Pandemic Preparedness Response

Administrative Module

Introduction

- Pandemic preparedness requires investments in personnel, planning, training, anticipatory policy development, physical plant infrastructure

- The following captures lessons learned from the COVID-19 (SARS Coronavirus 2) pandemic to inform an ongoing Pandemic Preparedness Response.

- Administrative preparation is divided into three phases: Pre-pandemic preparation, Pandemic response, and Recovery from Pandemic

- The final section in this deck includes critical preparation for exposure risk reduction in the format of the Hierarchy of Controls

Pre-Pandemic Phase

Disease-specific Control Plan (update periodically)

Establish departmental emergency action plans

Population-specific preparation (see modules in this website section)

Establish routine supply chain MOUs: urgent/emergent PPE, laboratory, cleaning & disinfection, hand hygiene supply/product delivery

Establish:

-Staffing agency MOUs

-Redeployed worker training strategies

Pandemic Phase

Establish Hospital Incident Command (HICS)

Conduct surveillance/reporting

Optimize isolation capacity, including
-Capacity expansion and monitoring
-space repurposing

Implement departmental emergency plans

Implement communications strategies

Develop/implement disease- and population-specific clinical guidance (policies/ procedures/ workflows)

Establish strategies for:

-Screening

-Testing

-Vaccination delivery

-Patient transfers

-Staffing, including redeploying workers

Recovery Phase

Establish tiered approach to re-introduce staff, patients, visitors, students, faculty, vendors

Establish tiered approach to returning spaces to pre-pandemic uses

Establish tiered approach to rescinding control measures

Debrief to identify improvement opportunities and future planning and preparation

Pre-Pandemic Phase

Pre-Pandemic Preparation: Control Plan Elements (1)

- Program administration, authority statement
- Contact information (institutional, public health)
- Pathogen transmission modality and associated:
  - Engineering controls
    - Optimize and detail appropriate space for patients (e.g., list of all AIIR)
    - Detail appropriate spaces, healthcare personnel (HCP) (e.g., identify alternate break or work rooms, should physical distancing be necessary)
    - Establish cadence and strategy to ensure spaces are compliant (e.g., testing, observation)
  - Administrative controls
    - Detail screening, testing, entry restrictions for HCP, patients, visitors, students, researchers
    - Develop/implement isolation strategy
    - Optimize tiered communications strategies
    - Ensure HCP education and compliance with controls strategies
    - Detail population-specific patient flow strategies
    - Address core department safety strategies (e.g., NFS, EVS, Lab)

Pre-Pandemic Preparation: Control Plan Elements (2)

- Pathogen transmission modality and associated:
  - Personal Protective Equipment (PPE) requirements
    - Ensure adequate, appropriate and flexible supply
      - invest in emergency stockpiles
      - FIFO inventory management to ensure stockpile is in-date
    - Complete HCP testing (e.g., fit testing, elastomeric fitting)
    - Detail standard approach compliant with regulatory and public health guidance
    - Detail specialty requirements (e.g., aerosol-generating procedures)

- Detail decedent handling

Pre-Pandemic Preparation: Departmental Emergency Action Plans (EAP)

- Write, submit and socialize departmental EAP, including:
  - Strategy to redeploy staff
  - Strategy to re-instate staff
  - Strategy to support remote work
  - Strategy to maintain staff safety during pandemic
  - Succession planning
  - Operations assignments
  - Communications strategies
  - Training strategies

https://safety.ucsf.edu/emergency-action-plan
https://ucsf.app.box.com/s/pfxbdqs8gqquoqmftiuqbxxzszzz23wu

Pre-Pandemic Preparation: Population-Specific Guidance

- Guidance documents are located here: https://infectioncontrol.ucsfmedicalcenter.org/resources

- Guidance documents include:
  - Specialty care unit development
  - Critical care unit preparation
  - Perioperative and Procedural care preparation
  - Ambulatory care preparation
  - General unit care

- Pandemic-specific web-based workflows and algorithms https://infectioncontrol.ucsfmedicalcenter.org/coronavirus

Pandemic Phase

Pandemic Phase: Hospital Incident Command

- Goal: muster necessary personnel and supplies for response

- Establish before imminent threat potential exists
  - Senior leadership establishes
  - Identify necessary human resources for immediate response
  - Establish initial communications strategies and cadence, refine as needed
  - Evaluate public health information to guide response
  - Ensure core service representation

Pandemic Phase: Surveillance and Reporting

- Responsible Parties:
  - Occupational Health Services (OHS) (Students, Staff, Faculty)
  - Hospital Epidemiology and Infection Prevention (HEIP) (Patients, Visitors)
- Responsibilities:
  - Establish isolation, infection and exposure criteria/definitions, based on public health guidance
  - Establish review and response criteria, cadence, cross-communication
  - Establish notification, follow-up and reporting standard operating procedures (internal, external)
  - Monitor developments and update leadership of significant changes

Pandemic Phase: Optimize Isolation Capacity

- Responsible Parties:
  - Facilities Management
  - Safety
  - HEIP

- Responsibilities
  - Evaluate need to implement established patient isolation capacity expansion plans
  - Identify locations for planned patient isolation capacity expansion
  - Implement engineering modifications to achieve isolation capacity expansion
  - Monitor established and expanded locations for compliance with requirements
  - Identify appropriate spaces for safe HCP work-related support (e.g., break, work room)
  - Communicate with senior leadership re: capacity limits, constraints

Pandemic Phase: Communications

- Responsible Parties (among others):
  - HEIP   OHS   Service Excellence
  - HICS   Care Delivery workgroup
- Responsibilities:
  - Establish controls, cadence, audiences and media for messaging
  - Confirm point personnel for messaging
  - Review and confirm content
  - Evaluate effectiveness of selected media (consider layered approach for significant reach to UCSF community)
  - Consider push and pull strategies: email, pandemic-focused website, video updates (e.g., "Town Hall"), population-targeted (e.g., Health, Community)
  - Ensure location-specific decisions are reviewed by dependent departments

https://infectioncontrol.ucsfmedicalcenter.org/coronavirus
https://www.ucsf.edu/topic/covid-19
https://coronavirus.ucsf.edu/

Pandemic Phase: Clinical Guidance

- Responsible Parties
  - Population service leaders (e.g., Periop, Ambulatory, Pediatric, HCP)
    - Consider establishing Clinical Guidance workgroup (Medical Technical Specialists)
  - HEIP
  - OHS
- Responsibilities:
  - Establish clinical guidance for population-focused care, including patient transitions (e.g., admission, discharge, transfer)
  - Evaluate, detail and communicate workflows for testing, screening, treatment (and treatment delay), vaccination for pandemic disease (see link below)
  - Establish and detail concomitant care delivery for non-pandemic disease

Recovery Phase

Recovery Phase: Reintroducing Persons

- Responsible Parties
  - Care delivery-focused leaders (e.g., Periop, Critical/Acute/Ambulatory Care)
  - HEIP
  - OHS
  - Human Resources
- Responsibilities
  - Establish tiered approach for equitable reintroducing people on-site, considering:
    - Disease case rates
    - Vaccination status
    - Disease-recovered status
  - Communicate reopening strategies across populations (e.g., HCP, patients)

Recovery Phase: Returning to Pre-Pandemic Space Use

- Responsible Parties
    - Med Ctr FM   Campus FM   OHS
    - Safety   Space owners   Care delivery workgroup
    - Emergency Mgmt   HEIP

- Responsibilities
    - Refer to public health guidance for establishing institutional reopening tiers
    - Establish equitable space reinstatement

Recovery Phase: Rescinding Control Measures

- Responsible Parties
  - Emergency Management HICS   Laboratory (micro, pathology)
  - Safety   OHS   Senior executive team
  - HEIP   Communications   Infectious Diseases
- Responsibilities
  - Review policies/workflows established during pandemic
  - Review regulatory and public health restrictions
  - Communicate changes swiftly and thoroughly
- Suggested governance workgroups:
  - Clinical care delivery   Testing
  - Communications   PPE resilience
  - Reopening

Recovery Phase: Debrief

- Responsible Parties
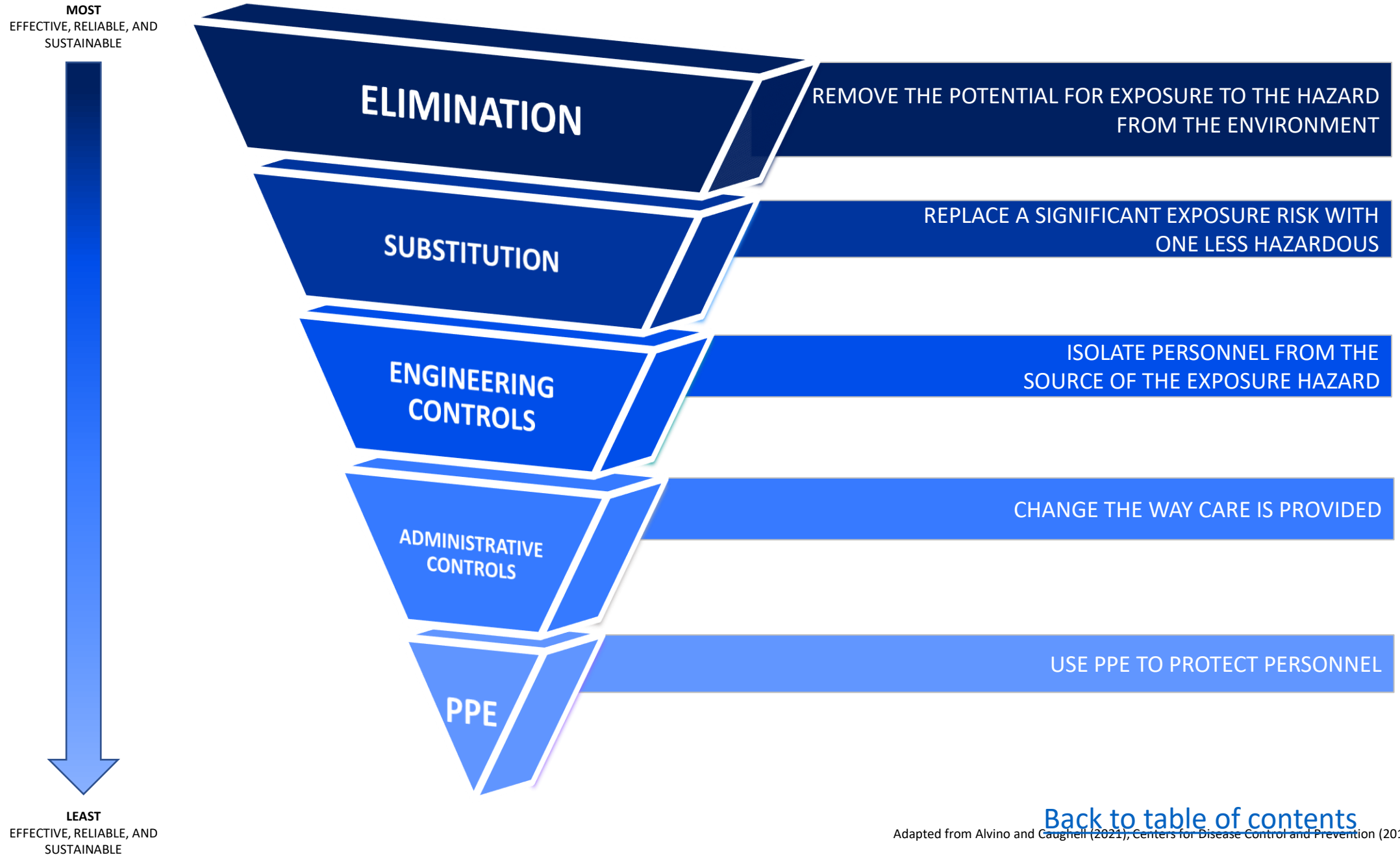   - Emergency Management   HICS
    - Safety   OHS
    - HEIP   Care delivery workgroup
- Responsibilities
    - Review and evaluate decisions, actions, strategies implemented, outcomes
    - Identify and implement elements to incorporate into routine workflows
    - Identify and memorialize elements to incorporate into future pandemic responses

Hierarchy of Controls:
Pandemic Preparation and Response

MOST
EFFECTIVE, RELIABLE, AND SUSTAINABLE

ELIMINATION — REMOVE THE POTENTIAL FOR EXPOSURE TO THE HAZARD FROM THE ENVIRONMENT

SUBSTITUTION — REPLACE A SIGNIFICANT EXPOSURE RISK WITH ONE LESS HAZARDOUS

ENGINEERING CONTROLS — ISOLATE PERSONNEL FROM THE SOURCE OF THE EXPOSURE HAZARD

ADMINISTRATIVE CONTROLS — CHANGE THE WAY CARE IS PROVIDED

PPE — USE PPE TO PROTECT PERSONNEL

LEAST
EFFECTIVE, RELIABLE, AND SUSTAINABLE

Adapted from Alvino and Caughell (2021), Centers for Disease Control and Prevention (2015).

ELIMINATION

REMOVE THE POTENTIAL FOR EXPOSURE TO THE HAZARD FROM THE ENVIRONMENT

- Monitor reports of unusual communicable disease clusters (global)
  - Escalate concerning threats to senior leadership
- Develop tiered approach to care delivery
  - Develop/establish testing strategies to identify potentially communicable people
  - Establish triggers for suspending services based upon threat of increasing local transmission
- Develop tiered approach to communications: (tiered cadence, distribution methods, responsibilities for acquiring/packaging information)

SUBSTITUTION

REPLACE A SIGNIFICANT EXPOSURE RISK WITH ONE LESS HAZARDOUS

- Consider alternatives to in-person care when possible
  - Virtual visits
  - Outdoor testing sites
- Expedite in-person visits
  - Evaluate alternate workflows or locations that do not require patient waiting or queueing
  - Consider extending hours to accommodate lower patient density
- Consider excluding non-essential people
  - Visitor exclusion
  - Pause volunteer program
  - Normalize and support remote working as possible

ENGINEERING CONTROLS

ISOLATE PERSONNEL FROM THE SOURCE OF THE EXPOSURE HAZARD

- Ensure sufficient negative pressure isolation patient care rooms in inpatient and ambulatory locations
  - Respiratory Support Clinics (RSCs)
  - Manipulate air handling to support additional Airborne Infection Isolation Rooms (AIIRs), with associated testing and documentation
  - Consider building more AIIRs than code requires in new construction (inpatient and ambulatory)
  - Shared documentation of air changes per hour and time to clearance for patient care and work spaces (centralized monitoring preferred)
  - Calculated and documented processes for and library of easily converted patient care and work spaces
  - Identify floors, wings, areas that can support negative pressure isolation

ADMINISTRATIVE CONTROLS

CHANGE THE WAY CARE IS PROVIDED

- Determine thresholds for pausing programs (e.g., surgeries, clinics)
- Develop strategies for redeploying workers to alternate work
  - Screening   Coaching   Observing
  - Testing   Training   Consider rehiring essential retirees
  - Policy/procedure/workflow development and implementation
- Establish new programs for institutional and public health response
- Develop alternate and standardized workflows to limit exposure
  - Pre-procedure/pre-admission screening/testing
  - Pre-visit screening
  - Periodic testing for admitted patients
- Develop and expand testing platforms; establish interpretive guidance for results

- Develop stockpile strategies for anticipated shortages; rotate stock to prevent material aging and out-dating)
  - Respirators (fit-tested N95, elastomeric, PAPR, etc.)
  - Gloves
  - Gowns
  - Masks
- Ensure variety of suppliers for commodity items
- Develop thresholds for ordering above allocation levels (event-related, urgent stockpiling)
- Reuse of single-use PPE
  - Determine thresholds to trigger reuse
  - Develop policies to support thresholds, decisions, implementation
  - Monitor technologies for reprocessing used PPE