COVID-19 Briefing
Introduction/Objectives

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Colorado Hospital Association
• Welcome and Thank You
• Due to caller volume, all on mute
• Questions can be submitted within the chat feature
  o Q/A document will be created to follow up
• Take back to your facilities:
  o Situation awareness
  o Information on available resources and activation processes
  o Knowledge on the supply chain disruption
  o Hospital communications
COVID19 Overview
CDPHE Response Activities

Daniel Shodell, MD, MPH
Colorado Department of Public Health and Environment
Outline: COVID-19

• Overview

• Public Health Response

• Healthcare Mitigation Approach

• Summary
COVID-19: Overview

- **COVID-19**: Coronavirus disease - 2019; caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
  - Causes fever and lower respiratory illness (e.g. cough or shortness of breath)
- **Diagnosis**: Testing recommended for specific people with exposure history and/or illness.
- **Treatment**: No specific treatment is available. Clinical management pillars are supportive (fluids, fever management, intensive care if needed, etc) and infection control.

Sources:
COVID-19: Overview

- Compared to prior coronavirus outbreaks, COVID-19 is much more widespread, but less lethal.
  - Severe acute respiratory syndrome (SARS), 2003: Global 8,096 cases, 774 deaths (9.6% case fatality rate). US had 27 cases and zero deaths.
  - Middle East respiratory syndrome (MERS), 2012: Global 2,494 cases, 858 deaths (34.4% case fatality rate). US had 2 cases and zero deaths.

COVID-19: Overview

Last updated March 6, 2020

COVID-19: Overview

• Case count / geographic spread
  – 101,781 cases worldwide, 3,460 deaths
  – 164 cases in 19 US states, 11 deaths
  – Eight cases in CO, zero deaths

Last updated March 6, 2020

https://www.arcgis.com/apps/opsdashboard/index.html#bda7594740fd40299423467b48e9ecf6


COVID-19: Public Health Response
COVID-19: Public Health Response

• COVID-19 is emerging as a pandemic (an increase, often sudden, in the number of cases of a disease that has spread over several countries or continents, usually affecting a large number of people)

• The range of COVID-19 illness severity and its transmissibility means it has the potential to overwhelm health systems

Source: https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section11.html
COVID-19: Public Health Response

• Key factors in the public health response:
  – We know it’s highly transmissible, but detailed information about how COVID-19 spreads is limited
  – Why some people get severely ill (vs. the majority of cases with mild illness) is not fully understood outside of advanced age and comorbidity
  – Even if spread of COVID-19 can not be stopped, slowing the rate of spread is critically important:
    • An acute surge can overwhelm health care systems
    • Institutions (public safety, education, etc) can not operate with critical staffing shortages due to illness
    • Additional time can allow for developing effective treatment and/or vaccine
COVID-19: Public Health Response

- Goal of community mitigation measures

Factors to consider before implementing community mitigation measures (also known as non-pharmaceutical interventions, or NPI):

- Ethics
- Feasibility
- Thresholds (triggers) and duration of implementation
- General vs. selective implementation for most vulnerable populations
- Balancing public health benefits and social costs
- Acceptability

COVID-19: Public Health Response

• Examples of community mitigation -- personal protective measures:
  
  – Voluntary home isolation (staying home) when ill
  – Respiratory etiquette (e.g. cover your mouth and nose when coughing or sneezing, etc.)
  – Hand hygiene (e.g., hand washing soap and water, alcohol-based hand rub, etc.)
  – Voluntary home quarantine of exposed household members (staying home when a household member is ill)
  – If you are sick, stay home (self isolation). Ill people should wear a mask to protect family members or in any scenario where needed to prevent spread of germs

COVID-19: Public Health Response

- Examples of community mitigation -- pandemic protective measures:
  - School closures and dismissals (temporary, preemptive, and coordinated for child care and K-12)
  - Social distancing measures
    - Telecommuting and remote-meeting options in workplaces
    - Mass gathering modifications, postponements, or cancellations
    - Dividing classes into smaller groups and creating opportunities for distance learning (e.g., via the internet or local television or radio stations)
  - Disinfection of frequently touched surfaces and objects in homes, child care facilities, schools, and workplaces

For more information: [https://www.cdc.gov/nonpharmaceutical-interventions/](https://www.cdc.gov/nonpharmaceutical-interventions/)

COVID-19: Public Health Response

• Additional considerations:

  – Communications: The goal is that everyone at risk is able to take protective action. Effective risk communication can save lives, reduce illness (by informing people on how to protect their health), and help preserve social, economic, and political stability.

  – Materials:  

COVID-19: Public Health Response

COVID-19: Public Health Response

State emergency operations center (SEOC): Currently activated at level II
- Level IV: Routine
- Level III: Enhanced monitoring and coordination. Select state agencies (for example: CDPHE, CDOT, etc.) are notified
- Level II: Identified situation or threat requires coordination with one or more additional state agencies. Notification is made to all remaining state agencies and other support organizations to be on standby for activation
- Level I: Full activation of the SEOC with representatives from state departments and other supporting organizations

Daily status report:
http://www.coemergency.com/
Last updated March 6, 2020

Source: https://www.colorado.gov/pacific/dhsem/operations-0
COVID-19: Healthcare Mitigation
COVID-19: Healthcare Mitigation

• Healthcare mitigation strategies are being developed with healthcare providers and clinical facilities to:
  – Reduce morbidity and mortality
  – Minimize disease transmission
  – Protect healthcare personnel
  – Preserve healthcare system functioning

For the purposes of this discussion, reference to healthcare providers (HCP) refers to all persons, paid and unpaid, working in healthcare settings engaged in patient care activities, including: triage, care, cleaning, obtaining clinical specimens, and coming in contact with potentially contaminated environmental surfaces. This includes emergency medical services (EMS) clinicians (prehospital EMS and medical first responders) as well as home health care agency staff, etc.
COVID-19: Healthcare Mitigation

- Healthcare resources currently available from CDC and CDPHE

https://www.colorado.gov/pacific/cdphe/resources-local-public-health-agencies-and-healthcare-providers

COVID-19: Healthcare Mitigation

• What to expect:
  – Additional cases COVID-19 in Colorado and exclusions from work
  – Supply chain issues, particularly (but not limited to) personal protective equipment (PPE)
  – Community mitigation measures (e.g. closures, social distancing, etc -- see definitions in prior section)
  – Questions and concerns from employees and stakeholders
COVID-19: Healthcare Mitigation

• How to prepare:
  – Continuity of operations / Facility emergency plans: review, exercise, prepare to implement
  – Communication
    • Disseminate information you receive; Help staff and stakeholders access available resources
    • Address and correct rumors and misinformation
  – For non-clinical staff who can work remotely: identify staff, establish and test systems immediately
  – For all staff, clarify policies and practice:
    • Avoid counter-incentives to using sick leave or self-excluding from work if symptomatic
COVID-19: Healthcare Mitigation

• How to prepare
  – Protection for staff is critical: Optimization of PPE supply chain and PPE sparing
    • CDPHE recommendations under development, expected week of 3/9
    • Adapted from CDC guidance released 2/29/20
    • CDPHE recommendations will be oriented around maintaining the highest level of protection for HCP while avoiding PPE wastage, and extending the use of PPE in the context of current or future shortages
  – PPE Concept of Operations (CONOPS)
    www.colorado.gov/pacific/cdphe/resources-local-public-health-agencies-and-healthcare-providers
COVID-19: Healthcare Mitigation

• How to prepare
  – Engineering and administrative controls remain critical.
    • E.g. expand telemedicine implementation?

  ![Hierarchy of Controls Diagram](https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html)

  ![Supply Chain Diagram](apps.who.int/iris/bitstream/handle/10665/331215/WHO-2019-nCov-IPCPEPPE_use-2020.1-eng.pdf)

  – Conventional, contingency, and alternative / crisis scenarios for PPE supply align with CDC guidance:
    • Re-use
    • Extended Use
    • Expired Use
COVID-19: Healthcare Mitigation

• How to prepare
  – Public health efforts to reduce burden on clinical facilities
    • Guidance for prioritizing healthcare (e.g. rescheduling elective surgery): in development
    • Community testing sites (drive-through model): under discussion
    • State capacity (utilization of state facilities): preliminary discussions
    • Crisis standards of care and alternate care delivery sites: future considerations
    • Communication: CDPHE materials for the public, as well as guidance for health care facilities
      – Nurse line guidance
COVID-19: Healthcare Mitigation

• How to prepare
  – Close contact with your regional health care coalitions

https://sites.google.com/state.co.us/co-share/hpp
Summary

• There are outstanding questions:
  – Transmissibility specifics
  – Predictors for severe disease
  – Optimal clinical management
  – Impact of global travel restriction, quarantine measures
  – Environmental factors -- temperature, seasons

• But we do also have a lot of information and actions we need to take now are clear:
  – Preparation
  – Communication
  – Community mitigation
  – Healthcare mitigation
For more information


Coronavirus Disease 2019 (COVID-19) in Colorado

COVID-19 in Colorado Test Results
As of March 5, 2020 - updated Mondays through Fridays

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<tr>
<th>Status</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Positive</td>
<td>2</td>
</tr>
<tr>
<td>Negative</td>
<td>92</td>
</tr>
<tr>
<td>Pending</td>
<td>30</td>
</tr>
<tr>
<td>Total tests*</td>
<td>124</td>
</tr>
</tbody>
</table>

*Numbers are cumulative since Jan. 23, 2020 and include test results from both CDC and the state.
To date, 14 tests were conducted at CDC. All current testing is being done by the state lab.

Resources for local public health agencies and health care providers

Information for all Coloradans
We are doing everything possible to limit and slow the spread of COVID-19 in Colorado.

This is a rapidly changing situation, and it's hard to predict exactly how COVID-19 may affect our communities. What we're seeing in other areas tells us that once spread is detected in a community, numbers can increase quickly. Given that, our recommendations may change just as quickly.

How you can help?
Everyone has a part to play in slowing the spread of this disease.
State Cache and SNS Activation Process

Greg Stasinos
Colorado Department of Public Health and Environment
ESF#8 SNS
Resource Request Process

State Cache and Strategic National Stockpile
What it contains and process for activation

Greg Stasinos
Objectives

• Review the State Cache and Strategic National Stockpile
  – What they are
  – What they contain
  – What the process for activation is
What is the Strategic National Stockpile?

- The Strategic National Stockpile (SNS) is the nation’s largest supply of potentially life-saving pharmaceuticals and medical supplies for use in a public health emergency severe enough to cause local supplies to run out.
- The first line of support from the stockpile is to send a broad-range of pharmaceuticals and medical supplies.
- Contents are pre-packed and configured in transport-ready containers for rapid delivery anywhere in the United States within 12 hours of the federal decision to deploy. Each package contains 50 tons of emergency medical resources.
What is the State Cache?

Warehouse Medical Supplies

The Western Slope Cache resides in Grand Junction, Colorado and is a Medical Cache designed to support the Health and Medical needs of the citizens of Colorado in times of emergency or supply shortages.
How to request resources from the state
CDPHE – OEPR / Emergency Support Function 8 (ESF-8)

Process for Local Jurisdiction Requesting Support or Resources from the State

Local Agency unable to fill resource request locally, contacts LPHA or Local ESF 8

Is the LPHA/ESF 8 able to fill the resource request?

Yes

The request is filled via mutual aid, supplier contracts or HCC members

No

Escalating or cascading events require complex support - initiate support processes early.

Resource request sent to SEOC via (ESF 8)

Is the SEOC ESF 8 able to fill the resource request with state resources?

Yes

The request is filled via state resources or contracts

No

The request for SNS assets will be documented and submitted per the SNS Plan

Is the SEOC ESF 8 able to fill the resource request through other resources?

Yes

The request is filled via EMAC or non-SNS federal resources

No

State ESF 8 recommends that CDPHE request SNS Assets
Will SNS assets be sent to Colorado for the emergency?

Yes

DOC SNS activates the Inventory Management Unit (IMU) to standup IMATS

No

Resource Requests will continue to go through the SEOC ESF 8s

Resource Requests for SNS Assets will go through public health, without being approved by the ESF 8s; visibility of all SNS shipments will be shared with the ESF 8s through IMATS.

DOC SNS activates the Inventory Management Unit (IMU) to standup IMATS

IMU uploads the Advanced Shipment Notice into IMATS

IMU will notify IMATS Users to have LPHAs send orders to them for entry into IMATS

Are current SNS supplies in the RSS enough to fill all resource requests?

Yes

The question of how to allocate the first shipment of supplies referred to the Emergency Coordination Group* (ECG)

No

Using population numbers and situational awareness the ECG will establish a methodology for the distribution of limited SNS assets

IMU will review each request in IMATS to determine if they are ready to be filled at the RSS?

Yes

IMU will change information in the resource request and notify the appropriate IMATS User of the change

IMU will send requests ready to be filled to the RSS

No

IMU will notify IMATS Users to have LPHAs send orders to them for entry into IMATS

RSS ships the requested supplies to the LTP or RTP

IMU sends list of items in the SNS shipment to the IMATS Users. These items will be ordered through IMATS; all other items will go through the EOCs.

* Emergency Coordination Group (ECG). This group will consist of key CDPHE executive decision makers, which may include the Executive Director, Chief Medical Officer, Environmental Programs Director, the State ESF-8 Lead and other positions relevant to the scenario at hand, including specific members of the GEEERC.
Resource Request Flow When SNS Assets Are Available

PODs, Hospitals and others are asked to send resource requests for SNS Assets

- **PODS**
  - Local Public Health Agency (LPHA) collects and sends resource requests to designated IMATS User

- **HOSPITALS**
  - IMATS User enters resource request for SNS items into IMATS

- **OTHER**
  - Requests With Quantity Issues - IMU corrects the numbers, notifies the regional contact
  - Items Ordered Not Appropriate for Facility - IMU changes or takes the item off the order, notifies regional contact
  - Non-SNS items removed from request and sent to appropriate EOC, LPHA notified of change

Visibility of all shipments of SNS assets will be shared with ESF 8s through IMATS.

What happens to orders being reviewed by IMU?

- Quantity Issues
  - Approved orders sent to the RSS to be picked and shipped
  - Supplies arrive at LTPs/RTPs

- Item Issues
  - Requests With Quantity Issues - IMU corrects the numbers, notifies the regional contact

Examples: facilities requesting N95s need fit testing capability and facilities ordering medication in large quantity containers need to have a pharmacist

Supplies arrive at LTPs/RTPs
What does this look like?

- While responding to events medical resources may be unavailable or in short supply
- Local agency is unable to fill resource request locally
Can local LPHA/ ESF#8 fill the request?

- Scenario A
  - YES

- The request is filled via mutual aid, supplier contracts or HCC members
Can local LPHA/ ESF#8 fill the request?

- **Scenario B**
  - NO

- Resource request sent to State Emergency Operations Center (SEOC) via ESF#8
  - Using a 213RR within WebEOC
Is the SEOC ESF#8 able to fill the resource request with state resources?

- **YES**
  - The request is filled via state resources or contracts.

- **NO**
  - Can the SEOC ESF #8 able to fill the resource request through other resources?
If the SEOC cannot fill the request

• The request is filled via Emergency Management Assistance Compact (EMAC) or non-SNS federal resources.
  – State-to-State Assistance
When the resource requests cannot be filled via EMAC, and all other options are exhausted...

- STATE ESF#8 recommends that CDPHE request SNS Assets
What does that look like?

- The request for SNS assets will be documented and submitted per the SNS Plan.
We need a way to track orders

- The CDPHE SNS Unit activates the Inventory Management Unit to stand up the Inventory Management and Tracking System (IMATS)
Within IMATS:

- The IMU uploads the Advanced Shipment Notice into IMATS
- If the current SNS supplies are enough to fill all resource requests, IMU will notify IMATS users to have LPHAs send orders to them for entry into IMS.
- The IMU will review each request in IMATS to determine if they are ready to be filled at the RSS.
- The RSS is the Receipt, Store and Stage Warehouse for the entire state.
Within IMATS cont’d:

• NON-SNS items will be removed from the request and the appropriate EOC or LPHA will be notified of the change.
What if there isn’t enough?

- If the current SNS supplies are not enough to fill all orders, the Emergency Coordination Group (ECG) must determine how to allocate the first shipment of supplies.
- Using population numbers and situational awareness, the ECG will establish a methodology for the distribution of limited SNS assets.
The IMU will review each request

- Review entails:
  - Quantity Issues- The IMU corrects the numbers and notifies regional contact.
  - Items not appropriate for ordering facility- The IMU changes the order or removes the particular item(s) and notifies regional contact.
- The IMU will send request ready to be filled to the RSS.
- If needed, the IMU change information on the resource request and notify the IMATS user of the change.
Next Steps

• Approved orders are sent to the RSS Warehouse to be picked and shipped.
• The RSS ships the requested supplies to the LTP or RTP.
• At the Local Transfer Point, or the Regional Transfer Point the assets are sorted and deployed to the agencies or facilities in need.
Questions?

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Supply Chain Disruption

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Medline Industries, Inc.
Supply Chain Disruption

- International governments are prioritizing PPE products for their domestic market
- We are expecting a reduction in capacity and/or delayed shipments from our factories
- Specific to China:
  - Large percentage of PPE is manufactured (for entire Industry) in Hubei Province
  - Hubei Providence government extended mandatory factory closure through March 10th
  - Highways, public transport, rail, river and air travel have been restricted to emergency medical teams only
  - Chinese government extended the Chinese New Year holiday causing production to be impact on multiple categories
Categories Impacted

• Facemasks- surgical and isolation
• PPE – solution gowns and coveralls
• Traditional wound care
• Surgical drapes and gowns
• Components for standard and custom packs
• Sanitizer and disinfecting wipes
• Raw materials used for manufacturing
Manufacturer Reaction

- Manufacturers are ramping up product in all areas possible
- Most manufacturers are putting in allocation for all items impacted
- Allocation is being sent to distributors on a weekly
- We would/could produce more in US if the healthcare market would be willing to pay the increased cost for production in the future
- Air freight is challenging as most flights have been cancelled to and from impacted countries
Examples from other Hospitals

• Removing masks from entrance kiosks
  o Limit people from taking masks outside hospital as they are truly only needed in healthcare environment
• N95 Masks should be under lock and key
• Use appropriate masks for appropriate situation
• Conservation is key
• Example 1- Pass out one N95 per nurse and store in zip lock bags in brown bags for each patient
• Example 2- One N95 mask per Nurse and use Face shield over N95 masks and disinfect after every use
What are other hospitals doing

- Have dedicated room for potential Coronavirus patients
- Use Telehealth as much as possible
- Not using actual product for practice drills
Work with your Distribution Partners

• Establish ongoing collaborative calls with your distribution partner
  o Set weekly meetings if necessary
  o Discuss updates since last call/visit
  o Share current inventory levels for your hospital
  o Share best practices from across the nation

• Work together to get through this
  o Request transparency both good and bad from all parties

• Have patience as things are changing daily
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Communications

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Thank you for your time.

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