



31 January 2020

NATO Members:

With global attention on the pandemic outbreak of Coronavirus in Wuhan, China, NATO has revised and updated its paper on Pandemic Preparedness. We have also included domestic and overseas Business Checklists prepared by the U.S. Centers for Disease Control (CDC).

On 30 January, the World Health Organization (WHO) declared the outbreak a “public health emergency of international concern”.

While the Chinese government has severely restricted travel in the affected region, and exhibitors and distributors have voluntarily and temporarily closed all of China’s cinemas, as have amusement parks, it is important to note that there are relatively few cases worldwide. According to the CDC, “Imported cases of 2019-nCoV infection in people have been detected in the U.S. While person-to-person spread among close contacts has been detected with this virus, at this time this virus is NOT currently spreading in the community in the United States.”

We further note that, in the wake of the 2009 H1N1 outbreak, which was less severe than anticipated, the CDC has moderated its approach to new outbreaks of pandemic flu. Further, the CDC has coordinated closely with states and U.S. territories in the development of consistent pandemic preparedness plans, reducing the likelihood of varying and inconsistent approaches by region.

In the interest of preparedness, our paper considers a wide range of possibilities and histories of previous pandemics, and their effects on movie theaters. With that in mind, we recommend you remain aware of any new information from the CDC and your local health authorities.

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National Association of Theatre Owners

## **Preparing for a Flu Pandemic**

*On September 28th, 200,000 gather for a 4th Liberty Loan Drive in Philadelphia. Days after the parade, 635 new cases of influenza were reported. Within days, the city will be forced to admit that epidemic conditions exist. Churches, schools, and theaters are ordered closed, along with all other places of "public amusement."*

—From **The American Experience: Influenza 1918**. PBS

According to the World Health Organization (WHO), the Department of Homeland Security (DHS), Centers for Disease Control (CDC) and the Department of Health and Human Services (HHS), another flu pandemic (when an animal disease, such as Avian Flu, crosses over into a strain which affects humans, who have no immunity), **is a question of when, not if**, and how severe it will be.

**Developing a plan for a flu pandemic is critical to any theater's emergency preparedness efforts. NATO encourages theater owners to use the resources identified in this document to develop a plan for your theater(s). NATO will continue to monitor information published by WHO, DHS and CDC and will advise our members of new information as it is made available.**

## **Background on Flu Pandemics**

There have been four flu pandemics in the last century—the 1918 “Spanish Flu,” which killed 20-40 million people worldwide (including at least 600,000 in the United States); the 1957-58 “Asian Flu,” which killed approximately 116,000 in the U.S.; the 1968 “Hong Kong Flu,” which killed 34,000; and the H1N1 (Swine Flu) virus, related to the 1918 Spanish Flu, in 2009, in which is estimated 11–21% of the global population contracted the illness, and 151,000–579,000 died.

A fifth flu pandemic – the Wuhan Novel Coronavirus – is in its early stages.

## **Preparation for a Pandemic Flu Outbreak**

Unlike natural disasters, planning for a flu pandemic cannot be predicted or limited by geographic region (in contrast to, *e.g.*, earthquakes in California, tornados in the Plains States, hurricanes on the coast). Physical plants are unaffected, but up to 40% of employees may be affected in some areas, while others experience minimal effects.

According to the CDC, localized outbreaks of influenza are projected to last 6-8 weeks with the duration of pandemic wave lasting 3-4 months. Local outbreaks can reoccur after the pandemic wave period.

**Movie theater pandemic plans generally cover two areas: (1) staffing concerns and (2) public gathering place concerns**

**1) Staffing concerns in case of an outbreak**

Employers may consider some of the following issues in advance of an outbreak to minimize employee exposure and ensure compliance with relevant state and local laws.

- a) Continuing operations while short-staffed, in theaters and corporate offices:
  - Staff impact unlikely to be evenly distributed (an entire theater staff or corporate division may be unavailable, while others are scarcely affected), necessitating cross-training
  - Telecommuting infrastructure
  - Suppliers will face the same issues
- b) Consider employment laws including family/medical leave law and employee health & safety requirements:
  - Broader definitions under some state laws as to what constitutes a disability
  - Required notice of plant/office closures (WARN - Worker Adjustment and Retraining Notification Act requires 60-day notice for plants or offices with more than 100 employees)
  - Staff and other operational expenditures during period of diminished revenue
  - Recalling/replacing staff after an extended layoff

**2) As an industry whose primary business is as a place of public gathering**

Businesses that act as public gathering places should also consider both the external perceptions or fear from the public about disease transmission in public places as well as how to proceed in the event of an enforced closure of public gathering places either at a single site or across a large geographical area.

- a) External perceptions of the hazards of infection in public places
  - If the government publicly recommends avoiding spaces of public gatherings, including cinemas, few exhibitors want to be on the other side of that argument when public health is at stake. The best PR strategy at that point is to follow the cue of your public officials and build on the image of total and complete cooperation.
  - Staff and public education regarding real risks, mitigation and prevention
  - Closure due to lack of business
  - Voluntary closure as pre-emptive measure of concern

b) Enforced closure of public gathering places in case of a severe outbreak

- Some states contemplated closure of public places during the 2009 H1N1 outbreak
- Georgia’s closure guidelines specifically referenced movie theaters
- Department of Health and Human Services Pandemic Influenza Plan 2017 update, building on the milder than expected 2009 H1N1 pandemic
 

*“The 2005 Pandemic Influenza Plan and subsequent updates focused planning for a severe pandemic with effects that would extend beyond health consequences to include social and economic disruption. **By preparing exclusively for a very severe pandemic, the Plan did not include specific guidance for the type of pandemic we experienced in 2009, which was comparatively less severe. However, the capabilities that were developed through the HHS Plan, the National Strategy for Pandemic Influenza, and its companion 2006 Implementation Plan, were effectively adapted and used to respond to the pandemic that emerged. Lessons learned were captured to inform future responses.**”*
- The Influenza Plan also included the following community mitigation measures:
 

*“Community-level interventions can be added during pandemics and implemented in a graded fashion depending on the severity of the pandemic; **these include measures aimed to reduce social contacts between people in schools, workplaces, and other community settings.**”*

**TABLE 10. Recommended nonpharmaceutical interventions for influenza pandemics, by setting and pandemic severity\***



Setting	Pandemic severity		
	Low to moderate severity (mild to moderate pandemic)	High severity (severe pandemic)	Very high severity (very severe to extreme pandemic <sup>1</sup> )
All	CDC recommends voluntary home isolation of ill persons, respiratory etiquette, hand hygiene, and routine cleaning of frequently touched surfaces and objects. <sup>5</sup>	CDC recommends voluntary home isolation of ill persons, respiratory etiquette, hand hygiene, and routine cleaning of frequently touched surfaces and objects.	CDC recommends voluntary home isolation of ill persons, respiratory etiquette, hand hygiene, and routine cleaning of frequently touched surfaces and objects.
Residences	CDC generally does not recommend voluntary home quarantine of exposed household members.	CDC might recommend voluntary home quarantine of exposed household members in areas where novel influenza virus circulates.	CDC might recommend voluntary home quarantine of exposed household members in areas where novel influenza virus circulates.
	CDC generally does not recommend use of face masks by ill persons.	CDC might recommend use of face masks by ill persons when crowded community settings cannot be avoided.	CDC might recommend use of face masks by ill persons when crowded community settings cannot be avoided.
Child care facilities, schools for grades K–12, and colleges and universities	CDC might recommend selective school dismissals in facilities serving children at high risk for severe influenza complications.	CDC might recommend temporary preemptive, coordinated dismissals of child care facilities and schools. <sup>6</sup>	CDC might recommend temporary preemptive, coordinated dismissals of child care facilities and schools.
		If schools remain open, CDC might recommend social distancing measures.**	If schools remain open, CDC might recommend social distancing measures.
Workplaces	CDC generally does not recommend social distancing measures.	CDC might recommend social distancing measures. <sup>11</sup>	CDC might recommend social distancing measures.
Mass gatherings <sup>55</sup>	CDC generally does not recommend modifications, postponements, or cancellations.	CDC might recommend modifications, postponements, or cancellations.	CDC might recommend modifications, postponements, or cancellations.

Source: CDC Community Mitigation Guidelines to Prevent Pandemic Influenza — United States, 2017

- Understanding what level of outbreak will trigger closure in the numerous local jurisdictions in which our larger members operate
- Getting local officials to commit themselves on the issue before it occurs

Exhibitors may face competing guidelines among jurisdictions. According to the CDC 2017 Pandemic Influenza Plan: “Pandemic preparedness planning has become more sophisticated and has grown in breadth and depth across all levels of government, stakeholders, private entities, and sectors over the past ten years. Today, every state, four major metropolitan areas, and eight U.S. territories and freely associated states have their own pandemic influenza plan.” To harmonize these guidelines consider

- Local
- State
- Federal
- International
- Managing Your Risk
- Sourcing an Outbreak
- Business interruption insurance coverage

**Pandemic Outbreaks Have Affected Movie Theaters in the Past**

Movie theaters have been impacted in varying ways by past pandemic outbreaks. Some examples are included below.

**1) Flu Epidemic of 1918-1919**

- Business hours restricted, streetcars' capacity limited.
- Staggered business hours, signs with "cover coughs."
- Staggered business hours, warning signs posted in theaters.
- Schoolchildren given information to take home, warned not to gather in groups.

*Source: Nonpharmaceutical Interventions Implemented by US Cities During the 1918-1919 Influenza Pandemic; Howard Markel, MD, PhD; Harvey B. Lipman, PhD; J. Alexander Navarro, PhD; Alexandra Sloan, AB; Joseph R. Michalsen, BS; Alexandra Minna Stern, PhD; Martin S. Cetron, MD; JAMA. 2007;298:644-654.*

**(2) SARS (Severe Acute Respiratory Syndrome) – 2003**

(Beijing, Hong Kong, Toronto)

- **Beijing Cinemas closed for 7 weeks.**
- **Canadian Box Office**

2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
\$390,584,000	\$403,066,000	\$462,583,000	<b>\$382,666,000</b>	\$446,338,000

Hong Kong released the following advice on prevention of SARS specifically directed at movie theaters:

**Health Advice on the Prevention of Severe Acute Respiratory Syndrome (SARS)  
to Operators of Cinemas/Theatres**

**Method of Cleansing & Disinfection**

Use diluted household bleach (e.g. adding 1 part of household bleach to 99 parts of water) when carrying out cleansing and disinfection, then rinse with water and mop dry.

If facilities are contaminated with vomitus, wash with diluted household bleach (i.e. mixing 1 part of bleach with 49 parts of water) immediately, then rinse with water and mop dry.

**Ventilating Systems**

Step up cleaning, inspection and maintenance for all ventilating systems in the premises, including air outlets, air filters and fresh air inlets.

Keep the ventilating systems of the premises in full operation during business hours.

**Entrances & Exits**

Cleanse and disinfect facilities (including walls, floors, doors, handles, steps, staircases, handrails and notices) at least twice a day.

**Lobby & Tuck Shop**

Cleanse and disinfect facilities (including walls, floors, doors, steps, staircases, handrails, notices and ticket offices) at least twice a day.

If a tuck shop is provided, all the food and beverage must be stored and covered properly.

**Toilets**

Cleanse and disinfect facilities (including walls, floors, doors, steps, handrails, gratings, floor drains, sanitary fittings and ablution facilities) between each show.

Provide toilets with liquid soap and disposable tissue towels or hand dryers.

Chlorine tablets should be provided in the flushing cisterns at regular intervals.

**Seating Areas**

Cleanse and disinfect facilities (including walls, floors, doors, steps, staircases and handrails) at least twice a day.

Arrange for disinfestation by professional pest control contractors regularly.

**Staff and Audience**

All staff on duty should wear mouth masks.

Any staff member found suffering from respiratory tract illness should cease work immediately and consult a registered medical practitioner.

Proper containers should be provided for the audience and staff to dispose of the used masks and disposable tissue towels. The containers should be emptied and disinfected frequently.

**Food and Environmental Hygiene Department - April 2003**

### **(3) H1N1 (Swine Flu) 2009-2010**

- Mexico is a prime example of more austere measures. The Ministry of Health cancelled educational activities in the greater Mexico City area on April 24 and expanded these measures to the rest of the country on April 27. Additional social distancing interventions were implemented in the greater Mexico City area, including the closure of movie theaters and restaurants and the cancellation of large public gatherings. <https://www.nih.gov/news-events/nih-research-matters/flu-pandemic-study-supports-social-distancing>
- In Mexico, cinemas were closed for eleven days in April and May—causing losses for theater owners (estimates reached \$24 million). Further south in Argentina and Venezuela, where governments took less heavy-handed approaches, attendance may have wavered, but it was generally business as usual.
- On Aug. 13, Mumbai, India, schools and movie theaters closed.
- November: Ukraine is in virtual lockdown mode, with the government closing schools, universities and movie theaters and banning all public gatherings until the end of November.

### **(4) Wuhan Coronavirus 2019-2020**

Seven strains of Coronavirus are known to infect humans, including this new virus, causing illnesses in the respiratory tract. Four of those strains cause common colds. Two others, by contrast, rank among the deadliest of human infections: SARS, and Middle East respiratory syndrome, or MERS.

The new virus likely came from bats, scientists say. It's not known exactly where or how it jumped to humans, though. Health officials believe the outbreak originated in a large animal and seafood market in Wuhan, China. Of the first 41 cases, 27 had some exposure to that market, according to a report in the medical journal the Lancet. But three of the first four people to become ill, on Dec. 1 and Dec. 10, said they had no contact with the market.

- As of January 30, more than 9,200 infections were reported in China, with 213 deaths. There were 98 cases outside of China.
- The virus has a current mortality rate of about 2%. By comparison, the mortality rate of the SARS pandemic was 9.6%.
- Chinese authorities restricted travel from 17 cities – affecting at least 50 million people.
- 70,000 screens closed in China during Lunar New Year holiday
  - Box office for first Saturday reduced from \$200 million in 2019 to \$1.5 million in 2020.
  - 2019 New Year holiday box office totaled \$860 million

## **Countries with Confirmed 2019-nCoV Cases (as of 30 January 2020)**

China	Japan
Hong Kong	Malaysia
Macau	Nepal
Taiwan	Philippines
Australia	Sri Lanka
Cambodia	Singapore
Canada	Thailand
Finland	The Republic of Korea
France	United Arab Emirates
Germany	United States
India	Vietnam

## **Resources**

Centers for Disease Control <https://www.cdc.gov/flu/pandemic-resources/index.htm>  
CDC Business Pandemic Influenza Checklist <https://www.cdc.gov/flu/pandemic-resources/pdf/businesschecklist.pdf>  
CDC Business Overseas Pandemic Influenza Checklist <https://www.cdc.gov/flu/pandemic-resources/pdf/businesses-overseas-checklist.pdf>  
CDC Coronavirus Summary <https://www.cdc.gov/coronavirus/2019-nCoV/summary.html>  
CDC Community Mitigation Guidelines to Prevent Pandemic Influenza — United States, 2017 [https://www.cdc.gov/mmwr/volumes/66/rr/rr6601a1.htm?s\\_cid=rr6601a1\\_w](https://www.cdc.gov/mmwr/volumes/66/rr/rr6601a1.htm?s_cid=rr6601a1_w)  
CDC Pandemic Influenza Plan <https://www.cdc.gov/flu/pandemic-resources/pdf/pan-flu-report-2017v2.pdf>  
World Health Organization Novel Coronavirus Summary <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>