## COVID-19: Responding with Data, Not Fear

Using Employee Benefits Data to Assess Risk



#### **OUR PURPOSE**

## Turn the world's health data into great healthcare everyone can afford.

**OUR APPROACH** 

We empower U.S. employers and their advisors to optimize health benefits using data.







#### **Today's Presenters**



Chris Savoie

VP of New Products



Rance Hutchings, Pharm.D

Chief Clinical Officer



Kim Stagner, RN

Nurse Case Manager, Clinical Support



Rachel Myrer, MPH

Healthcare Analyst



#### White House Guidelines for Opening Up America

	Phase 1	Phase 2	Phase 3
Social Distancing and PPE			
Temperature Checks and Sanitation			
Encourage Telework			
Special Accommodations for Vulnerable Populations			
Close Common Areas	<b>⊘</b>	<b>⊘</b>	
Minimize Non-Essential Travel			
Return to Work in Phases	<b>⊘</b>		

Source: <a href="https://www.whitehouse.gov/openingamerica/">www.whitehouse.gov/openingamerica/</a>





## Return to work philosophies

- Focus on preventative measures at work
- Allow individuals who are immune to go back to work



# Ending Isolation for Infected Employees

#### **Symptom-Based Strategy**

- 3+ days after resolution of fever without the use fever-reducing medications and improved respiratory symptoms
- 10+ days after symptoms first appeared

#### **Test-Based Strategy**

- Resolution of fever without the use fever-reducing medications **and** improved respiratory symptoms
- Negative results from two FDA approved tests collected more than 24 hours apart

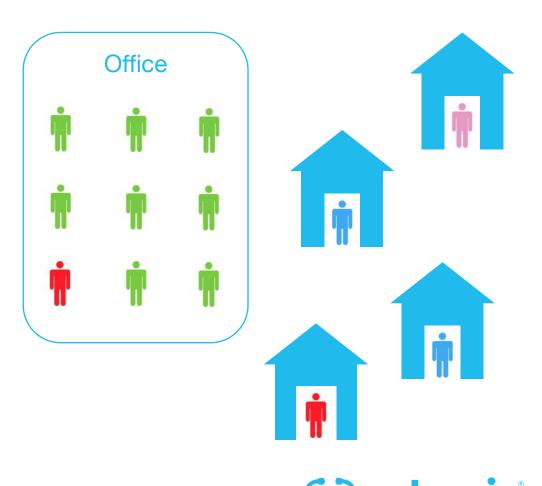
Source: <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html">https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html</a>



#### **Prevention**

# Office

#### **Immunity**



#### **COVID-19 Colliding with the Seasonal Flu**



"There's a possibility that the assault of the virus on our nation next winter will actually be even more difficult than the one we just went through," Redfield told the Post. "And when I've said this to others, they kind of put their head back, they don't understand what I mean."

"We're going to have the flu epidemic and the coronavirus epidemic at the same time," he added.

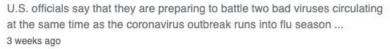


CDC director Robert R. Redfield seen April 16, 2020, in Washington, D.C.

This year's flu season is largely over, with CDC currently reporting <u>low flu</u> activity in the U.S. While influenza viruses circulate all year, flu season typically begins between fall and winter, and the peak lasts from December to February. The numbers vary from year to year, but during the 2018-2019 flu season, the <u>CDC estimated</u> 35.5 million people in the U.S. got sick with influenza, 490,600 were hospitalized and 34,200 died of the illness.

#### M CNBC

#### Dr. Anthony Fauci warns US could 'be in for a bad fall' if coronavirus treatments don't work





#### FOX Carolina

#### Another wave of coronavirus will likely hit the US in the fall Here's why and what we can do to stop it

Anthony Fauci during an Economic Club of Washington webinar earlier this week. Americans could be in for "a bad fall and a bad winter" if the ... 2 weeks ago



#### CM CNN

#### US could be in for 'a bad fall and a bad winter' if it's unprepared for a second wave of coronavirus, Fauci warns

(CNN) A second round of the coronavirus is "inevitable," the nation's top infectious disease doctor says, but just how bad it is will depend on the ... In-Depth  $\cdot$  3 weeks ago





## Viruses and Human Immunity

#### Viruses go inside healthy cells

An infected cell looks like a healthy cell

#### **Adaptive immunity**

Identifying new pathogens (like a virus) using antibodies

#### Preparing to immobilize them

- B cells incapacitate viruses outside cells (humoral immunity)
- T cells identify signs that a cell may not be a healthy cell → killing and engulfing the infected cell



#### Vaccine Approval Process



#### Before a Vaccine Goes to Market



#### **Pre-Clinical Trials**

Sponsor submits an Investigational New Drug (IND) application to the FDA

#### **Clinical Trials**

Phase 1: Safety and immunogenicity with a small group of closely monitored patients

Phase 2: Dosing range, usually with hundreds of patients

Phase 3: Effectiveness and side effects with thousands of patients

The FDA can halt the next trial if issues arise with the current trial



#### **Approval and Going to Market**



#### **Post-Clinical Trials**

- Submit a Biological License Application (BLA)
- Submit safety and efficacy data to the FDA for review and a risk/benefit analysis
- Facility undergoes pre-approval inspection
- Vaccine product labeling put forward

#### **Market Approval**

- Approved!
- X Denied



#### After a Vaccine Goes to Market



#### **Post-Market Monitoring**

VAERS (Vaccine Adverse Event Reporting System) where medical providers can report adverse events

#### **Clinical Trials**

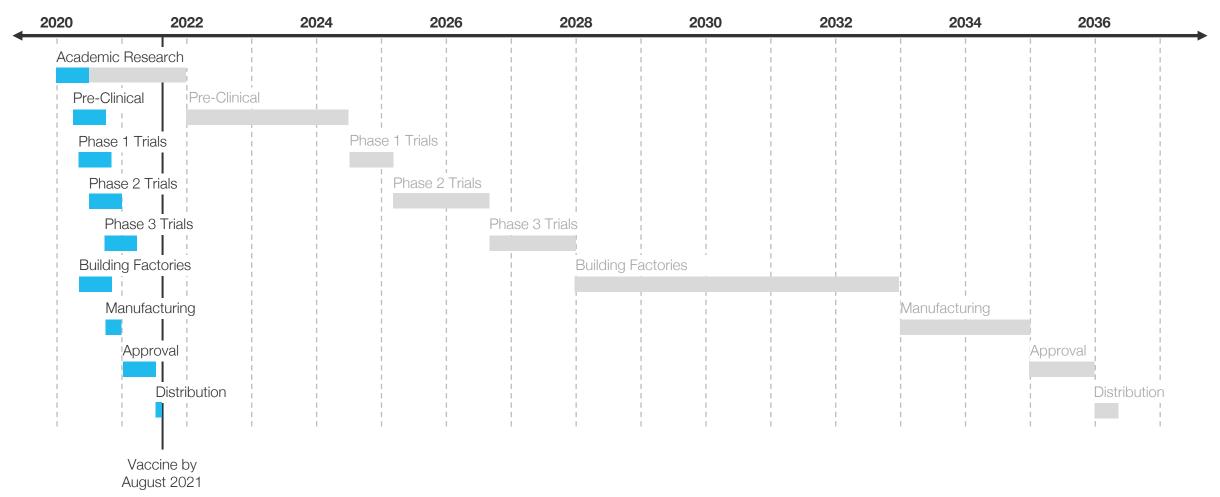
Phase 4: Continued trials to look for rare side effects that may not have been seen in phases 1-3

#### **Quality Control**

- Testing lots of vaccine for purity and dosing consistency
- Ensuring good manufacturing, cleanliness, etc.



#### **Timeline**



Source: <a href="https://www.nytimes.com/interactive/2020/04/30/opinion/coronavirus-covid-vaccine.html">https://www.nytimes.com/interactive/2020/04/30/opinion/coronavirus-covid-vaccine.html</a>



#### **Health Belief Model**

Rosenstock, Stretcher, and Becker - 1988

BACKGROUND

**PERCEPTIONS** 

**ACTION** 

#### SOCIODEMOGRAPHIC FACTORS

(e.g., education, age, sex, race, ethnicity)

#### **THREAT**

- Perceived susceptibility to condition
- Perceived severity of condition

#### **EXPECTATIONS**

- Perceived benefits of action vs. perceived barriers
- Perceived self-efficacy to perform action

#### **CUES TO ACTION**

Onsite vaccination clinics, free or reduced out of pocket costs, vaccination incentive, vaccination policy, provider recommendation, etc.

Behavior to reduce threat based on expectations



## **Immunization Strategy**

- Know your flu vaccination rates
- Provide easy access
- Dispel rumors and have an educational push
- Apply phasing to stratification



#### **Looking at Your Immunization Data**

See Artemis in Action





Knowing your population's flu vaccination rates could help you predict the number of employees who will receive a vaccine for the Coronavirus when it's available.

Please note, we are not suggesting people who receive a flu shot are immune to COVID-19



# Considerations for Employers and Advisors

- 1 Know thyself
- 2 Study your data and monitor trends
- 3 Identify populations at risk
- 4 Create a return to work plan
- 5 Educate and dismantle myths



#### Thank you!

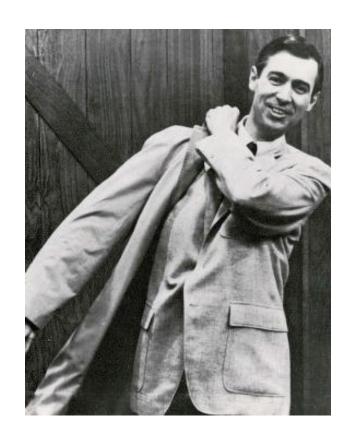


Learn more on our COVID-19 resources page at artemishealth.com/covid19



Join us June 9 - 11 for a three-part Return to Work series.





"In times of stress, the best thing we can do for each other is to listen with our ears and our hearts and to be assured that our questions are just as important as our answers."

- Fred Rogers



#### Q&A

Ask our experts your questions.



### Thank you.

