



Novel Coronavirus: Lessons from the Front Lines Webinar

March 11, 2020



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Welcome



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CHA Coronavirus Response

- We have a team working around the clock to advocate at the federal and state levels, to coordinate with local health officers, and to communicate with all of you so you have the latest information.
- We are posting the latest guidance on our Coronavirus Watch website: <https://www.calhospital.org/education-event/coronavirus-watch>
- We also are sending this information out via email. If you would like to be added, please email your signature block to Christina Devi at cdevi@calhospital.org and request to be added to our Coronavirus Watch distribution.

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Continuing Education

Continuing education will be offered for this program for health care executives and nursing.

Full attendance and completion of the online evaluation and attestation of attendance are required to receive CEs for this webinar. CEs are complimentary and available for the registrant only.

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Faculty



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CHA Staff



Mary Massey
Vice President, Emergency
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Vice President, Legal Counsel

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CoVID-19

Francesca J. Torriani, MD, FIDSA
Program Director Infection Prevention and Clinical
Epidemiology UC San Diego Health
Division of Infectious Diseases and Global Public Health

A high-power view
of the COVID-19
epidemic
(pandemic) and
mitigation strategies
for healthcare
systems

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What is this COVID-19?

COVID-19 is a new respiratory virus first identified in Wuhan, Hubei Province, China.

Many of the patients in the outbreak in Wuhan, China had frequented a large food market near the station.

COVID-19 is a zoonotic virus. From the phylogenetics analyses undertaken with available full genome sequences, bats appear to be the reservoir of COVID-19, but the intermediate host has not yet been identified.

Evidence of efficient and sustained person to person spread without identifiable epidemiological risk factor in 115 countries and territories around the world.

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How is COVID-19 transmitted?

2019-nCoV appears to spread similarly to influenza or other respiratory viruses.

Person-to-person spread occurs mainly via small respiratory droplets produced with cough or sneezes and contact with fomites.

The infectious droplets are either inhaled or they get on the hands by touching contaminated surfaces and then are spread by contaminated hands.

Spread of COVID-19 is very effective with a basic reproduction number, R_0 (expected number of secondary cases produced by a single infection in a completely susceptible population) of 2-2.5.

High attack rate in household contacts (3 to 10%), lower for close contacts (0.45%).

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Transmissions in healthcare

- In China, 2055 healthcare workers were infected with COVID-19
- Most were identified early in the outbreak in Wuhan when supplies and experience with the new disease was lower.
- Investigations suggest that many HCW were infected within the household rather than in a health care setting.
- Only 246 of the total 2055 HCW cases occurred outside of Hubei.
- Most of these exposures were traced back to a confirmed case in a household.

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Symptoms of COVID-19

- Median incubation period is estimated at 5 days (1-14 days, 97.5% of those who develop symptoms appeared to do so within 11.5 days of infection).
- Infectivity could be present before symptoms appear.
- Reported illnesses have ranged from mild to moderate disease (80%), 13.8% with severe disease, and critically ill (6.1%) with respiratory failure and death.
- Symptoms include:
 - Fever (87.9%)
 - Dry cough (67.7%)
 - Shortness of breath (18.6%)
 - Sore throat, headache, myalgia, chills (11-14%)
 - N/V 5%, nasal congestion (3.7%)

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Mortality rates As of 3/10/20

Inclusive of China, 4,027 deaths worldwide out of 114,430 COVID-19 cases: 3.52%
In Europe, 716 deaths out of 18,357 lab confirmed cases of COVID-19: 3.90%
In the US, 31 patients died out of 1015 patients: 3.31% (22 patients from Kirkland, Washington)

2002 SARS: 774 deaths in 8098 confirmed cases: 9.6%

Current influenza season: estimated 16,000 to 41,000 deaths in the US.
In past years, 0.1% to 2.5%

Suggests that this coronavirus is associated with overall mortality lower than SARS and higher than seasonal influenza

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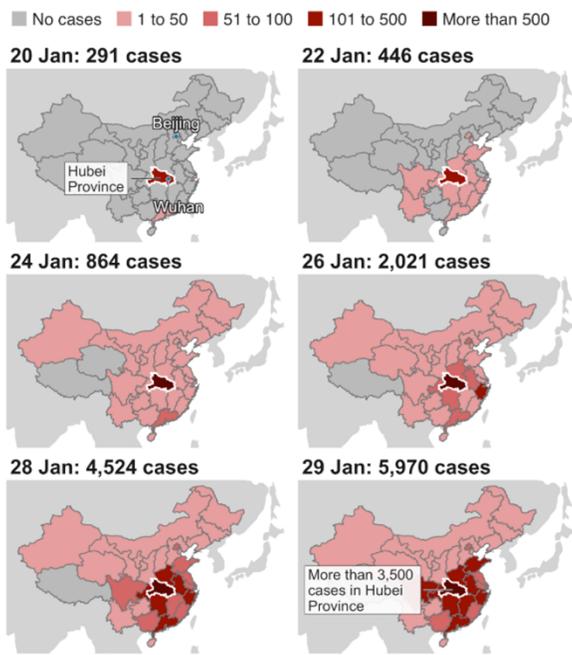
COVID-19 Lethal to whom:

- Higher fatality rates in older patients and those with medical comorbidities (diabetes, morbid obesity, cardiovascular, lung, liver, renal disease).
- In China, men > women, likely tied to heavy tobacco use and underlying pulmonary disease
- Higher fatality rates in challenged healthcare systems or in populations with underlying respiratory diseases
- Children (<18 years) only represented 2.4% of the population infected and only 0.2% developing critical disease.

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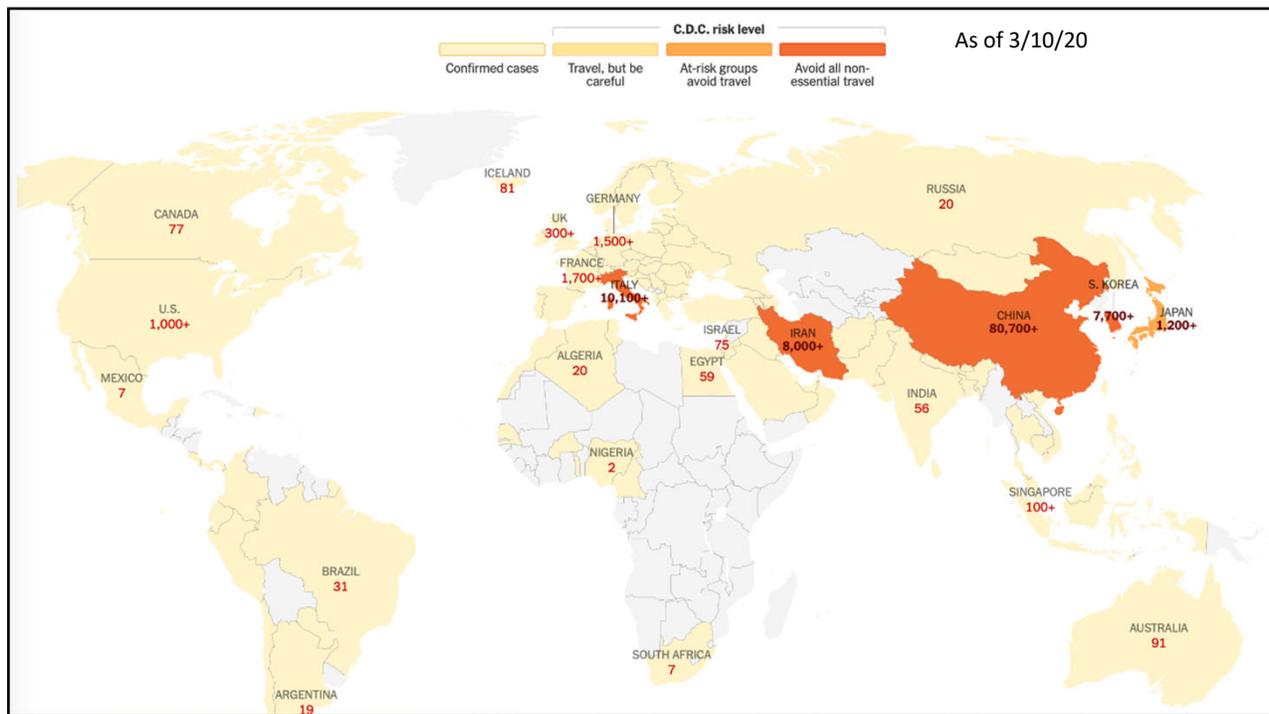
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How the virus has spread in China



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CDC Travel advisories as of 3.1.20

Widespread sustained (ongoing) transmission and restrictions on entry to the United States

CDC recommends that travelers avoid all nonessential travel to the following destinations. Entry of foreign nationals from these destinations has been suspended.

- China ([Level 3 Travel Health Notice](#))
- Iran ([Level 3 Travel Health Notice](#))

Widespread sustained (ongoing) transmission

CDC recommends that travelers avoid all nonessential travel to the following destinations:

- South Korea ([Level 3 Travel Health Notice](#))
- Italy ([Level 3 Travel Health Notice](#))

Sustained (ongoing) community transmission

CDC recommends that older adults or those who have chronic medical conditions consider postponing travel to the following destinations:

- Japan ([Level 2 Travel Health Notice](#))

Limited community transmission

Travelers should practice usual precautions at the following destination:

- Hong Kong ([Level 1 Travel Health Notice](#))

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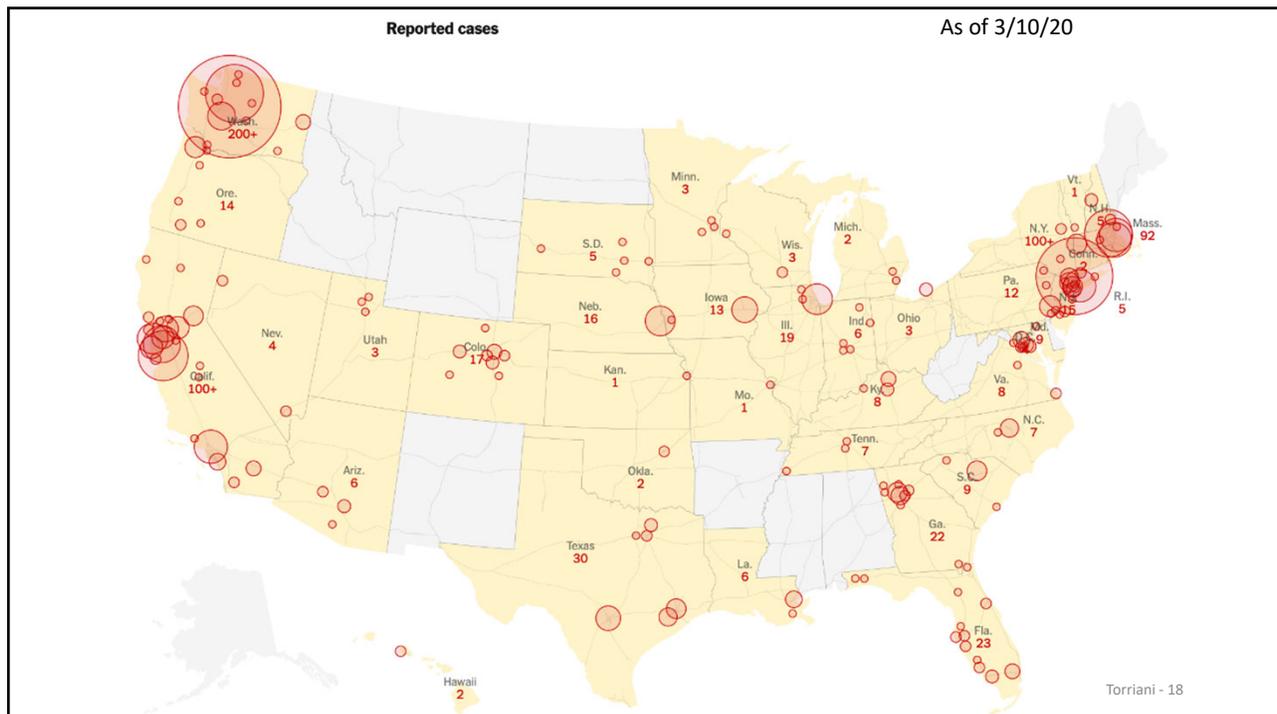
Stay home for 14 days from the time you left an area with widespread, ongoing community spread (Level 3 Travel Health Notice countries) and practice social distancing.

Take these steps to monitor your health and practice social distancing:

1. Take your temperature with a thermometer two times a day and monitor for fever. Also watch for cough or trouble breathing.
2. Stay home and avoid contact with others. Do not go to work or school for this 14-day period. Discuss your work situation with your employer before returning to work.
3. Do not take public transportation, taxis, or ride-shares during the time you are practicing social distancing.
4. Avoid crowded places (such as shopping centers and movie theaters) and limit your activities in public.
5. Keep your distance from others (about 6 feet or 2 meters).

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Current Strategies in California

- Containment vs. mitigation; transmission-reduction interventions
 - Limit travel
 - Social distancing, avoid large gatherings
 - Switch to virtual classes in schools or closures
- Airborne to droplet and contact precautions (OSHA and CDC)
 - WHO uses droplet and contact
 - CDC has discontinued the requirement for neg pressure rooms, but is preferring N95 over surgical masks, unless N95 are exhausted, continue droplet and contact
- COVID-19 testing has been expanded from CDC to Health Departments, academic and commercial labs
- Evaluation of patients outside of traditional healthcare setting (testing cabanas)
- Quarantine strategies travelers (high vs. low risk travel areas)
- Risk stratification for exposed healthcare workers (source control vs. none; droplet protection vs. none)

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Conclusions

- COVID-19 is on the verge of causing a pandemic. USA going to mitigation strategies
- In many states there is evidence of sustained community spread
- Person-to-person transmission in family homes (less hospital), and intercity spread
 - Vigilant control measures are warranted at this early stage of the pandemic
- As N95 and isolation rooms are exhausted, CDC easing from airborne, droplet, contact → droplet, contact precautions has become a necessity to be able to sustain
- Gradual expansion of diagnostic testing will allow for better picture and planning
- Travel restrictions, self-quarantine, social distancing, canceling public events to control the spread
- Wash your hands and stay calm

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COVID-19: Lessons from a Local Hospital CEO

Abhishek Dosi
CEO, Sutter Solano Medical Center



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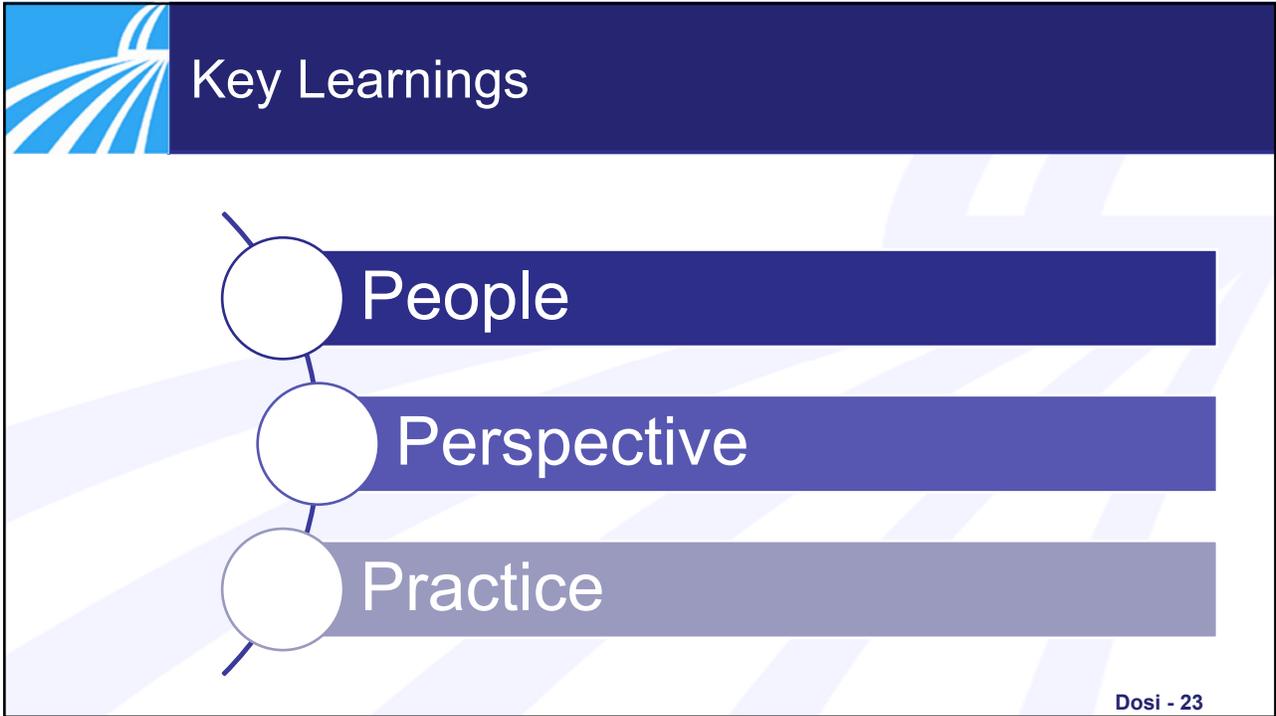


Setting the scene ...



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Key Learnings

- People
- Perspective
- Practice

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Key Learning: People

- Know your partners.
- Know your team.
- Advocate for your community.

Dosi - 24

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Key Learning: Perspective



Treat situational responses like future blueprints.



Don't just plan for the next 36-48 hours, plan for the next 36-48 days.



Remind and refocus teams on training when the hype gets high.



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Key Learning: Practice



Understand the challenges of weighing risk real-time.



Communication is good, over-communication is better.



Be present, be decisive, be flexible and *lead*.



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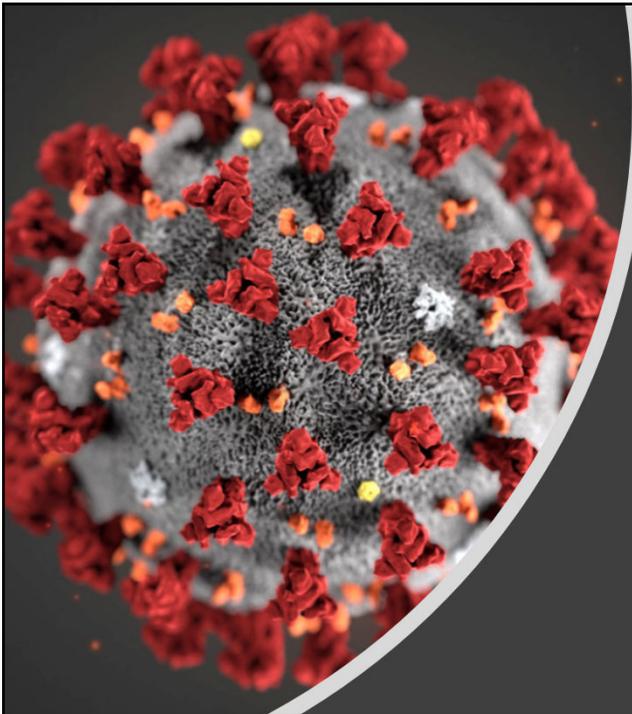


Discussion



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Lessons from the Front Line

Mary Meyer, MD, MPH
Kaiser Permanente Northern California

March 11, 2020

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The Bigger Picture:

Evolution of COVID-19 in our Kaiser Permanente Northern California System

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Initial Stage:

- Disease confined to China
- Initial work in KP NCAL focused on a containment strategy
- Workflows focused on airborne plus contact plus eye protection
- Checklists for donning/doffing
- Lists of appropriate PPE supplies
- Travel screening:
 - Recent travel from China

The Next Stage: Travis

- Pre-identified COVID-19+ patients transferred into our hospital system
- Largely asymptomatic
- Intense planning and focus about the arrival of each of these patients
- Ex: ambulance workflows for incoming COVID-19+ patient
- Expanded travel screening:
 - Any international travel



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The Next Wave:

Community Transmission

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Where We Are Now:

- Multiple patients presenting without clear epidemiologic risk factors
- Some patients quite ill: Intubated, ICU, etc.
- Some patients stable on initial presentation later deteriorated over several days

PUI Definition:

- Current definition suggests that it is up to clinician discretion
- Some epidemiologic factors suggest higher risk
- Our interpretation at KP NCAL:

PUI = Someone you decide to test for COVID



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Aspects of Surge: PPE Considerations

For All Patients

Universal Screening for cough/respiratory infection symptoms

Enhanced Respiratory Precautions for all patients with cough:

- Droplet
- Contact
- Eye Protection

For PUIs

Follow CDC and CDPH guidelines:

- Airborne
- Contact
- Eye Protection

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Outpatient Setting: Surge Considerations

Surge

Online Booking

- Increased booking requests

Call Center volume greatly increased

- Worried well
- Minimally symptomatic

Primary Care

Increased appointment requests

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Outpatient Setting: Surge Considerations

Surge Strategies:

Basic premise is to maximize virtual healthcare options

- Both a surge strategy and a public health mandate

Online:

- Accurate updated information
- Guiding online booking to telephone/video appointments

Call Center:

- Increased telephone/video appointments
- Screening for all cough and cold complaints rather than DOV
- “Flu Queue” of physicians and nurses to staff TAVs/VAVs

Primary Care:

- Prospective schedule monitoring
- Conversion to TAV/VAV when possible
- Monitoring of outreach for chronic conditions and well visits

“Drive-Thru” Testing



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Inpatient Setting: Surge Considerations

- Dashboard to follow airborne isolation rooms
- Cohort COVID-19+ patients
- Use regular rooms when airborne isolation rooms are full
- Alternate Care Areas / Sites



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Surge Considerations: Supply Chain

- PPE
- Other Supply Chain
 - Medications
 - IV fluids
- Constant review of supplies
- Strict limit on PPE orders/facility
- Monitoring of disaster supplies
- Different versions of each PPE item
 - Face Shields / Goggles / Gowns

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Surge Considerations: Testing

Testing Approach Has Also Evolved:

- CDC initially
- Local Public Health labs
- Now combination of commercial and Public Health labs

The One Constant:

- Highly variable turnaround times

Stewardship of Testing

- Testing not available for all who want it
- Guidelines for who should be tested controlled by ID

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Surge Considerations: Staffing

All physicians and nurses

- ID physicians in especially short supply

Furloughs

- Frequently changing recommendations
- Work restriction and pay considerations during furlough

Solutions:

- COVID-19 triage line for outpatient ID questions
- Regional pool of ED and HBS physicians who can move between facilities
- Proactive scheduling and extension of “flu season” nursing staffing levels
- Constant review of potential exposures in view of most recent recommendations regarding furloughs
- Regional data base of staff currently on furlough
- Tele-health for some asymptomatic furloughed physicians

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Surge Considerations: Hospital Command Centers (HCC)

✓ Have a low threshold to activate HCC

✓ Build a bench: COVID-19 admissions are confusing and time-consuming

✓ Have ID and IP in close contact with HCC: many decisions hinge on infection control questions

✓ Have Employee Health at the ready

✓ Public Affairs: be prepared for intense media interest

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Lessons Learned

Be Nimble

The recommendations will change every few days

Set this expectation with all communications

Communicate

Do your best to reach every member of your staff and keep them informed

You are only as successful as your least informed staff member

It is the frontline staff who take care of the patients who really need this information



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Lessons Learned

Manage staff and public anxiety

Be a source of truth

Stay consistent in your messaging at all levels of your organization

Listen to the concerns of your frontline--some of the best ideas come from these folks

Be prepared to give the same information repeatedly, until the message is heard

Train someone in the PPE as many times as it takes until they are comfortable

BE PATIENT



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Defining Traits of Incident Response



Isenberg - 43

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1. View coordination as your most important task.

Incident commanders sit in the eye of the storm, and should:

- Focus on asking the right questions
- Ensure that constructive ideas aren't overlooked
- Question and challenge ideas to assess their merit
- Push back against reactive thinking
- Stay mindful of the many constituencies you serve and your impacts on them

Isenberg - 44

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2. Ask the right questions.

- Do we have the right people, in the right place, at the right time?
- Are those people enabled? If not, what do they need?
- What do we have today, and what will we need tomorrow?
- What is our capacity and what are our priorities?

Isenberg - 45

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3. Manage the three flows.

- **Emotion:** Recognize and refocus when emotions run high, panic sets in, ego gets in the way or people become too reactive
- **Information:** Listen, filter and act on what's meaningful
- **Analysis:** Assess how decisions are being made and reflect on outcomes to inform the next round of decision-making

Isenberg - 46

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4. See the forest and the trees.

- **Understand the organization:** How roles and teams are defined, how to reach people, and which people and teams need to be involved based on current circumstances. This also means understanding organizational values, culture, and way of working.
- **Understand the situation:** What are the forces outside our control, who are the key players, where are the best sources of information, what is the issue at hand, and what are the greater societal, political or cultural ramifications? What is the known universe, and where do you sit in it?
- **Understand the implications:** Act locally but think globally – can this approach be applied across our hospital, our system, our state? What are the ripple effects? Who and what will these decisions impact downstream?

Isenberg - 47

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Discussion



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CDPH Program Flex

Kiyomi Burchill
Vice President, Policy
California Hospital Association



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Program Flexibility

- CDPH can waive licensing regulations (Title 22) – called “program flexibility”
- With recent Governor’s proclamation of emergency for COVID-19, CDPH can also waive licensing statutes (Health & Safety Code)
- Hospitals can request program flex on space use, staffing ratios, other requirements
 - Space use: CDPH Form 5000 A
 - Staffing ratio and other: CDPH Form 5000 for now; form 5000A form after CDPH revises it and issues AFL (soon)

Burchill - 50

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Providing information to CDPA

Be prepared to answer:

- Why is your staffing inadequate? (staff sick, have to care for kids because schools are closed, travelers don't want to work in Calif., etc.)
- What have you done to get more staff? (called temp agencies, imposing OT, etc.)
- If you can't meet ratio, what is your Plan? (staff med/surg differently, use a higher proportion of LVNs, use medical residents)
- Do you need the flex for the duration of the COVID-19 surge, or a shorter time period?

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Resource Requests

- Every hospital that has supply needs that they are unable to fill should send a 213 Resource Request using their county's form to their Medical Health Operation Area Coordinator (MHOAC), which is typically the county's public health department or emergency medical services authority. The contact list for all MHOACs is included in the webinar materials.
- If your hospital has ReddiNet, the form is on there and you can fill it out and send it to the MHOAC that way.
- The MHOAC will fill the request. Or, if it is unable to do, it will send it to the state via the Regional Disaster Medical Health Specialists (RDMHS) to be filled by the Region, and if the Region does not have adequate resources, the RDMHS will send it to the state to be filled with the state's emergency cache.
- It is important to complete this form, and not only phone-in the request because it documents a critical need.
- If the state's emergency cache is unable to fill requests, the Governor can request access to the Strategic National Stockpile, but it has not yet done so.

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Contact Information

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Questions

Online questions:

Type your question in the Q & A box,
press enter

Phone questions:

To ask a question, press *1

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Upcoming Programs

Coronavirus: Untangling Employee Safety Regulations and Guidance Webinar

March 18, 2020

11:30 a.m. – 1:00 p.m. Pacific Time

Health care workers continue to be on the front line caring for patients. As community transmission of COVID 19 increases, hospitals are more likely to see suspect or confirmed cases. Adding to the complexity, health care workers may be exposed outside of work and questions arise on how to handle those situations.

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Thank You and Evaluation

Thank you for participating in today's webinar. An online evaluation will be sent to you shortly.

For education questions, contact:
Robyn Thomason at (916) 552-7514 or
rthomason@calhospital.org

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