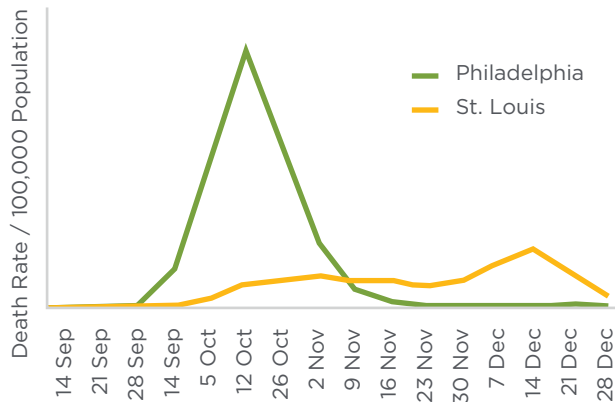# Lessons from the 1918 Flu Pandemic for Combating COVID-19

The influenza pandemic of 1918 showed how easily and rapidly a lethal virus can spread worldwide and how adapting everyday behaviors can sharply reduce its transmission. But in the twenty-first century, our world has changed significantly, making the response to a pandemic like COVID-19 just as tricky as it was a hundred years ago.

Precautions from 1918 Remain Effective Today

The 1918 influenza pandemic, sometimes referred to as the Spanish Flu, killed 50 to 100 million people worldwide.[1] (In current population terms that amounts to 220 to 440 million.) In the United States alone, the pandemic claimed an estimated 650,000 to 675,000 lives.

Two studies published in 2007[2,3] on the 1918 pandemic point to an extraordinarily successful tactic in slowing the flu's spread: social distancing. Researchers compared death rates in 43 U.S. cities during the pandemic's second wave and found that rates were about 50 percent lower in cities that took preventive measures early, versus cities that began later or not at all. Additionally, they found that relaxing preventive measures too soon could turn a stabilized area back into a hotspot.

Excess P&I Mortality Over 1913-1917 Baseline in Philadelphia and St. Louis, 1918 Influenza Pandemic "Second Wave"
(Image Credit: PNAS)

In the diagram above, after the initial outbreak, Philadelphia enforced preventive measures through the end of 1918 and did not experience a relapse. On the other hand, St. Louis, which did an impressive job initially, loosened precautions and saw a resurgence in cases.[4]

Obstacles to Flattening the Curve of COVID-19

Certainly, we've learned a lot from the 1918 pandemic, especially that a major behavioral change, social distancing, was highly effective in slowing the flu's spread. To combat COVID-19, public health experts also recommend new routines like wearing masks in public and frequent handwashing.

In the last century, though, the world has changed dramatically, complicating the fight against a pandemic, even with today's advancements in science and medicine.

The following factors are compounding our efforts to stop the spread of COVID-19:

- **Globalization:** Society is far more intertwined globally. And that has given the virus wings, enabling it to travel from one corner of the earth to the other in hours. While the first U.S. case was diagnosed in January in Washington state in a man who had visited Wuhan, an April study showed that travelers returning from early hotspots in Europe[5] may have already been infecting New Yorkers with the virus.

- **Inconsistent government policies:** A more global society means more travel (at least when countries began to relax their COVID-19 precautions). But inconsistent regulations across countries, states — and even town and city lines — makes even the simplest trip potentially dangerous.

- **Human behavior:** People's various reactions to COVID-19 precautions are difficult to predict. On one end of the spectrum are those who doubt the virus's severity or deadliness, while others strictly follow social distancing and other expert recommendations. But throughout human history, people have tended to cling to their core beliefs, even today when scientific evidence refutes those beliefs.

- **Viral behavior:** The peak mortality age of the 1918 pandemic was 28. COVID-19, though, mostly affects those over 65 with weaker immune systems and those with underlying conditions. The current pandemic reportedly has killed some children and otherwise healthy, young adults, as well as infecting at least one person a second time.[6] Most frightening of all, some spreaders of the virus never display symptoms.

- **Information security:** The explosion of information, its rapid transmission and more people working from home means businesses are subjected to more major disruptions in addition to COVID-19. Think IT outages that can hamstring operations, supply chains and customer service, as well as cyber-attacks that can expose an organization's sensitive IP and data.

- **Seasonal flu:** During the 2018-2019 season in the United States, 16.5 million people sought treatment for the flu and more than 34,000 people died, according to the CDC.[7] As COVID-19 continues into 2021, hospitals may become overloaded with patients with COVID-19 and the flu, leading to many more deaths. (And let's not forget the additional impact of natural disasters like hurricanes, wildfires and floods on communities already struggling with COVID-19.)

- **Other seasonal events:** Young children and young adults have returned to school and college. Evidence abounds that COVID-19 has flared up in schools in Georgia, Indiana[8] and Ohio.[9] And areas with declining case numbers became hotspots when businesses re-opened and after holidays such as Memorial Day, which led to spikes.[10] With the arrival of winter, people spend more time indoors, which accelerates the transmission of viruses.

How can we become more pandemic resilient?

First off, we must follow the recommendations of our public health experts. This means taking every precaution, including social distancing, face masks, handwashing and gloves for as long as public health experts deem necessary.

As organizational leaders, we must guarantee a secure workplace and the same level of safety even when employees' new offices are their homes.

At OnSolve, we're working closely with the business community to ensure it has the capabilities to provide the same level of security whether employees are working in the office, at home or on the road.

By applying the following principles, we can mitigate the risks of the current pandemic in our places of business:

- **Vigilance:** Use today's data collection and analysis and advanced technologies like AI and machine learning to determine threats from emerging hotspots. In near real time, you can cancel or postpone a critical business trip to a hotspot or help employees trapped in a hotspot by providing them with the latest information to sustain themselves while quarantining in an unfamiliar place.

- **Empathy:** Are employees that contract COVID-19 confident they will stil have a job if they get sick? If not, employees that self-diagnose or feel symptoms may attempt to circumvent screening systems. Additionally, factor in employees' fear that taking public transportation or returning to the office may infect them or their families. How much goodwill can you build if you take a step like alerting your employees to a flareup tracked to a subway station or commuter rail they use every day?

- **Accountability:** It's time to usher in a new era of organizational accountability. For some, the new normal may be working from home. For others, that isn't feasible, so it's imperative to develop new standard operating procedures for the office, store or shop floor. And as organizations, we can reinforce the importance of personal responsibility: Make employees aware of flareups and hotspots so they can protect their colleagues and customers and their families.

- **Screening:** Are there gaps in your screening process? Are you screening daily? Just because someone tests negative on Tuesday doesn't mean they can't contract the virus from a relative at home Tuesday night. And remember, COVID-19 is often transmitted by people who carry the disease but display no symptoms. Show your employees how much you value them by creating and spelling out your screening policy.

At OnSolve, we're working closely with the business community to ensure it has the capabilities to provide the same level of security whether employees are working in the office,

at home or on the road. Here's one example: We are helping our partners in the travel industry develop new and innovative tools as part of the OnSolve Critical Event Management Platform to provide more intelligent travel risk management. Additionally, we're helping our clients improve their mass notification systems to reach employees on any device, anywhere in the world.

With the OnSolve Platform for Critical Event Management™, your organization can quickly identify potential hotspots and implement contingency plans. You will be able to equip employees with information they need to stay safe and execute critical tasks, including contact tracing, traveler monitoring and travel validation in real time.

Contact us to learn more about how we can help your organization navigate COVID-19 with actionable intelligence to inform decision-making that can save time, money and lives.

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OnSolve delivers critical event management solutions designed to help enterprises, organizations and agencies of all sizes create the most successful outcomes when critical events occur. The OnSolve Platform for Critical Event Management combines leading risk intelligence, critical communications and incident management into one SaaS-based global portfolio. Our AI-powered platform is purpose-built to deliver fast, relevant and actionable intelligence, enable vital communications and allow response teams to react calmly and confidently.

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