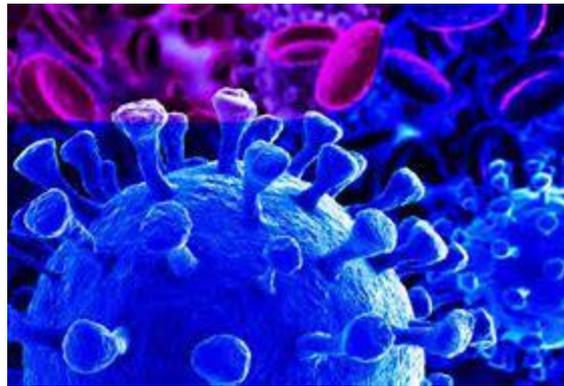


COVID-19 Update for Employers ***Understanding the Epidemic*** ***& Practical Recommendations***



April 2020

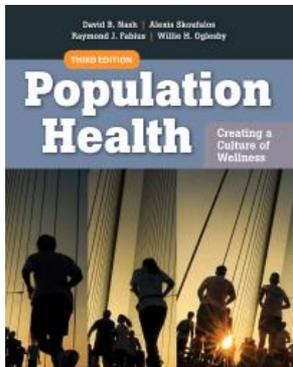
Proprietary & Confidential
All Rights Reserved



Ray Fabius MD

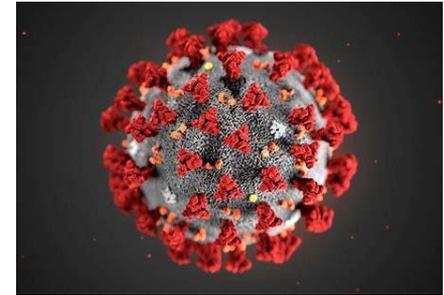
Medical Adviser to the GPBCH

- Over 25 years of medical management experience with Thomson Reuters, GE, Walgreens, Aetna, Cigna and others
- Served as front line primary care physician for over a decade
- Published articles, book chapters and five books
- Adjunct Faculty – Harvard, Jefferson, ACOEM
- Distinguished Fellow & Faculty Member of American Association of Physician Leadership
- Co-founder of HealthNEXT
 - Emerging Leader in building organizational cultures of health



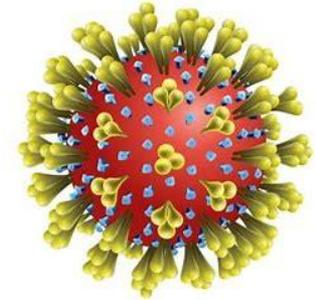
COVID-19 Emergence

- Identified in Wuhan China – December 2019
- Caused by the virus SARS-CoV-2
- Early on many patients were reported to have link to large seafood and live animal market
- Later patients had no exposure to animal markets indicating person to person transmission
- Travel-related cases reported – 1st US case 1/21/2020
- CDC is reporting confirmed COVID-19 cases in the US online at www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html



COVID-19 How It Spreads

Most Important Points



- **Person to person contact**
 - Sneeze or cough;
 - respiratory droplets can travel a few feet
 - **THIS IS THE REASON FOR DISTANCING**
 - Touch infected person / Hand-shake
 - Then touching mouth, eyes, or nose thereafter
 - **DO NOT TOUCH YOUR FACE**
- **Touch surface with live virus**
 - Then touching mouth, eyes, or nose thereafter
 - **WIPE DOWN COMMON SURFACES FREQUENTLY**

COVID-19 Symptoms

Reported illnesses have ranged from mild symptoms to severe illness and death for confirmed coronavirus disease 2019 (COVID-19) cases.

The following symptoms may appear 2-14 days after exposure.*

- Fever
- Cough
- Shortness of breath



COVID-19 Symptoms

Reported illnesses have ranged from mild symptoms to severe illness and death for confirmed coronavirus disease 2019 (COVID-19) cases.

The following symptoms may appear 2-14 days after exposure.*

- Fever
- Cough
- Shortness of breath

Additional Symptoms

- Nausea
- Diarrhea
- Dizziness
- Loss of Taste
- Loss of Smell
- Rapid Heart
- Bone Pains
- Pink Eye



CDC Recommendation

COVID-19 Suspected Patients



Call your doctor if you...

Develop symptoms, and have been in close contact with a person known to have COVID-19

OR

Have recently traveled from an area with widespread or ongoing community spread of COVID-19.

CDC Recommendation *COVID-19 Prevention*

- Wash hands for 20 seconds with soap & water
- Use alcohol based hand sanitizer with at least 60% alcohol if soap & water are not available
- Avoid touching eyes, nose, mouth with unwashed hands
- Avoid contact with people who are sick
- Stay home if you are sick
- Cover your cough or sneeze with a tissue and then rapidly dispose of it
- Clean & disinfect commonly touched objects or surfaces

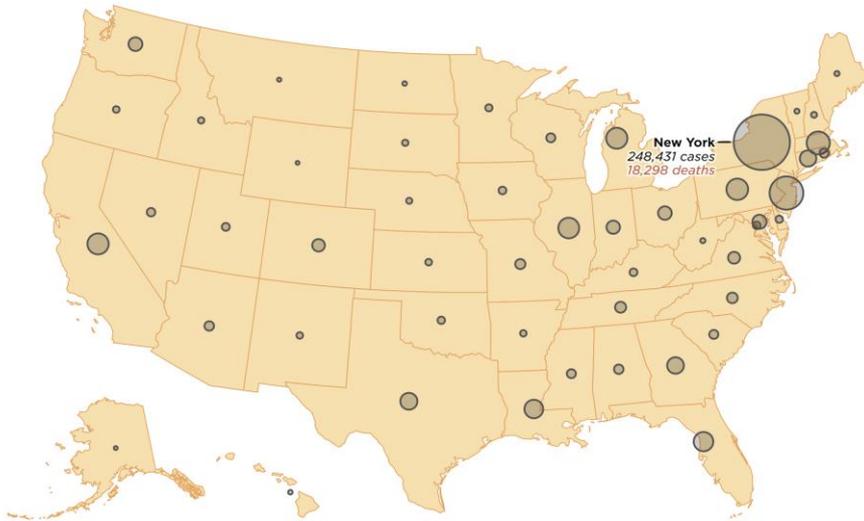


CDC Recommendation *COVID-19 Travel Restrictions*

- **Destinations with Risk of Community Spread of Coronavirus:**
- **Level 3 – Much of the World**
 - China
 - Iran
 - Europe (Schengen Area): Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Monaco, San Marino, Vatican City
 - United Kingdom and Ireland: England, Scotland, Wales, Northern Ireland, Republic of Ireland



Domestic Spread



Source: Center for Systems Science and Engineering at Johns Hopkins University. Cases on cruise ships are not included.



CDC Issues Domestic Travel Advisory for New York, New Jersey, and Connecticut

The CDC urges residents of New York, New Jersey, and Connecticut to refrain from non-essential domestic travel for 14 days effective immediately. This Domestic Travel Advisory does not apply to employees of critical infrastructure industries, including but not limited to trucking, public health professionals, financial services, and food supply. These employees of critical infrastructure, as defined by the Department of Homeland Security (<https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce>) have a special responsibility to maintain normal work schedule. The Governors of New York, New Jersey, and Connecticut will have full discretion to implement this Domestic Travel Advisory.

CDC Recommendation COVID-19 Treatment

- Similar to common flu
 - Get flu vaccine annually
 - Supportive – **rest, analgesics, fluids**
 - Contact PCP if illness worsens – short of breathe
- Hospitalization
 - Those with respiratory distress



GAME CHANGERS (Phase III)

- Antivirals
 - Many research protocols – meta-analysis
- Vaccines
 - Human Trials Beginning
- Antibody Production
 - Under research protocols
- Serologic Testing
 - Only a few weeks away but accuracy may be an issue

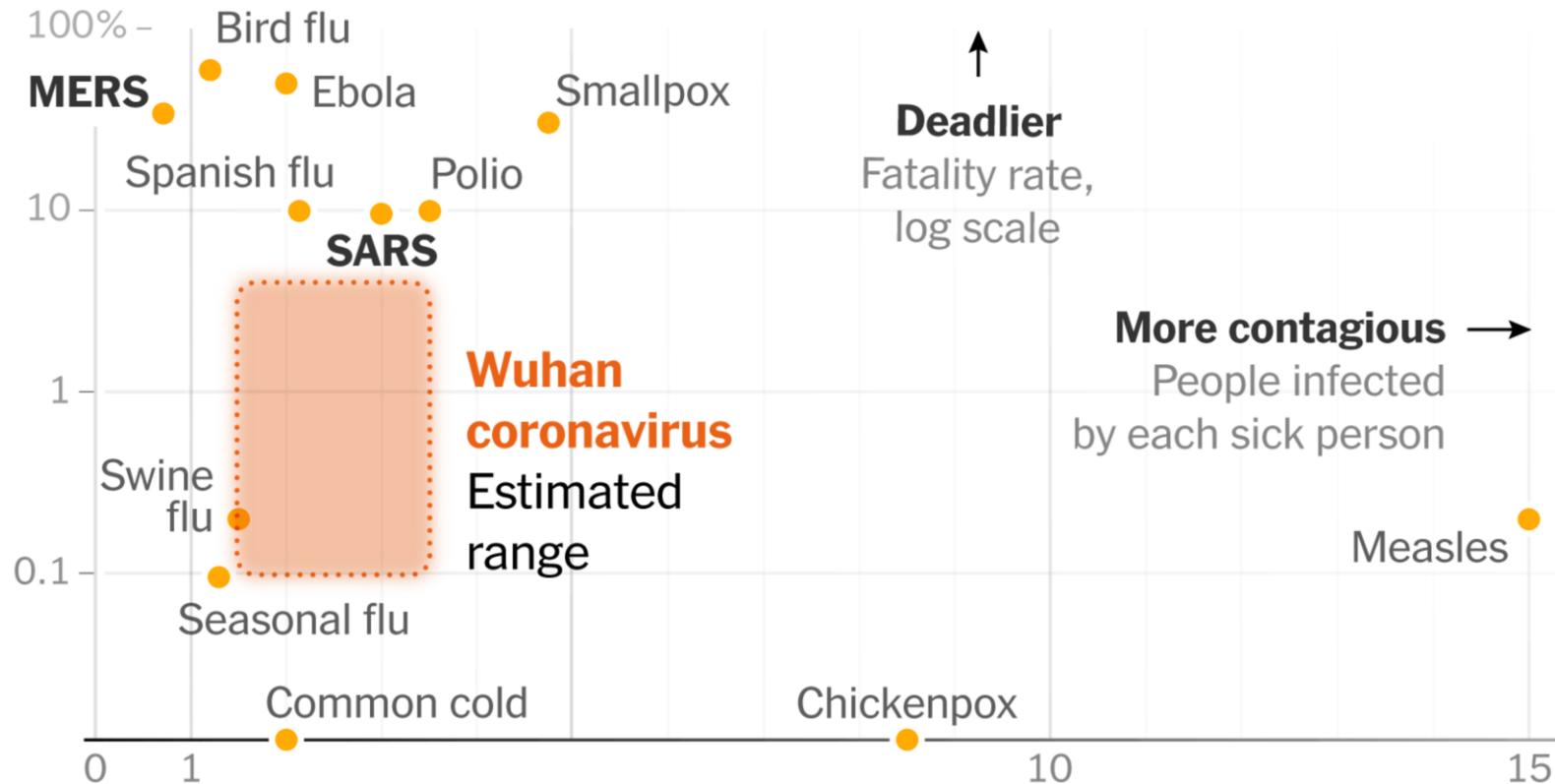


Testing

- Nasal Swabs – identify presence of virus in back of nose
 - Two separate negatives suggest end
- Antibody Testing
 - Gold standard – vial of blood – takes time
 - Rapid test – a drop of blood – quick result
 - Biggest concerns – FALSE POSITIVE & Inference of Immunity

COVID 19

Compared to Other Epidemic Viruses



COVID-19 versus Influenza

The Lessons We Learn Apply to Both

COVID-19

- Over 2.4 Million cases globally
- Causing significant illness in 20%
- 167,500 deaths globally
- US confirmed cases over 750,000
- US over 40,000 confirmed cases who have died
- All 50 States reported cases
- Incubation period 1-14 days
- At greatest risk: people 65 years and older, people of any age with certain chronic medical conditions (such as asthma, diabetes, or heart disease),

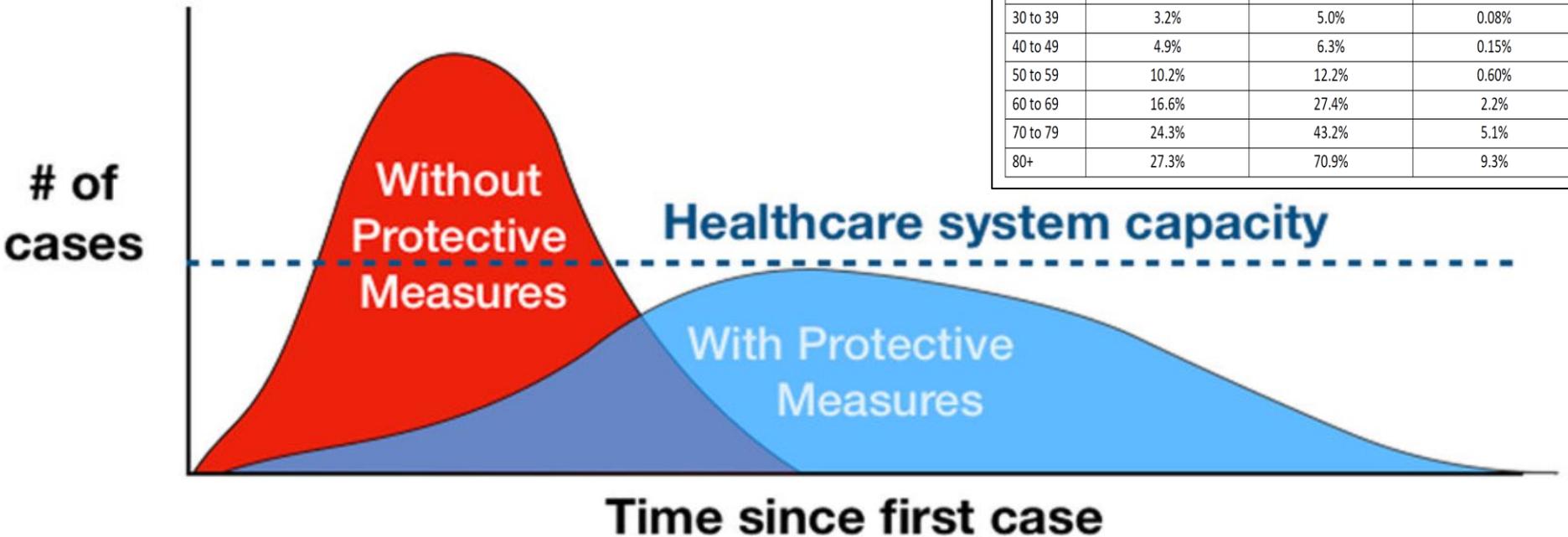
INFLUENZA

- 3-5 Million with severe illness globally
- 290,000-650,000 respiratory related deaths globally each year
- US confirmed cases 39-55 Million
- US flu-related deaths 24-60,000
- Incubation period 1-4 days
- At greatest risk: people 65 years and older, people of any age with certain chronic medical conditions (such as asthma, diabetes, or heart disease), pregnant women, and children less than 5

Flattening the Curve May Save One Million Lives

Table 1: Current estimates of the severity of cases. The IFR estimates from Verity et al.¹² have been adjusted to account for a non-uniform attack rate giving an overall IFR of 0.9% (95% credible interval 0.4%-1.4%). Hospitalisation estimates from Verity et al.¹² were also adjusted in this way and scaled to match expected rates in the oldest age-group (80+ years) in a GB/US context. These estimates will be updated as more data accrue.

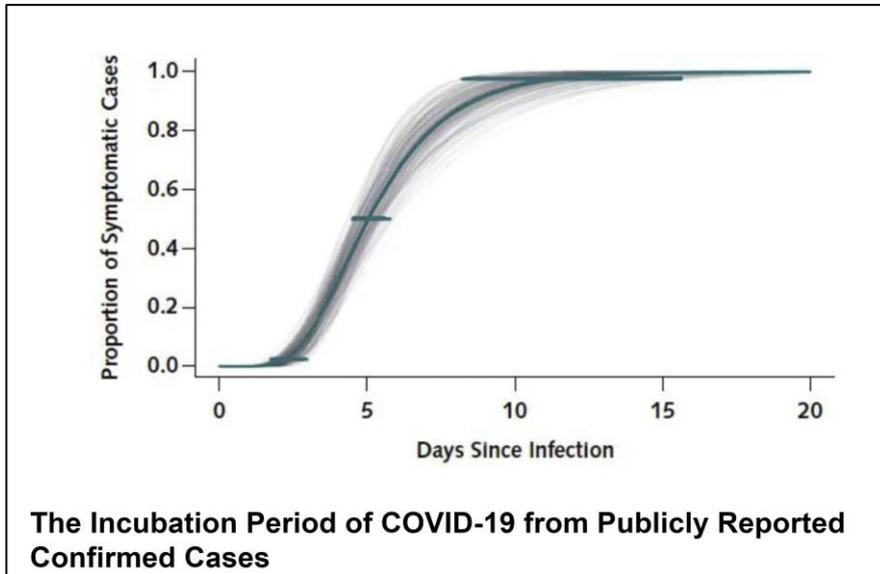
Age-group (years)	% symptomatic cases requiring hospitalisation	% hospitalised cases requiring critical care	Infection Fatality Ratio
0 to 9	0.1%	5.0%	0.002%
10 to 19	0.3%	5.0%	0.006%
20 to 29	1.2%	5.0%	0.03%
30 to 39	3.2%	5.0%	0.08%
40 to 49	4.9%	6.3%	0.15%
50 to 59	10.2%	12.2%	0.60%
60 to 69	16.6%	27.4%	2.2%
70 to 79	24.3%	43.2%	5.1%
80+	27.3%	70.9%	9.3%



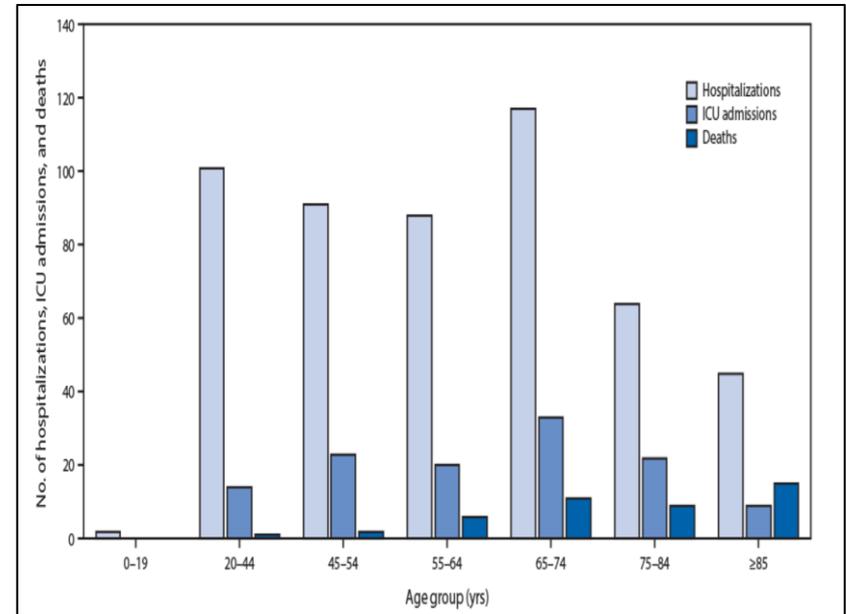
Adapted from CDC / The Economist

The Science Behind Re-opening

Incubation Period & Impact by Age Band



Incubation Period

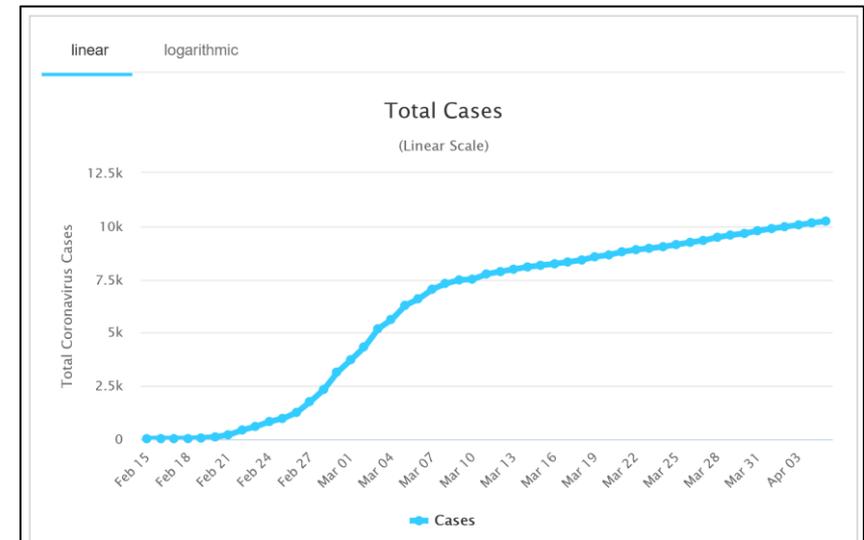


Illness Impact by Age Band

What we learned from South Korea

A Case Study

- Early massive testing
 - Now producing 100,000 / day
 - 40 times more testing than US
 - Drive by screening (600 centers)
 - Active contact tracing of all positive cases
 - No cost for testing
- Directed communications
 - Cellphone alerts at community level
 - Websites / apps reported on whereabouts of + cases
 - Self-quarantine with oversight
- Public response
 - Confidence high, panic low, hoarding rare
- 10,674 cases
- 236 deaths
- Fatality rate roughly 2%
- 8114 recovered



What we learned from the Diamond Princess

A Case Study

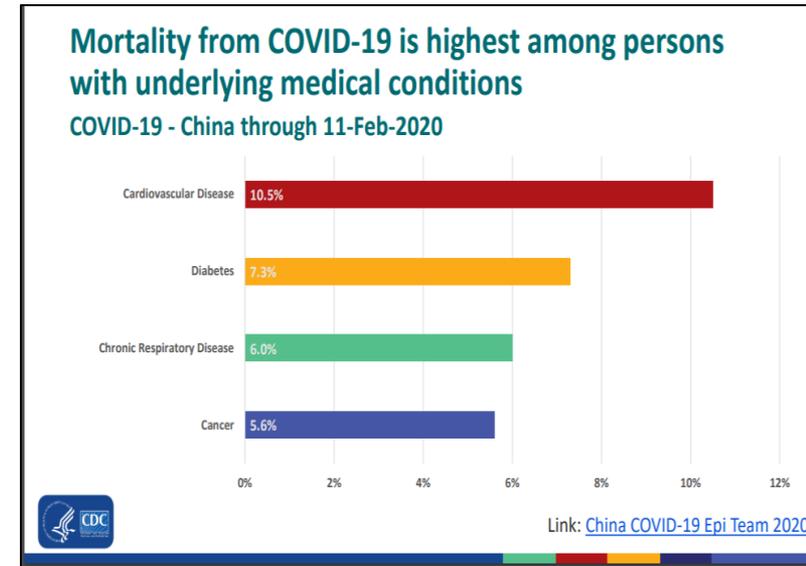
- Infection Rate roughly 20%
 - 800 of 3700 tested positive
- Many asymptomatic carriers
 - 46.5% of infected were asymptomatic when tested
- Fatality rate = 1.25%
 - 10 people died from the outbreak = 1% fatality rate
 - At least 4 times greater than influenza



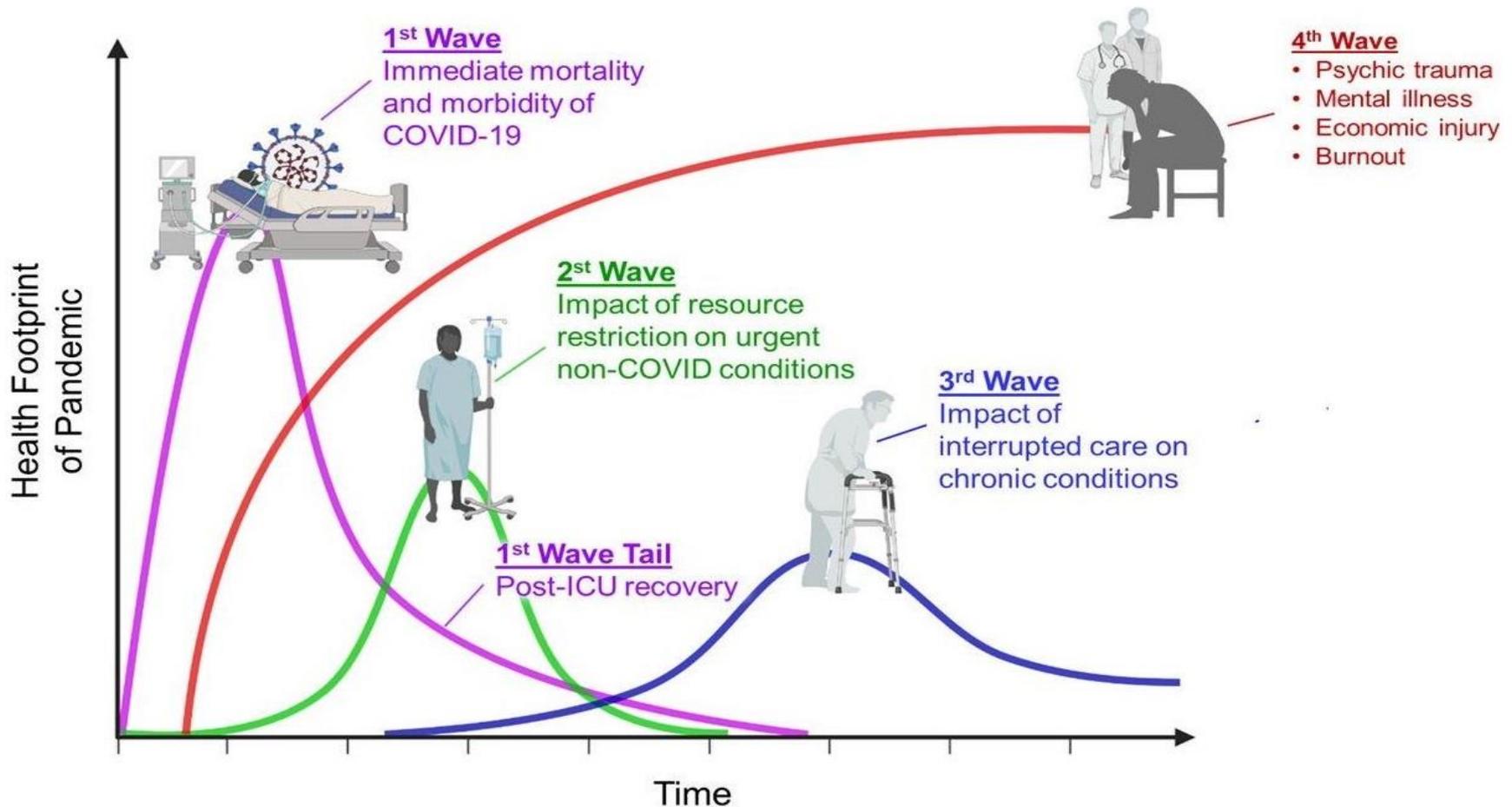
An opportunity *Reinforce Health & Wellbeing*

Your baseline health determines your outcome with COVID 19

- Do you have risk factors that you are not working on?
 - **Smoking** – 3 reasons for greater risk
 - Easier to become infected
 - Can contribute to the impact on lungs
 - Increases likelihood of COPD / Heart Disease
 - **High Cholesterol**
 - Heart disease makes it harder to respond to COVID 19
- Do you have a chronic disease that is not under control?
 - **Hypertension**
 - **Diabetes**



Foot print of Pandemic



Roadmap to Re-Open Strategies

- Target those infected (Containment)
 - Requires adequate testing / surveillance
- Reduce need for whole population (Mitigation)
- Track Covid 19 at county & state level
 - Local business level decisions will need to be made
- Communicate with public health at county level
- Those over 60 and those with chronic conditions sequestered
- All workplace mitigation efforts should be maintained

Roadmap to Re-Open Requirements at business community level Return to containment

- 14 days (1 incubation period) of sustained reduction in cases
- Local hospitals can accommodate patients
 - No longer stretched for resources and beds
- Testing in place for all with Covid 19 symptoms
- Contact tracing in place for all positive cases
 - Case management capabilities
- Adequate PPE for healthcare personnel

Best Practices

- Negotiated return to work strategic plan
- Daily Information Therapy
- Create Pods / Staggered shifts - to limit cross infection
- Maintain workplace practicing
 - Hand sanitizers / Tissues
 - Wipe down common surfaces
 - Physical distancing
- Tracking at the local level
- Entrance clearance for all
- Understand the age band distribution of workforce
- Attending to acute, chronic, mental and financial stress
- On-site health coaches, ergonomists, EHS, clinics
- Exploring testing options

Providing Practical Guidance

What Employers Should Have Done Already

- Appoint a leader and team** within your organization for a Coronavirus response and to ensure a coordinated and consistent plan across enterprise
- Provide updated information to employees about the symptoms of COVID-19, affected areas and what they can do to prevent illness (**Information Therapy**)
- Eliminate financial barriers for COVID-19 testing & treatment**
- Consider closing all non-essential worksites
- Begin to disinfect common workplace areas – cafeterias, rest rooms, elevators, stairwells – at least twice daily in remaining sites
- Prop doors open to prevent need to use door knobs
- Liberally place tissues and hand sanitizers throughout workplace
- Consider dispensing pocket sized hand sanitizers to employees on a frequent basis where and when available
- Place signage in all bathrooms directing correct hand washing
- Review business-related travel itineraries for employees, and in particular consider whether any travel is necessary especially for those who are older and / or with chronic conditions
- Encourage that all covered lives have an established relationship with a **primary care practitioner** and **get an annual flu vaccine**

Providing Practical Guidance

What Employers Should Do Now

- Maximize resources for **telework** where viable
- Eliminate co-pay for **Tele-medicine** visits
- Cross train** personnel on essential functions and review business continuity plans
- Create an **infectious disease outbreak plan**.
- Create **work pods or groupings** at the lowest number possible; stagger shifts...
- Create guidance for the **screening of all workplace contractors and guests**
- Review and adjust as appropriate sick leave or accommodation requests from employees – inform employees of any revisions
- Establish approach to employees who are not allowed in the office due to exposure or symptoms, communicate whether he or she will be paid or, rather, whether he or she can use sick, vacation, or any other type of paid leave.
- Work with employees facing travel restrictions and visa renewal issues
- Determine if additional obligations are imposed on your workplace by HIPAA's Privacy Rule.
- Assure that your policies and practices meet pertinent OSHA (and CDC) standards, especially for health care employees when blood-borne pathogens may be present.
- Consider whether there are any issues that need to be addressed with the employees' bargaining representatives and whether there are any provisions in the company's collective bargaining agreements that may require amendments

Providing Practical Guidance *What Employers Should Do Next*

- ❑ Consider merits of having a **Chief Medical Officer / Clinical Adviser**
 - ❑ Even small companies should have someone on retainer
- ❑ Establish process to **contact public health** if necessary
- ❑ Establish policy for **those who had COVID 19 to return to work**
- ❑ Understand the distribution of the **age bands** of your workforce
- ❑ **Establish plan for re-opening closed offices** – serologic positive when available; perhaps under 40 in the next few weeks after curve flattens
- ❑ Determine on-going payment status of workforce with sensitivity to employee financial health
- ❑ Educate leaders, managers and employees about Coronavirus-19 and on the company's planned response. (**Consider required module**)
- ❑ Provide continuous information updates to the workforce regarding the pandemic & your company's response (**Information Therapy**)
- ❑ **Track the incidence rate in the counties** where your workplaces & workforces reside
- ❑ Establish a pathway to **stay current** on the latest clinical recommendations on testing & treatments for COVID 19

