

## Continuity of Operations Guidance for Businesses

Beyond illnesses and deaths, a moderate or severe pandemic will disrupt many elements critical to functioning of society. This section of the North Carolina DPH Pandemic Influenza Plan focuses on the impact of pandemic influenza on the business sector. Assumptions are presented based upon federal references refined by state personnel with expertise in pandemic planning. It provides general guidance for Continuity of Operations Planning (COOP) with the goal of reducing economic losses due to a pandemic. COOP principles to aid planning are presented, with links to COOP templates prepared by UNC-Chapel Hill and other sources so that interested businesses can craft pandemic preparedness and response plans. However, nothing in this appendix, including links to external resources, should be considered sufficient for any business to prepare for a pandemic—the many factors yet to be recognized will have to be addressed and plans modified to reflect actual events. Maintaining awareness as pandemic events occur is critical to assuring a plan is well-matched to tasks needed to reach the goals of reducing deaths and illnesses as well as social disruption.

### **Planning Assumptions with potential impacts on businesses:**

1. Susceptibility to the pandemic influenza virus will be universal. ***Businesses will be impacted as workers, managers and customers fall ill.***
2. Efficient and sustained person-to-person transmission signals an imminent pandemic. ***As clusters of human infection are recognized, public health authorities will ‘raise the flag’ to alert others about an imminent pandemic by declaring a change in the World Health Organization (WHO) Phase—the system used worldwide to guide pandemic planning and response.***
3. The clinical disease attack rate could range from 30-50% in the overall population during the pandemic. During seasonal influenza, illness rates are highest among school-aged children (about 40 percent) and decline with age. Among working adults, an average of 20 percent will become ill during a community outbreak. It is not clear whether these same trends will occur during a pandemic. ***Many people will fall ill.***
4. Some persons will become infected but not show symptoms. Asymptomatic or minimally symptomatic individuals can transmit infection and develop immunity to subsequent infection. ***Persons able to fulfill their daily roles may be a source of infection to others.***
5. While the number of patients seeking medical care cannot be predicted with certainty, in previous pandemics about half of those who became ill sought care. With the availability of effective antiviral drugs for treatment, this proportion may be higher in the next pandemic. ***Demand for medical care will surge.***
6. Rates of serious illness, hospitalization, and deaths will depend on the virulence of the pandemic virus and differ by an order of magnitude between more and less severe scenarios. Risk groups for severe and fatal infection cannot be predicted with certainty but may include infants, the elderly, pregnant women, and persons with chronic or

immunosuppressive medical conditions. ***In the 1918-1919 pandemic, many healthy individuals between 20 and 40 years of age became ill and died in proportions greater than seen with seasonal flu. If this occurs again, impacts on businesses which employ or serve such age groups will likely be disrupted.***

7. Rates of absenteeism will depend on the severity of the pandemic. In a severe pandemic, absenteeism attributable to illness, the need to care for ill family members and fear of infection may reach 40 percent during the peak weeks of a community outbreak, with lower rates of absenteeism during the weeks before and after the peak. Certain public health measures (closing schools, quarantining household contacts of infected individuals, etc.) are likely to increase rates of absenteeism. ***Absenteeism will be a significant challenge for businesses.***

8. The typical incubation period (interval between infection and onset of symptoms) for seasonal influenza is approximately 2 days. It's not certain how a pandemic strain's incubation may vary from this. ***Pandemic flu may have a short incubation period—it could spread in a matter of days or weeks across the planet with very short notice.***

9. People who become ill may shed virus and can transmit infection for one-half to one day before the onset of illness. Viral shedding and the risk of transmission will be greatest during the first 2 days of illness. Children 4-6 years old. Variation in the day of onset of transmission will be a

Infectious Disease Research and Policy at the University of Minnesota (CIDRAP, [www.cidrap.umn.edu](http://www.cidrap.umn.edu)) offer support to such personnel. Businesses are encouraged to investigate these or other groups for expertise in such planning. By learning about pandemic influenza and defining how the assumptions listed above might affect a business's operations, a business operator can anticipate steps needed to mitigate such impacts.

For example, a business that relies on the presence of 50 personnel who currently work in close proximity to one another in an office setting may want to draft plans to have a proportion of employees work from home, provide greater distance between those that must work on site, and have all workers focus on prioritized operational activities. Prioritization of work is critical to this example, as is the recognition of how pandemic influenza can spread more easily between people who share workspace and absenteeism approaching 30-40%.

General steps:

- 1) Know the threat and the goal of reducing it
- 2) Know the organization's structure and resources, including existing Emergency Operations Plans
- 3) Apply logic to create a plan of steps needed to mitigate the threat to the organization using resources available
- 4) Practice the plan and refine it as needed
- 5) Maintain awareness of the threat

The federal pandemic preparedness website ([www.pandemicflu.gov](http://www.pandemicflu.gov)) has several resources to aid business planning. These include a checklist which specifies similar steps to the general plan outline noted above. Its broad categories are:

- 1) Plan for the impact of a pandemic on your business
- 2) Plan for the impact of a pandemic on your employees and customers
- 3) Establish policies to be implemented during a pandemic
- 4) Allocate resources to protect employees and customers during a pandemic
- 5) Communicate to and educate your employees
- 6) Coordinate with external organizations and help your community.

This last step is critical: Businesses often hold leadership positions in society which are critical to not only daily functioning, but which will become more important during a pandemic response. For example, if a well-respected business leader lends support to public health measures recommended such as closing schools or canceling events—even though it is likely that the business's bottom line may be hurt—it is likely that other business operators will follow by example. If this occurs, fewer people may be exposed to pandemic viruses and fewer illnesses and deaths may occur.

One facet of planned public health recommendations bears further explanation: in order to be effective, the call for and implementation of cancellations of events and activities where people gather and closings of schools must occur *before* widespread illnesses occur, i.e. during a time when to almost all appearances life is normal. Businesses need to be ready to respond even in the absence of increased numbers of ill persons and deaths due to the rapidity of pandemic spread.

### **Continuity of Operations Plan (COOP) Examples and Templates**

The following links are provided to help reduce the burden of duplication for businesses wishing to develop COOPs. Other links may be useful as well. While we do not offer specific endorsements of these sites, we urge business operators to search and review these and other sites for examples most appropriate to their COOP needs.

One example of a COOP tool follows this page. It is based on a section of The University of North Carolina at Chapel Hill (UNC-CH) COOP and may be useful for smaller businesses.

#### **Internet sites:**

Federal government pandemicflu.gov site for businesses. This has many relevant resources for businesses including tools to help protect workers.

[www.pandemicflu.gov/plan/business/index.html](http://www.pandemicflu.gov/plan/business/index.html)

US Chamber of Commerce.

[www.uschamber.com/issues/index/defense/pandemic\\_influenza.htm](http://www.uschamber.com/issues/index/defense/pandemic_influenza.htm)

UNC-CH COOP (copy and paste link into browser)  
[ehs.unc.edu/healthy/pandemic\\_flu.shtml](http://ehs.unc.edu/healthy/pandemic_flu.shtml)

NCDHHS Pandemic Flu Materials Site  
<http://www.ncdhhs.gov/panflu/index.htm>

Additional links to business continuity planning resources can be found by using keywords such as “business continuity” and pandemic in various search engines. These are not reviewed or endorsed by NC DPH, but they may be useful. The link below will provide search results from Flu Wiki, a site created by persons dedicated to sharing information about an influenza pandemic (copy and paste link into browser)  
[www.fluwikie.com/index.php?n=Consequences.WorkplaceContinuity](http://www.fluwikie.com/index.php?n=Consequences.WorkplaceContinuity)

## Generic Pandemic Influenza Continuity of Operations Plan (COOP)

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<b>Background</b>
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No one can predict the extent or severity of a pandemic, but in past epidemics the influenza hit in waves of infection with a wave lasting from six to eight weeks or longer. In order to blunt the extent and severity of a pandemic, public health officials may request that citizens take social distancing measures such as canceling public events, suspending and/or closing non-essential worksites.

General COOP goals include:

- Reduce the rate of illness and loss of life.
- Minimize the disruptive impacts of ill staff on business functioning.
- Maintain essential functions in the event the business closes.
- Reduce the risk of damage to critical infrastructure.
- Minimize financial loss.
- Minimize the economic impact on the community and state.

<b>Assumptions</b>
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1. Pandemic occurs
2. 40% reduction in workforce for 2 weeks during peak of pandemic waves
3. 50% loss of key suppliers/providers
4. Likely illness exposures at work.
5. Loss of 20% of leadership personnel

<b>Department/Unit Information</b>	<b>Section A</b>
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**Unit/Department:**

**Plan Developer:**

**Implementation Leader:**

<b>Continuity of Operations Objective</b>	<b>Section B</b>
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**List your key objectives to increase the chance of your business's continued functioning:**

- 1.
- 2.
- 3.
- 4.

<b>Emergency Communication Systems</b>	<b>Section C</b>
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Specify how personnel will receive notification of pandemic event related work directives, e.g. phone, call tree, email, pager, website, other:

<b>Emergency Access to Information and Systems</b>	<b>Section D</b>
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Describe how personnel will access information and/or other systems designated essential to continuity of operations, e.g. telecommuting requiring access to network drives:

<b>Scenario</b>	<b>Section E</b>
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- Suspension of non-essential work for a period of 4 - 8 weeks.
- Attempts to maintain *Essential Functions and Services*

<b>Essential Functions &amp; Associated Employees</b>				<b>Section F</b>
Function	Name(s), phone	*Alternate, phone	*2nd Alternate, phone	PPE**

\*Name of individual who can assume the function as a back up.

\*\*Personal Protective Equipment (number of staff who will need a PPE) (non-duplicated)

<b>Key Internal Dependencies (Add Mitigating Actions for each)</b>		<b>Section G</b>
What functions or services does your unit depend on that are part of your overall organization?		
Dependency	Providers	COOP

<b>Key External Dependencies (Add Mitigating Actions for each)</b>		<b>Section H</b>
What functions or services does your unit depend on that are <i>NOT</i> part of your overall organization?		
Dependency	Providers	COOP

Mitigating Action for \_\_\_\_\_

Risk:

Action:

Mitigating Action for \_\_\_\_\_

Risk:

Action:

Mitigating Action for \_\_\_\_\_

Risk:

Action:

<b>Delegation of Authority</b>	<b>Section I</b>
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List here the people who can make operational decisions if the head of your business or unit is absent.

	Name	Phone Number	Alt Phone Number
<b>Head of Operations</b>			
<b>First Successor</b>			
<b>Second Successor</b>			
<b>Third Successor</b>			

<b>Testing and Training</b>	<b>Section J</b>
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Share your completed Plan with your staff. Hold exercises to test the Plan and maintain awareness. Note below the type of exercises you will use and their scheduled dates.

Staff meeting orientation	Emergency communication test	<b>Exercise</b>
Call tree drill	Off site information access test	
Table top exercise	Unscheduled work at home day	<b>Plan Date</b>
Interdepartmental exercise	Emergency Assembly drill	
Other exercise:		

<b>Recovery</b>	<b>Section K</b>
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Describe your Plan to fully resume operations as soon as possible after the wave has passed. Identify and address resumption/scheduling of normal activities and services, work backlog, re-supply of inventories, continued absenteeism, the use of earned time off, and emotional needs.

Recovery activities needed:

- Copy data back to servers from home PCs and securely erase data from home PCs.
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<b>Special Considerations</b>	<b>Section L</b>
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