# DELAWARE RESPONSE TO THE COVID-19 PANDEMIC

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### TAKE A MOMENT

PREVENTING CHRONIC DISEASE

## Prevalence of Mindfulness Practices in the US Workforce: National Health Interview Survey

ORIGINAL RESEARCH — Volume 14 — January 5, 2017 Am score 107

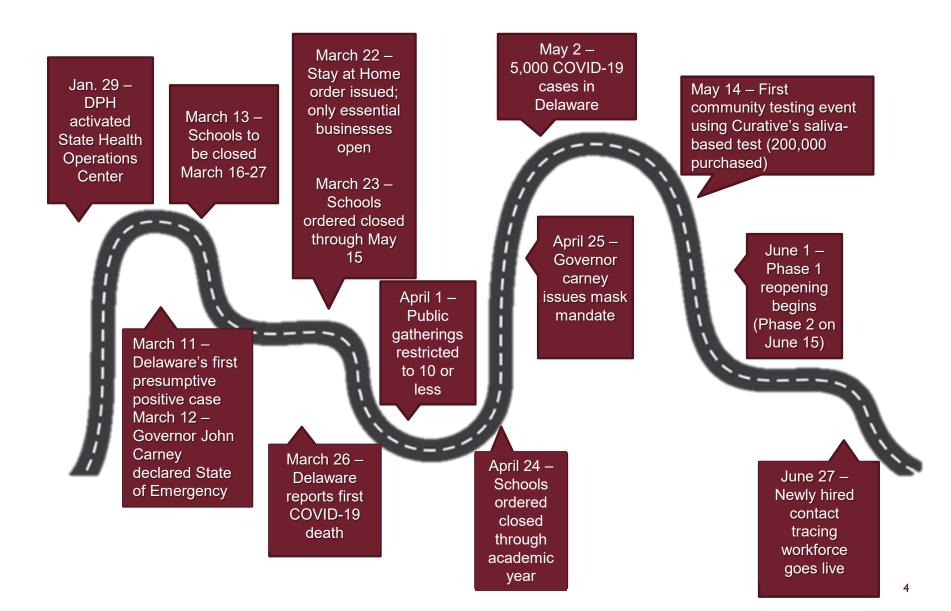
Diana Kachan, PhD¹; Henry Olano, MPH¹; Stacey L. Tannenbaum, PhD²; Debra W. Annane, MA²; Ashwin Mehta, MD, MPH²; Kristopher L. Arheart, EdD¹; Lora E. Fleming, MD, PhD³; Xuan Yang, MPH, MHS¹; Laura A. McClure, MSPH²; David J. Lee, PhD¹,² (View author affiliations)

Worker groups with low rates of engagement in mindfulness practices could most benefit from workplace mindfulness interventions.

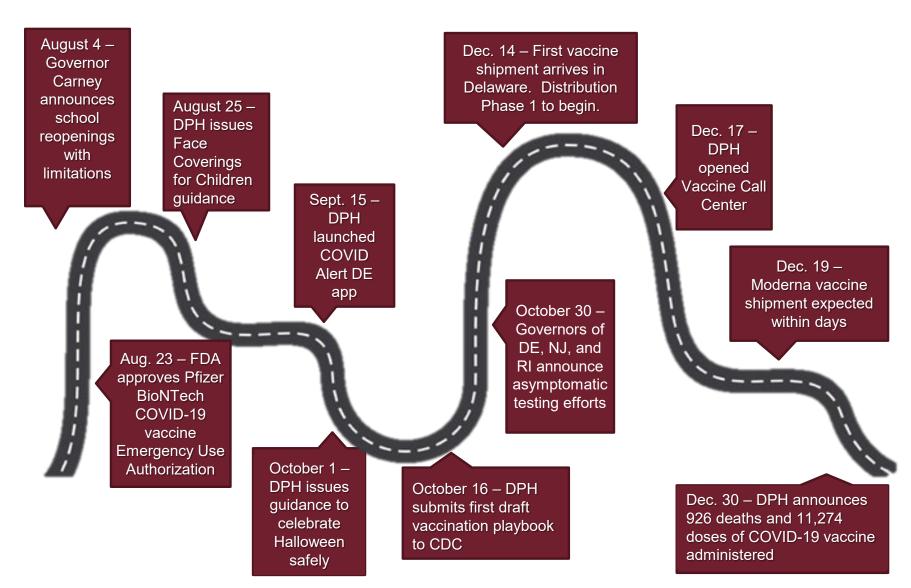
# TOPICS OF DISCUSSION

- COVID-19 Timeline
- Unique Pandemic Challenges
- Infection Control
- Diagnostics
- Vaccine
- Other Challenges (Communications, Law)

### Delaware's Coronavirus 2019 Response – Timeline 2020

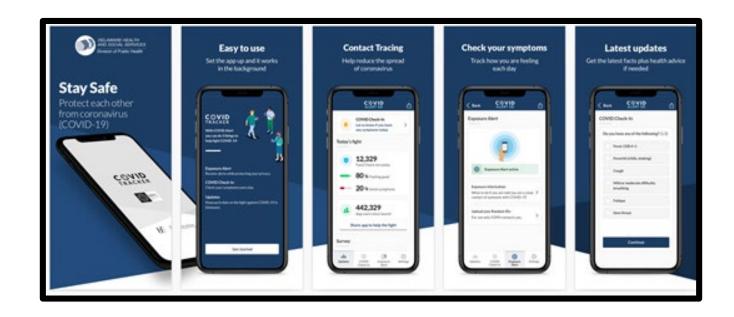


### Delaware's Coronavirus 2019 Response – Timeline 2020 (continued)





# COVID ALERT DE: EXPOSURE NOTIFICATION APP



# DPH UPDATED SURVEILLANCE SYSTEM'S CAPACITY TO BETTER MANAGE HOUSEHOLD EXPOSURES

New capacity allows a comprehensive review of household exposure details among multiple household members and provides functional capacity to track and manage quarantine recommendations.

Updated functionality to manage and alter quarantine periods based on up-to-date household contact tracing information allows epidemiologists to provide the most informed recommendations possible.

Epidemiology also updated their review process for breakthrough cases and hospitalizations, a previously very time consuming and manual task.

Keeps individuals and the general public safe



Review • Evolve • Strengthen processes and systems

### Scenes from 2020









# COVID-19 PANDEMIC IMPACT ON THE MEDICAL MARIJUANA PROGRAM

- Safety of industry employees
- Panic-buying leading to severe shortages (750 lbs to 0)
- Edibles progress stopped
- Long lines at Centers
- New product lines brought to market (vape / hash / R2R)
- Home delivery
- Online ordering and curbside pickup

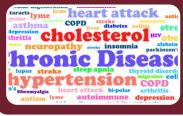


# CORE PUBLIC HEALTH PRIORITIES IMPACTED BY COVID-19



#### Comprehensive Cancer

- Incidence and Mortality
- Cancer Screening



#### Chronic Diseases & Associated Risk Factors

- Obesity/Overweight
- Diabetes & Prediabetes



#### Health Equity

- Social Determinants of Health
- Population Health

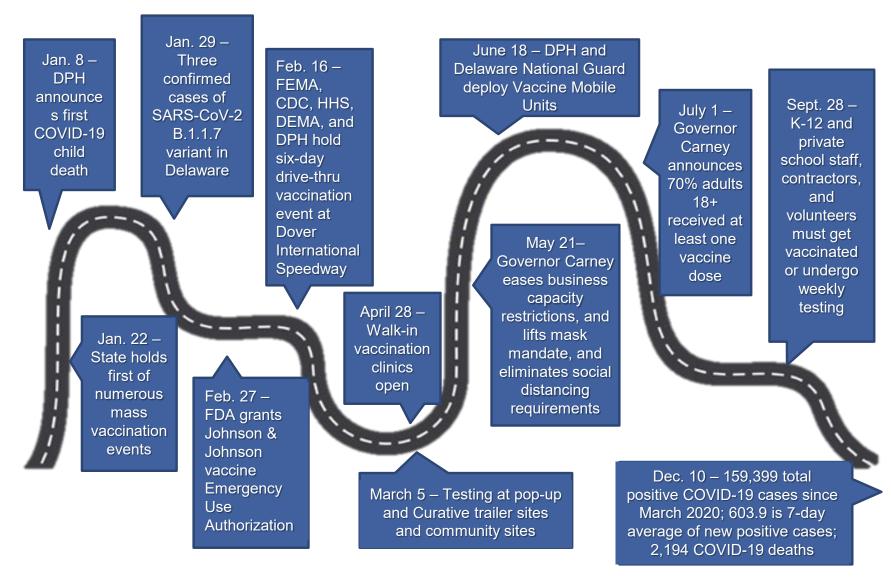
# Civil unrest





Relatively peaceful protests in Delaware

### Delaware's Coronavirus 2019 Response - Timeline 2021



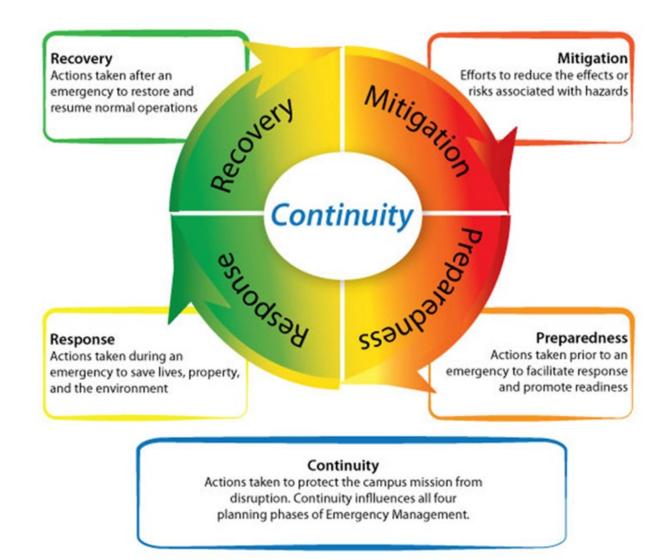
# CATEGORIES OF DISASTERS

- Natural
- Human System Failure
- War and Conflict





- Natural
- Chemical
- Biological
- Radiological/ Nuclear
- Trauma/ Explosives



# PANDEMIC CHALLENGES

- Worldwide impact
- Lack of specific therapeutics or interventions
- Length of time
- Number of victims/deaths



# ZOMBIE APOCALYPSE?



### ZOMBIE OUTBREAK

 Zombies often depicted as being created by an infectious virus, which is passed on via bites and contact with bodily fluids



- Zombies often depicted as being created by an infectious virus, which is passed on via bites and contact with bodily fluids
- Diagnosis "Ataxic Neurodegenerative Satiety Deficiency Syndrome"
- New virus or mutations of existing infections attributed to "outbreak"
- Zombies taking over entire countries, roaming city streets eating anything living that got in their way
- "How do I prepare for a zombie apocalypse?"

# SPECIFIC COVID-19 CHALLENGES

- Lack of knowledge of the infectious agent
- Limited critical resources

Level of pandemic preparedness



# CHANGING SCIENCE

- Transmission
- Asymptomatic spread
- Isolation/Quarantine
- Diagnostics
- Management



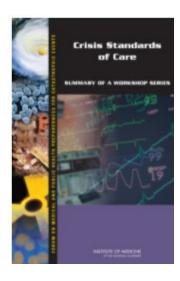


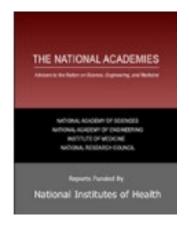




### CRISIS STANDARD OF CARE

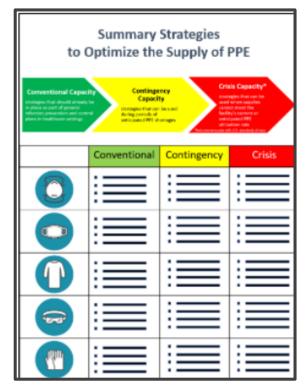
- "Guidelines developed before disaster strikes to help health care providers decide how to provide the best possible medical care when there are not enough resources to give all patients the level of care they would receive under normal circumstances." (IOM 2012)
- Need for specific legal/regulatory powers and protections for healthcare providers in the necessary tasks of allocating and using scarce medical resources and implementing alternate care facility operations





## **CONTINUUM OF CARE**

- Conventional capacity
  - Consistent with daily practices
- Contingency capacity
  - Not consistent with daily practices, but functionally equivalent
- Crisis capacity
  - Not consistent with usual standards of care, but sufficient in a catastrophic disaster



www.cdc.gov

# LIMITED RESOURCES

- PPE
- Therapeutics
- Hospital Beds
- Health Care Staff
- Oxygen
- Ventilators
- Vaccine



## SOME RESPONSE NUMBERS

107,769.6 hours worked at SHOC and the warehouse (March 2-August 28, 2020)

2,350 business complaints received (June 2-September 15, 2020)

33,994 calls and 20,698 emails answered by the Call Center
(March 4-September 11, 2020)

1,191 media inquiries (March 5-September 11, 2020)

1,962 PPE requests delivered to 1,107 facilities (Feb. 10-September 11, 2020)

Source: Division of Public Health, 9/15/20.

# MODULAR MEDICAL EXPANSION SYSTEM



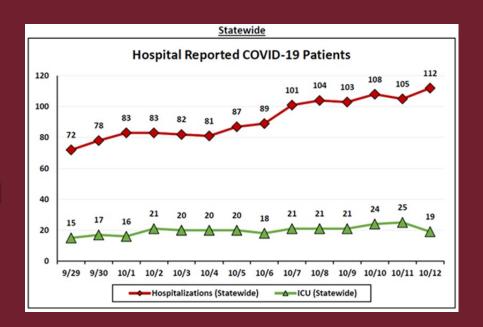
## HEALTHCARE SYSTEM SURVEILLANCE

# Hospitals

- Census
- ICU
- Patients/Ventilators
- COVID positive/suspected
- Staffing

### **EMS**

- Call volume
- "Syndromic" surveillance
- Responder exposures



## **Delaware Pandemic Influenza Summit**

February 21, 2006 – Dover Downs Conference Center 500 attended from health, business, education, and religious sectors



Vice Admiral Richard H. Carmona U.S. Surgeon General



Governor Ruth Ann Minner greets the press at the February 2006 Pandemic Influenza Summit at Dover Downs Conference Center. She is flanked by (L-R): Delaware Department of Agriculture Secretary Michael T. Scuse; Delaware Health and Social Services Secretary Vincent Meconi; Delaware Division of Public Health Director Dr. Jaime Rivera; Alex M. Azar II, Deputy Secretary of the U.S. Department of Health and Human Services; U.S. Surgeon General Richard Carmona; and Delaware Department of Safety and Homeland Security Secretary David B. Mitchell.

## INFECTION CONTROL

- Social Distance
- Masks
  - Respirator
  - Gaiter
  - Cloth
  - Layers
  - "Transparent"
  - Face Shields
- Hand Hygiene
- Ventilation
- Environmental Cleaning





## DIAGNOSTICS

- Polymerase Chain Reaction (PCR)
  - Nasopharyngeal
  - Oropharyngeal
  - Anterior nasal
  - Saliva
  - Oral fluid

- Rapid Antibody
  - IgM vs. IgG
- Rapid Antigen
  - Observed/Monitored
  - Over-the-counter

2,526,062 Tests 910,449 Persons



## **DPH PLANNING ACTIVITIES**

- Met internally and regularly with the Office of the Governor
- Trained Immunizations Program staff to utilize national vaccine tracking system
- Tabletop exercises
- Stakeholder meetings (Task Force & Communications Subcommittee)
- Ethics Advisory Group meetings
- Received dummy shipment from Pfizer
- Centralizing vaccine program staff
- Enrolling vaccinators in federal program



Mock vaccine delivery at DPH Warehouse, Dec. 11, 2020

# LARGE AND SMALL VACCINATION EVENTS STATEWIDE







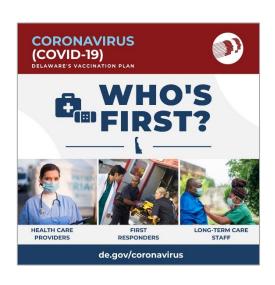




Photos by Sean Dooley and Sharon Smith, DPH.

# COORDINATING MESSAGING

### General messaging - social media graphics

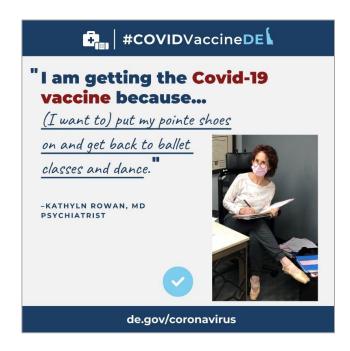






## **TESTIMONIALS**

Real Delaware health care and first responders with personalized reasons why they plan to get the vaccine





# RESOURCES/COLLATERAL MATERIALS

- Delaware COVID-19 website is de.gov/coronavirus
  - Sections for the public, providers, and organizations
- DPH's COVID-19 vaccine website is <u>de.gov/covidvaccine</u>
  - Vaccine Safety section
- My Healthy Community data includes vaccination data

myhealthycommunity.dhss.delaware.gov/





# NEXUS OF PUBLIC HEALTH AND LAW

- Law is a critical public health tool
- Law can be leveraged to help public health, or it can be a constraint that inhibits public health response.
- There are occasional tensions.



## PUBLIC HEALTH'S AUTHORITY

States have primary "police power" functions (10th Amendment).

### Public health powers:

- Surveillance and reporting
- Epidemiological investigations
- Vaccination
- Isolation and quarantine



# LAW AND POLICY FOR THE GOOD OF PUBLIC HEALTH

#### Mandatory public health actions to protect public health

- Clean Indoor Air Act
- Mandatory childhood lead testing
- Seatbelt requirements

#### Examples related to COVID:

- Shelter in place requirements
- Closing schools and daycare centers
- Prohibiting large gatherings
- Isolation and quarantine



# ENABLING STATUTES GRANT DHSS AUTHORITY



Delaware Health and Social Services (DHSS) has authority over:

- Many disease reporting and investigation duties
- Certain types of businesses

DPH used its statutory and regulatory authority to require:

- Reporting of all COVID-19 test results to DPH (March 2020).
- Reporting of demographic information to DPH (April 2020).

# LAW AND PUBLIC HEALTH USED TO CONSTRAIN INDIVIDUALS

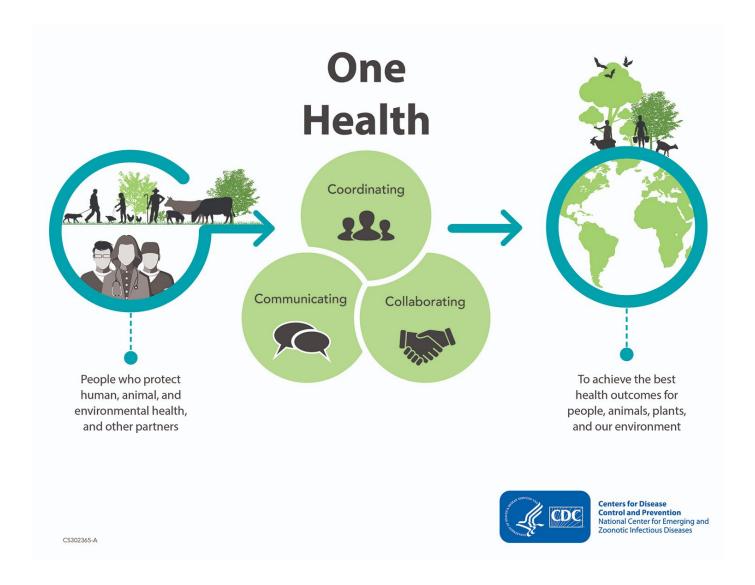
- Travel restrictions
- Isolation and Quarantine
- Fiscal liability
  - U.S. spent \$2.369 billion on Ebola in 2014-2015, including international response (CDC)



# PUBLIC HEALTH RESPONSE CONSTRAINED BY THE LAW

- Data privacy and security
  - Public Health Information
  - Delaware more stringent than HIPAA
- Enforcement
- State/Federal Tensions





## **THANK YOU**

Delaware COVID-19 website de.gov/coronavirus

Delaware flu website flu.Delaware.gov

Delaware Health Alert Network online registration system healthalertde.org/

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