will be that much more vulnerable during a pandemic.

**Figure 1-1. A Pandemic Flu Family Story**

H1N1 comes to Cedar Rapids, Nebraska: The Langan Boys, 1918

Cedar Rapids: Census 1910, town population 576; six churches and a flour mill.

In 1918, Thomas Langan, 25, was married to Carrie and had five children. His brothers — William, 22, Edward, 20, and David, 16 — lived at home.

All four brothers fell ill with influenza.

December 16: Edward died  
December 19: William died  
December 20: David died  

Thomas survived and fathered four more children with Carrie. He died in 1966 at 75 years of age.

Thomas and Carrie (center) pictured in 1955 with their nine children.
MODULE TWO

Community Hardiness and Personal Resilience

✓ Communication Mitigation Strategies
✓ Stigma and Pandemic Influenza
Community Hardiness and Personal Resilience

Community Hardiness. The measure of a community’s hardiness will come from several domains, including its socioeconomic status (e.g., income levels, unemployment rates, education levels, and health-related behaviors), community-based organizations, non-governmental organizations, neighborhood associations, places of worship, and its political and governmental structures. Pre-disaster community cohesion is important to community hardiness. In contrast, existing social stressors such as ongoing racial, economic or political strife that weakens cohesion can bode ill for a community’s ability to cope with the impact of a severe influenza pandemic. Importantly, pre-existing social strains such as community poverty, individual poverty, low perceptions of risk, poor preparedness, and limited access to mitigation, response, and recovery resources are associated with bleaker outcomes for a community.

For individuals, families, neighborhoods, communities, and nations to fare well in the next severe influenza pandemic several factors will need to be in place. Some of these factors can be influenced by communication messages before and during the pandemic and should originate both from response organiza-
tions and from response and community leaders. Communication professionals should consider the psychological components of community hardiness and personal resilience and reinforce the positive aspects of both in their messaging. This is not an attempt at mass mental therapy. It is an attempt to take every available advantage and apply it to what may become the biggest public health challenge ever.

This aspect of social interaction could be critical in a severe influenza pandemic, where a community’s well-being could directly depend on the group’s ability to comply with novel instructions from authoritative sources, such as being asked to create a community education plan if schools are closed, or how to ensure impoverished community members will be fed if under a voluntary household quarantine.

Group cohesion manifests itself in different ways depending on the type of group in consideration and the individual resources persons bring to the group. Two elements that increase group cohesion are member similarity (e.g., demographics, shared experiences, shared threats, and values) and member attractiveness (e.g., prestige, acknowledged expertise, and relevance to the desired task). The tighter the group cohesion, the more likely attitudes would be in agreement and opinion certainty strong. Group cohesion may contribute to group resilience and, ultimately, group success. Important elements to keep a group together include defining and accepting roles and sets of behaviors for members, an accepted set of norms, and any forces that draw the group together, such as a short work deadline or competition from another group.

**Personal Resilience.** Personal resilience is a person’s ability to maintain their equilibrium in the face of trauma and loss. Resilience is often described as the protective factors that help humans thrive after extreme disasters. People’s fear, anxiety, and despondency can be reduced to manageable levels by reducing
situational uncertainty with information, by giving individuals or communities things to do, which restores a sense of control. Communication messages should stress self-efficacy (i.e., “you can protect yourself and others and what you do will directly influence the outcome of the pandemic for you and your neighbors”).

Personal resilience is more prevalent than often believed and adaptive coping strategies can be learned. Discussing personal resilience and allowing people to mentally rehearse how they believe they would respond under the stress of a pandemic outbreak in their community is worthwhile. This rehearsal will allow them to adjust their view about their mastery over the event and consider the consequences of the behavior before acting. Communication activities before and during a severe pandemic can increase personal resilience (e.g., building mastery skills) and community hardiness (e.g., use social persuasion to increase cohesion).

During the resolution phase of a severe pandemic, messages should acknowledge the shared misery and celebrate the efforts taken to save lives and function as a community under extraordinary circumstances. The community that both mourns its dead and celebrates all of its successes will recover more quickly than a community that focuses only on their loss, responds with anger or guilt, and chooses to blame.
Checklist: Communication for Community Hardiness

Before

• Do a community hardiness assessment.
• Identify unifying symbols and shared history that can be used to remind people that they are part of a community.
• Educate partners, media, and civic leaders about the role of community hardiness.
• Identify community influencers and engage them in the community hardiness planning activities.
• Consider community meetings to discuss the protective aspects that exist in the community and its vulnerabilities.

During

• Highlight successes in the community as they shoulder the burden of the outbreak.
• Provide a forum for the community to discuss problems that may arise during the outbreak.
• Recommend ways that the community can help safeguard its most vulnerable members.

After

• Document the community’s survival through memorials and collecting items (both oral and visual) to archive for their historical value.
• Acknowledge the shared misery.
• Try to recapture traditional community events as soon as possible to help the community return to a sense of normalcy.
Checklist: Communication for Personal Resilience

Before

• Connect people with similar interest through organizations, meetings, and websites to match skills with pandemic “chores”.
• Give step-by-step directions.

During

• Help people help others.
• Focus people on a goal: “Keeping my family safe.”
• Remind people that they have overcome past struggles.
• Remind people about core societal values: “We value our independence.”
• Show how people “just like me” are coping.
• Challenge people to do their best.
• Remind people of their individual value to the community.

After

• Acknowledge that negative life experiences have meaning and we can learn and grow.
• Show respect by acknowledging losses in a personal way (e.g., mini biographies).
• Acknowledge the shared misery, direct people to acts of hope.
Community Mitigation Strategies

A pandemic influenza strain vaccine can not be manufactured in pandemic quantities until the pandemic influenza strain emerges. Also, antivirals can not be stockpiled in pandemic quantities because some strains of influenza viruses are resistant to the antivirals. This leaves public health officials with the quandary of how to help protect people from the influenza virus during the early phase of a pandemic when vaccine and antivirals will be in extremely short supply. The answer at this time is the implementation of nonpharmaceutical interventions or NPIs.

NPI behaviors are meant to limit the spread of the pandemic, reduce illness and deaths, and lessen the impact on societal infrastructures such as reducing workplace absenteeism and numbers of hospitalizations. Briefly, CDC has identified the following four pandemic mitigation interventions: 1) Isolation of ill people in their home or the hospital; 2) Voluntary home quarantine of non-ill family members for at least 4 days (i.e., two transmission periods) when a household member is presumed ill with pandemic influenza; 3) Dismissing students from school attendance and closing child care programs; and, 4) Social distancing to reduce contact among adults (e.g., cancel large public gatherings and telecommute to work). For this strategy to be effective in a severe pandemic, individuals and communities would have to adopt these behaviors early once the virus arrived in their community and be willing to sustain them for as long as 12 weeks. An important addition to the community mitigation strategies is the development of a “Pandemic Severity Index” to help individuals and communities determine which strategies to take and the length of time to engage them.
Figure 1-2. Pandemic Severity Index

<table>
<thead>
<tr>
<th>Case Fatality Ratio</th>
<th>Projected Number of Deaths* US Population, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0%</td>
<td>1,800,000</td>
</tr>
<tr>
<td>1.0 - &lt;2.0%</td>
<td>900,000 - &lt;1,800,000</td>
</tr>
<tr>
<td>0.5 - &lt;1.0%</td>
<td>450,000 - &lt;900,000</td>
</tr>
<tr>
<td>0.1% - &lt;0.5%</td>
<td>90,000 - &lt;450,000</td>
</tr>
<tr>
<td>&lt;0.1%</td>
<td>&lt;90,000</td>
</tr>
</tbody>
</table>

Assumes 30% Illness Rate and Unmitigated Pandemic Without Interventions

To learn more about community mitigation strategies, visit:
www.pandemicflu.gov/plan/community/mitigation.html
Stigma and Pandemic Influenza

Stigmatization can be defined as a mark or sign of disgrace or discredit. Peril gives rise to the type of stigmatization that could come about early in a severe influenza pandemic. If the stigmatizing condition associated with the person or group is dangerous or lethal to others, stigma arises. Naturally, the more dangerous the condition is, the stronger and swifter stigmatization will take hold.

What is the difference between stigma and simple prejudice? Stigmatization occurs when there is a perception of threat and it is accompanied by a social sharing of this perception by the dominant group. In other words, individuals in a severe pandemic may behave with prejudice but it takes a wider community for stigmatization to occur. With media technology today the “community” sharing the stigmatizing belief could be quickly expanded.
Scientists, traditional and new media, Hollywood and marketers will all give different meaning to the pandemic virus when it begins to threaten the U.S. population. Communication professionals involved in the public health response will face a communication landscape that will offer many different perspectives on a virus. How well we can discourage stigmatization may depend on the work that is done long before a virus arrives.
Checklist: Inhibiting and Countering Stigmatization

Before

• Remember: Products, animals, places, and people can be stigmatized.

• Avoid geographic mentions of past infections, instead substitute dates (e.g., 1918 Influenza Pandemic instead of Spanish Influenza).

• Avoid constant use of visuals that portray only one ethnic group.

• Avoid typefaces and symbols that evoke a specific ethnic group (e.g., Avian influenza). The latter appears Asian-like.

• If a particular pathogen evokes an association with a particular ethnic group, stigma is likely to occur. Avoid the association.

• Share with media your concerns about stigma.

• Address the issue of stigma in pre-planning community checklists and guides.

• Have a mechanism in-place for people who feel stigmatized and need to express their concern or ask for help.

• Ask staff, if appropriate, who share the ethnic group of persons experiencing the earliest outbreaks whether the proposed materials are offensive (and/or ask trusted partners).

• Teach response officials and communication staff about the harmful effects of stigmatization.

During

• All of the above continue to apply.
MODULE THREE

✓ Special Populations
✓ Loss, Grief, and Cultural Bereavement
Special Populations

While the very nature of a pandemic influenza virus strain involves nearly universal susceptibility to the virus, emergency planners are concerned that some portions of the U.S. population could be at greater risk of illness and death. From a biological perspective, people with suppressed immune systems and serious chronic health conditions could be at greater risk. From a societal perspective, people who are poor, disenfranchised and powerless could be at greater risk because of disparities in access to health care and inadequate support to take individual measures to reduce the opportunity for exposure to the virus (e.g., remaining home for extended periods).

Before attempting to identify special populations, these assumptions about emergency communication should be considered:

• The initial objectives for public information releases from response authorities early in a crisis are to: 1) prevent further illness, injury, or death; 2) restore or maintain calm; and 3) engender confidence in the operational response.

• Emergencies are chaotic and planning should be directed at simplifying roles and responsibilities to achieve the greatest good for the greatest number while maintaining enough resources to reach those who can’t help themselves.

• To avoid confusion early in a crisis, accurate, relevant, simple, fast and consistent messages are best.

• “One size fits all” never fits all people equally well.
• Public health resources for public information activities during a crisis will be limited and must be prioritized, especially early in the crisis.

• Individuals and communities must be empowered to help themselves and each other.

Specifically tailored messages for diverse populations may be more effective during the pre-event stage than during the initial phase of crisis. One possible reason to alter emergency messages is cultural difference since cultural learning may influence group and individual behavior as it relates to preparedness and crisis survival. All cultures include persons who tend toward either collectivism or individualism in their thinking about self and others. Asian and American Indian cultures are believed to be more collectivist than Euro-American and African American cultures. Cultural beliefs may be more strongly held in a crisis than non-crisis situations; but, if the crisis message does not require a person to take actions inconsistent with their cultural beliefs, then the message should not be altered.

Noteworthy, the term “special populations” has crept into public health emergency response planning documents without adequate definition. For public health mass communication during an emergency, a special population is any group that cannot be reached effectively during the initial phases of a public safety emergency with general public health messages delivered through mass communication channels.
Loss, Grief, and Cultural Bereavement

During the next severe influenza pandemic, modeling estimates indicate that nearly two million people in the United States alone are expected to die if conditions remain as they are today (i.e., limited ability to produce vaccine early in the pandemic, limited supplies or efficacy of antivirals, and limited community mitigation measures taken). Grief is experienced in a broad social context. The view of a particular society, culture, or subculture, with expectations of “appropriate grieving,” influences the experience of loss and the “performance” of grief for those in that society. Grief is a universal emotion, but no two people experience grief in exactly the same manner. The grieving process includes:

**Bereavement.** The state that results from a significant loss and encompasses a wide range of reactions, emotional, cognitive, spiritual, behavioral, and physical. Bereavement is a normal, natural experience, although it is traumatic and emotionally disruptive.

**Grief.** The intrapsychic process of regaining equilibrium after a loss. Manifestation includes emotional catharsis and obsessive thoughts of the deceased. Re-evaluating spiritual issues and experiencing physical symptoms may also occur.

**Mourning.** The public expression or sharing of the feelings of grief. Such rituals as funeral services or the wearing of black are expressions of mourning.

**Anticipatory grief.** An experience that occurs before the expected death of a loved one and is a projection of emotional pain and the life change that the loss will bring.

Importantly, those who communicate about the number of deaths in their community should be cautious about the wording of their reports. They must show a level of sensitivity regarding
the individuals who constitute the total number of deaths. As the first deaths occur, people will expect more information to characterize the deaths (e.g., age, role in the community, gender). They will be trying to assess their own risk according to the types of people who are dying. While it may seem odd, in developed nations economic loss must be considered within the grieving process. Persons who suffer severe economic loss, especially if the likelihood of recovery is slim (e.g., no business insurance), can experience emotional impact akin to losing a loved one.
Here are some reminders on communicating during times of loss and grief

*Empathize with the patient and family.*

- People only engage in serious, meaningful communication for short spans of time.
- Small talk and chitchat can be a treasure trove of meaningful “hints” about what a person is worried about or may want to talk about.
- Privacy is important. Assure that information shared will be kept private.
- Allow communication free from interruptions (e.g., crying shouldn’t be interrupted).
- Try not to answer questions outside your area of expertise. Get permission from the individual to refer him or her to an expert.

*Listen carefully.*

- Place the speaker’s needs above your own.
- Use open and accepting body language (e.g., no crossed arms).
- Always be honest in responding.
- Try not to interrupt or give advice.
- Accept moments of silence.
- As much as 90% of all communication is nonverbal. Look for cues in body language.
Words of caution.

• Try not to misinterpret the meaning of words and gestures.

• Value judgments hinder communication. Validate what the person is saying but remain neutral in conversation.

• Teasing belittles the individual.

• Blame cuts off communication.

• Use the person’s name in the conversation.

• Ask a clarifying question: “Can you help me understand?”

Conclusion

Well-planned and well-executed crisis and emergency risk communication, fully integrated into every stage of the pandemic influenza planning and response, can give the organization the critical boost necessary to ensure that limited resources are efficiently directed where truly needed. A severe influenza pandemic will take a physical, emotional, and societal toll on the U.S. population. CERC principles will ameliorate some of the anticipated negative outcomes.