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COVID-19 Weekly Updates

Monday, May 11, 2020 | 4 PM ET

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INTRODUCTION OF PANELISTS

Chief Gary Ludwig, IAFC President

Fire Chief John Sinclair, Chair COVID19 Task Force

Dr. Jim Augustine, MD, FACEP, IAFC COVID-19 TF, EMS Section Representative

Mr. Ken LaSala, IAFC Director of Government Relations

AND SPECIAL GUESTS

- Chief Keith Bryant, US Fire Administrator
- Mr. Koerner is CBRNE Advisor in the Office of the HHS Assistant Secretary for Preparedness and Response (ASPR)
- CAPT Joselito Ignacio is a U.S. Public Health Service Officer (DHS)/ (FEMA)
- Division Chief Pete Lawrence, Ocean City (CA) Fire Department.

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Fire Chief Gary Ludwig

IAFC President

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Fire Chief John Sinclair

Chair COVID19 Task Force

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James J Augustine, MD

Fire EMS Medical Director

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Coronavirus: What to be Watching

- The Development of a State and local case tracking system
- Management of local COVID outbreaks in congregate settings. Do you need a strike team?
- Summer weather event preparedness
- COVID hospitalizations and deaths
- Your EMS volume

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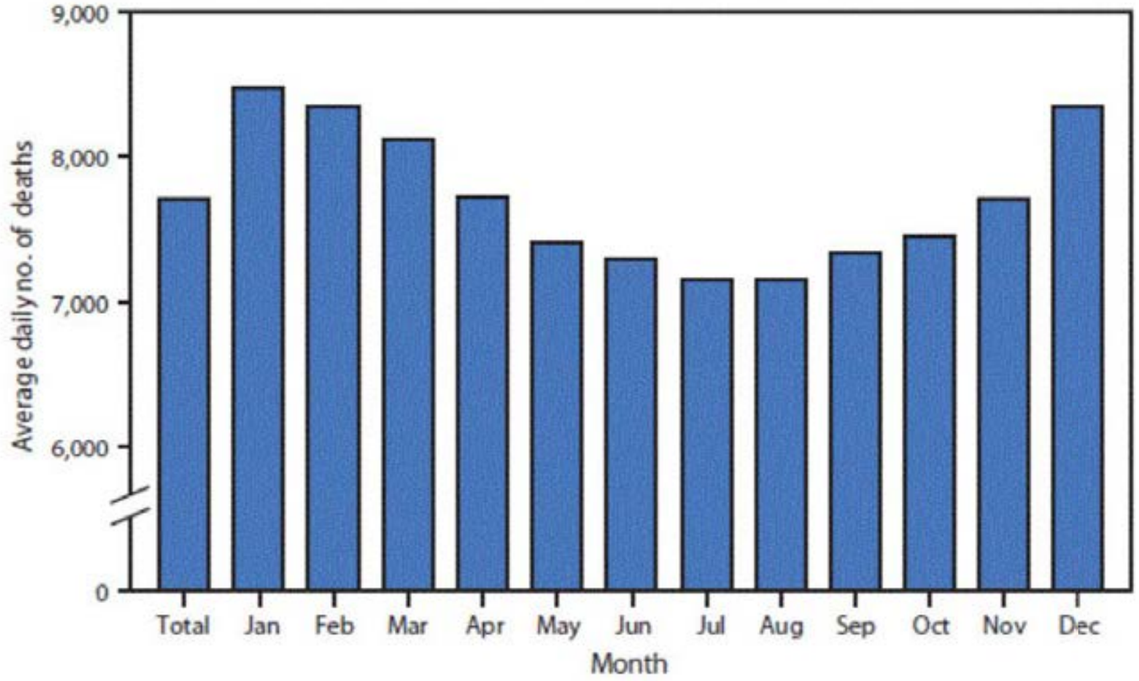
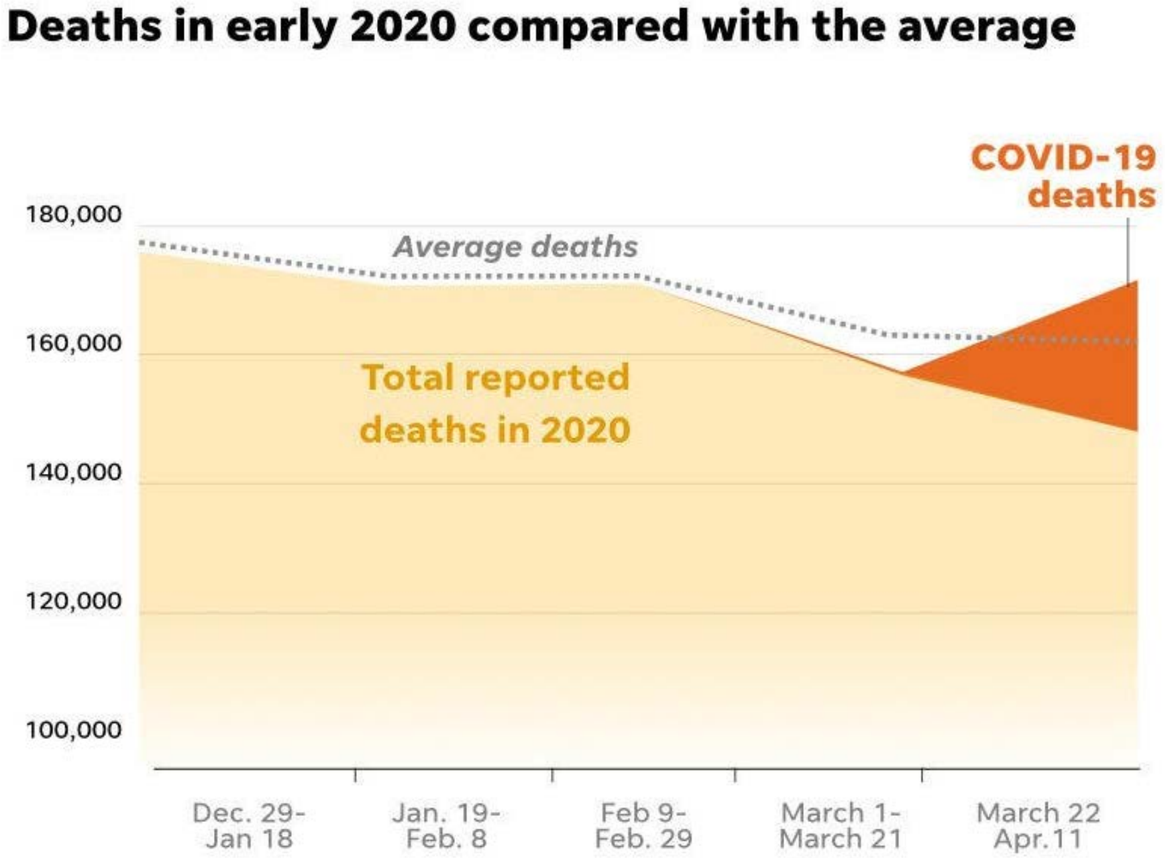
Watching Hospitalizations and Deaths



* Deaths include U.S. residents only.



SOURCE: CDC and USA Today Analysis

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Coronavirus:

YOUR STAFF

Personnel Health and Safety

Checking personnel mental health and need for breaks/vacations

Maintain and improve your member health monitor process

Masks in the station and gowns for low risk exposure coming off

Employee:								Exposure Date:							
Presumptive		Date:						Confirmed		Date					
	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6		Day 7	
Symptom/Time	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000
Your Temperature														
Runny Nose														
Sore Throat														
Dry Cough														
Runny Eyes														
Fever														
Short of Breath														
Any Other Symptoms?														
	Day 8		Day 9		Day 10		Day 11		Day 12		Day 13		Day 14	
Symptom/Time	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000	0800	2000
Your Temperature														
Runny Nose														
Sore Throat														
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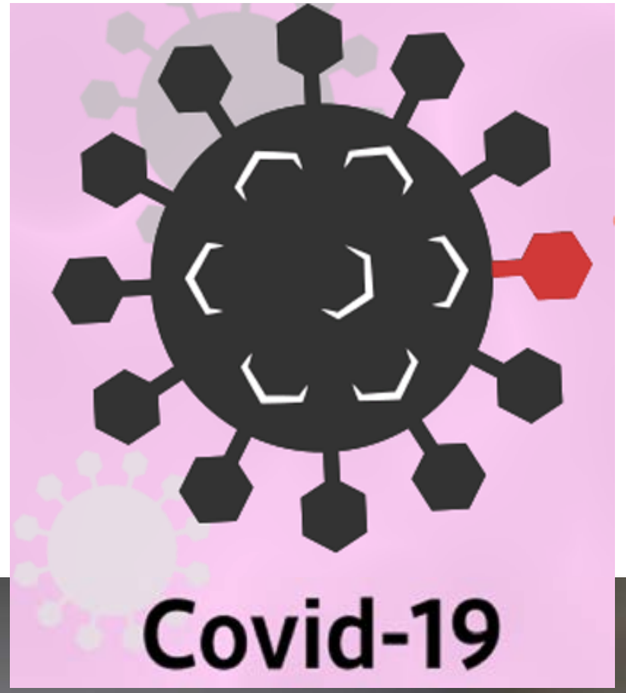

Coronavirus: Testing for the Virus

PCR = Polymerase Chain Reaction

More options coming, more volume, more speed

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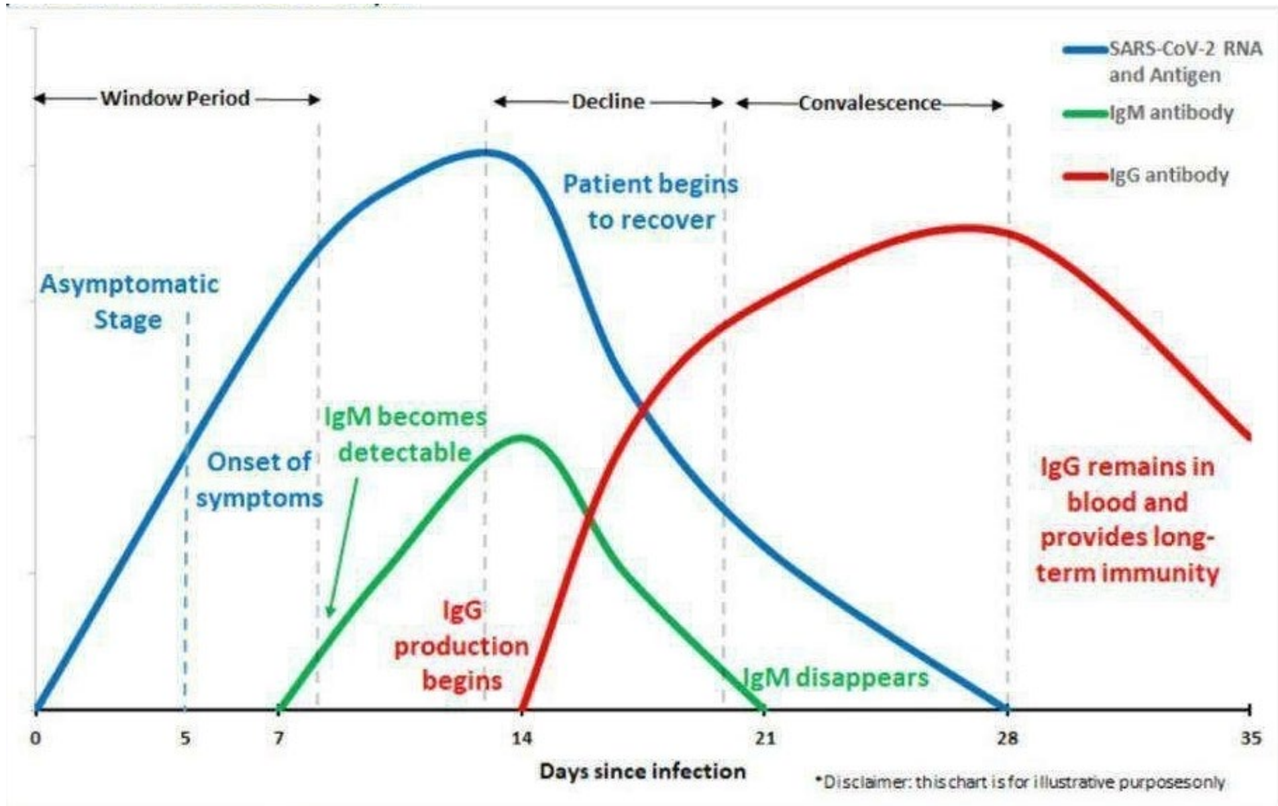
- Blood testing is becoming key to future waves
- Still with point of care antigen testing
- The application of antibody tests

Test Results			Clinical Significance
PCR	IgM	IgG	
+	-	-	Infected, window before antibodies
+	+	-	Infected, early stage
+	+	+	Infected, active stage OR Persistent Shedding
+	-	+	Infected, late stage or recurrent
-	+	-	Early stage infection, PCR false negative
-	-	+	Prior infection, with durable immunity

COVID Testing Sequence



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COVID Planning for the Fall

Better Processes
More PPE
Rapid Testing
Full Hospitals – Hot or Cold.
You need to be involved in that process

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CIDRAP Recommendations

- States, territories, and tribal health authorities should plan for the worst-case scenario (Scenario 2), including no vaccine availability or herd immunity
- Government agencies and healthcare delivery organizations should develop strategies to ensure adequate protection for healthcare workers when disease incidence surges
- Government officials should develop concrete plans, including triggers for reinstituting mitigation measures, for dealing with disease peaks when they begin
- Risk communication messaging from government officials should incorporate the concept that pandemic will not end soon, and people need to prepare for possible periodic resurgences of disease over the next 2 years

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Coronavirus: Planning for Future Waves

- A Second Shutdown is possible
- A busier system mixing with influenza and winter diseases
- Arrange for flu vaccines for your members and community. Will you be involved?
- Testing out of the hospital. Will you be involved?
- Our members need better protection, with the PPE situation addressed on this continent
- When will COVID vaccine be ready and safe? You will be involved.

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Ken LaSala

Director of Government Relations
and Policy

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Legislation

- Call to Action:
  - $5 billion for AFG and $5 billion for SAFER
  - Waive requirements, including cost share, and allow fire departments to retain and re-hire firefighters
  - https://www.iafc.org/topics-and-tools/legislative-issues/action-center

- H.R. 6509/S. 3607, Legislation to Clarify PSOB Eligibility for the Families of COVID-19 LODDs

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Grants

- COVID-19 AFG Grants – Application Period: April 28 – May 15
- FY 2019 SAFER Grants – Application Period: Open through May 15
- FY 2019 FP&S Grants - Application Period: April 27 – May 29
- HHS Payments: https://www.iafc.org/blogs/blog/iafc/2020/04/29/cms-provides-covid-support-payments-to-ems-agencies

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COVID19 – PPE Best Practices and Decontamination

Chief Keith Bryant

U.S. Fire Administrator

CAPT Joselito Ignacio, MPH, CIH

U.S. Public Health Service Chemical, Biological, Radiological/Nuclear Science Advisor and Program Manager for the Interagency Modeling and Atmospheric Assessment Center (IMAAC)

John F. Koerner, MPH, CIH

CBRNE Advisor in the Office of the HHS Assistant Secretary for Preparedness and Response (ASPR)

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COVID19 – PPE Best Practices and Decontamination

THE INFORMATION PRESENTED IS CURRENT TO 5/7/2020 AND IS BASED ON THE CURRENT RESEARCH.

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COVID19 – PPE Best Practices and Decontamination

PPE Distribution

- 86.1 M N-95 Respirators.
- 123.5 M surgical masks.
- 8.2 M face shields.
- 948.6 M gloves.
- 19.4 M gowns.
- 145 shipments from overseas.

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COVID19 – PPE Best Practices and Decontamination

PPE Needs

- FEMA, HHS and CDC identify current and projected needs for critical equipment and balance relief efforts continually.
- DLA contracted with Battelle for 60 critical care decontamination systems for sanitation of N-95 Respirators.
- FEMA and HHS have obligated over $62B.

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COVID19 – PPE Best Practices and Decontamination

U.S. Fire Administration

- Personnel assigned to multiple task forces and working groups.
- Representing the needs of fire and EMS.
- Sharing information, training, and products for use by fire and EMS.
- Gathering data through fire reporting software.

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COVID-19: Best Practices for PPE Preservation

John F. Koerner, MPH, CIH

Deputy – PPE Preservation WG, COVID-19 Response, FEMA/ASPR Healthcare Resilience Task Force

Strategic Plans, Office of the Assistant Secretary for Preparedness and Response

11 May 2020

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Purpose

- To discuss and provide a venue to reflect upon best practices for the preservation of personal protective equipment in healthcare for current, emerging, and future surge operations.

Methods

1. FDA Emergency Use Authorizations beginning March 28, 2020
2. CDC “Strategies to Optimize the Supply of PPE and Equipment”
3. Expedited literature review for best practices
4. Informal interviews to gather experiential evidence
5. Focus group to assess Fact Sheet
6. Interagency review and published
7. Ad hoc Technical Working Group for Decontamination

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Spectrum of Personal Protective Equipment (PPE)

Similar use rates for Respirators & Masks and Eyewear & Face Shields

Gloves

Gloves

~1,500 per COVID-19 hospitalization

Gowns:

Isolation & Surgical Gowns

~375

per COVID-19 hospitalization

Respirators & Masks

N95 Respirator **Surgical Mask** **Procedure Mask**

~375 per COVID-19 hospitalization

Eyewear & Face Shields

Eyewear **Face Shield**

~375 per COVID-19 hospitalization

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As supply decreases, different strategies are used to optimize PPE

Conventional	Contingency	Crisis
• Usual Standard of Care • Cached and usual supplies available	• Functionally equivalent care • Conservation, adaptation, & substitution of supplies • Use during **expected** shortages	• Crisis standards of care • Critical supplies lacking • If no gowns, use gown alternatives • Consider with **known** shortages

Severity of shortage

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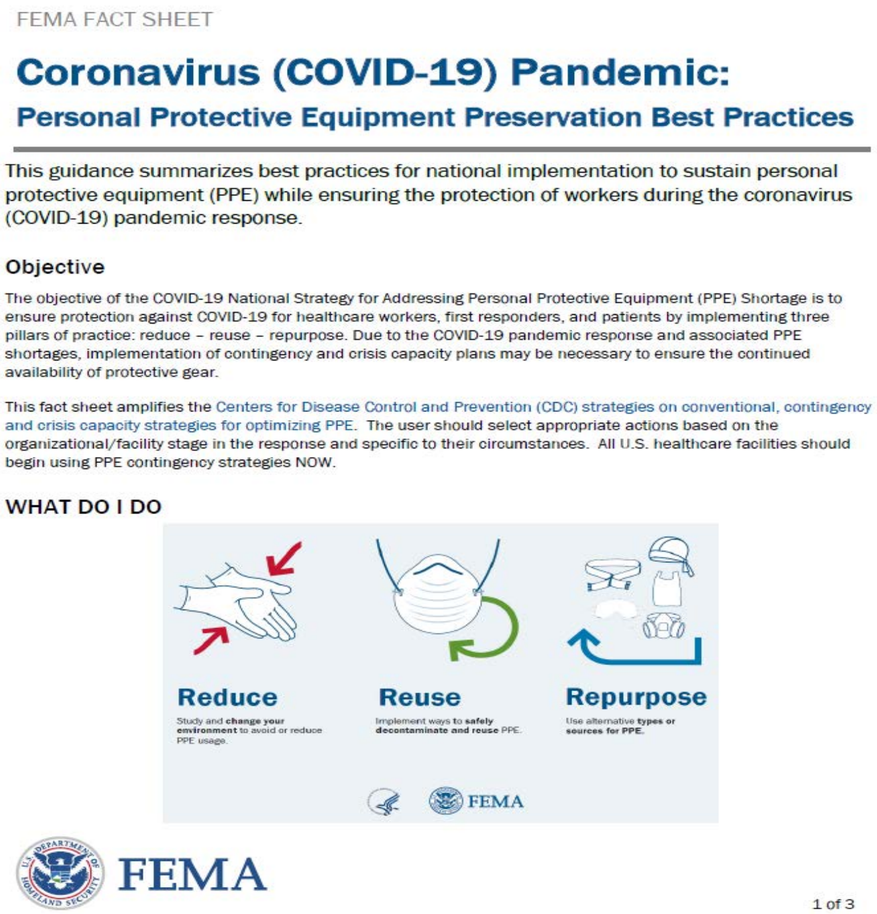
FEMA Fact Sheet

Coronavirus (COVID-19) Pandemic: Personal Protective Equipment Preservation Best Practices

Published – April 12, 2020



FEMA FACT SHEET

Coronavirus (COVID-19) Pandemic:

Personal Protective Equipment Preservation Best Practices

This guidance summarizes best practices for national implementation to sustain personal protective equipment (PPE) while ensuring the protection of workers during the coronavirus (COVID-19) pandemic response.

Objective

The objective of the COVID-19 National Strategy for Addressing Personal Protective Equipment (PPE) Shortage is to ensure protection against COVID-19 for healthcare workers, first responders, and patients by implementing three pillars of practice: reduce – reuse – repurpose. Due to the COVID-19 pandemic response and associated PPE shortages, implementation of contingency and crisis capacity plans may be necessary to ensure the continued availability of protective gear.

This fact sheet amplifies the Centers for Disease Control and Prevention (CDC) strategies on conventional, contingency and crisis capacity strategies for optimizing PPE. The user should select appropriate actions based on the organizational/facility stage in the response and specific to their circumstances. All U.S. healthcare facilities should begin using PPE contingency strategies NOW.

WHAT DO I DO

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1 of 3

https://www.fema.gov/media-library-data/1587131519031-6501ee8a0ce72004832fa37141c53bc0/PPE_FACTSHEET.pdf

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FEMA Fact Sheet: *Published April 12, 2020*

Personal Protective Equipment Preservation Best Practices

1. Amplifies the CDC strategies for optimizing PPE.

2. Suggests appropriate actions based on the organizational/facility stage in the response and specific to user circumstances.

3. All U.S. healthcare facilities should begin using PPE contingency strategies NOW.

4. Pillars of Practice: **REDUCE – REUSE - REPURPOSE**

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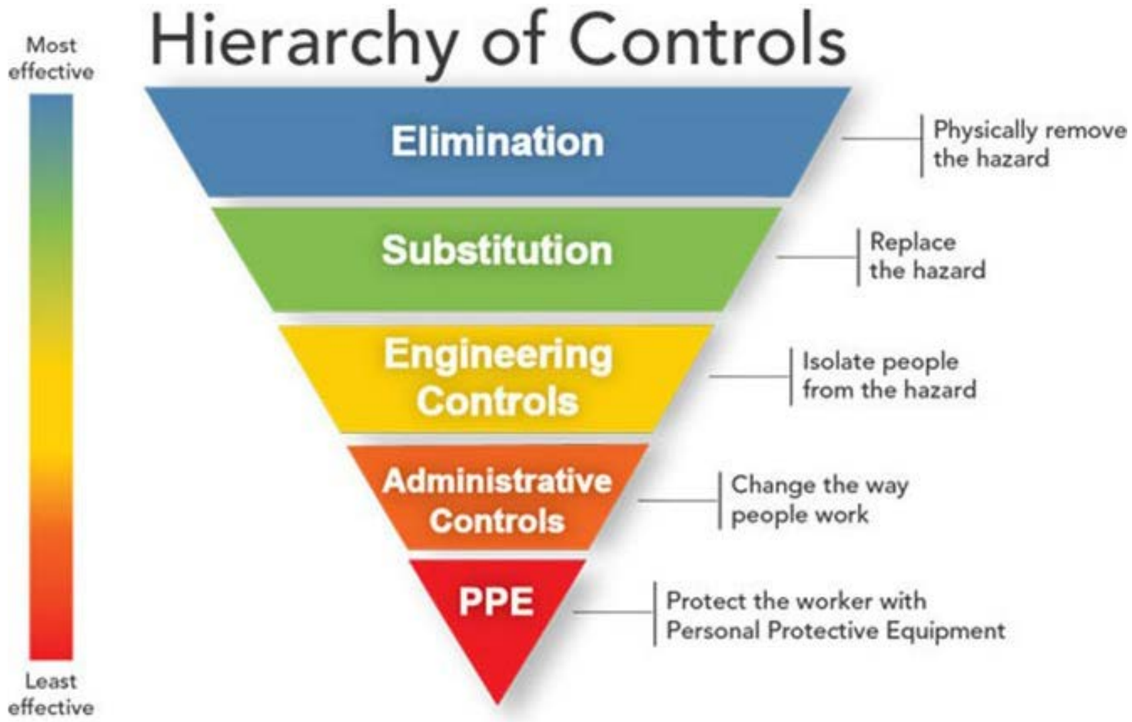
How Do I Do It?

- Non-healthcare industries should conserve medical PPE for medical care.
- Maintain social distancing.
- If feasible, conduct patient or civilian interactions outdoors or in large open spaces.



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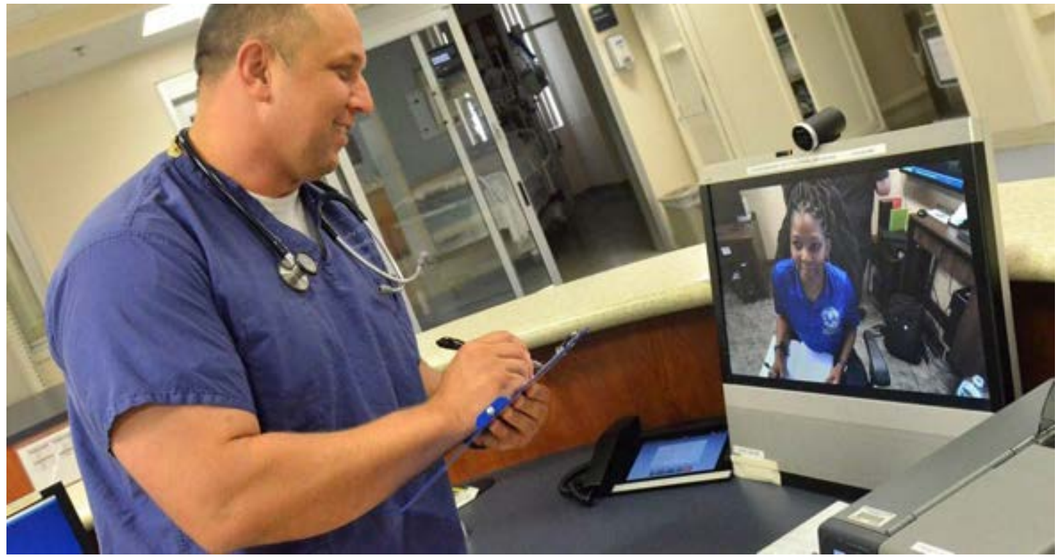
REDUCE
Usage Rate of PPE

<u>Contingency</u> – Engineering, Barriers, and Technology

- Use barrier controls when possible to limit the need for PPE (e.g. masking patients, acrylic barriers, car windows, improved ventilation systems).
- Limit visitor access and offer technology-based alternatives (e.g., video chat).
- Use tele-consultation, internet-based interviews, or remote camera-based observation when available.
- When clinically appropriate, place IV towers and ventilators outside of patient rooms to allow monitoring and management without entering the room.



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REDUCE - Usage Rate of PPE

Contingency – Work Practices & Administrative Changes

- Minimize number of people with, and frequency of, direct patient or civilian contact.
- Work with cohorts of patients/civilians who test positive for COVID-19, rather than single subjects.
- Consolidate activities to a single visit.
- Modify supporting staff workflow to limit PPE use.

Contingency – Personal Protective Equipment

- Understand your PPE requirements and burn rates.
- Extend use-times of undamaged, non-visibly soiled PPE.
- Note: OSHA has relaxed enforcement of annual fit-testing requirements for N-95 FFR's

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REUSE

- Contingency – Implement strategies to optimize the supply of PPE and equipment.
- Crisis - Implement expanded facility-based PPE reuse policies and procedures.
- Crisis - Track “check in” and “check out” of PPE designated for reuse. Each worker is provided specific PPE at the beginning of the shift. At the end of the shift, all PPE is labeled, collected, and stored for reuse.
- Crisis – Implement guidance for decontamination and reuse of FFRs

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REPURPOSE

- Contingency - Use other NIOSH-approved respirators instead of N-95 FFR when respiratory protection is required.
- Contingency - Seek alternative supplies of PPE.
- Crisis - Use N-95 FFRs beyond their expiration dates if certain conditions are met.
- Crisis - Use FDA authorized imported, non-NIOSH-approved disposable FFRs.

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Communicate, Communicate, Communicate

To ensure uniform application of modified practices, processes, and procedures, all workers must be trained, with recommended elements including:

- Reasons for changes from standard practice and for implementing contingency and crisis practices during COVID-19 related PPE shortages
- New PPE guidance (FDA, CDC, DOJ) related to COVID-19
- Proper methods to conduct new or changed work practices (e.g., staffing, social distancing)
- Methods to install or utilize any barrier controls (e.g. patient masking, Plexiglas shields)
- Proper donning and doffing of PPE to minimize self-infection
- Proper hand hygiene

CDC Clinician Outreach Communication Activity (COCA) Webinar: Optimization Strategies for Healthcare Personal Protective Equipment (PPE): https://emergency.cdc.gov/coca/calls/2020/callinfo_032520.asp

CDC Guidance on Strategies to Optimize the Supply of PPE and Equipment: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html

CDC Infection Control Guidance for Healthcare Professionals about Coronavirus (COVID-19): https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html

CAPT Joselito Ignacio, MA, MPH, CIH, CSP, REHS

U.S. Public Health Service Officer Assigned As DHS/FEMA CBRN Science Advisor

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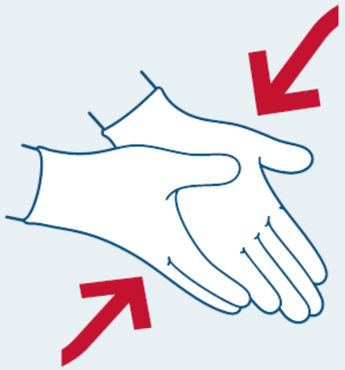
DECONTAMINATION AND REUSE OF N95 RESPIRATORS FOR HEALTHCARE FACILITIES

6 MAY 2020



Reduce

Think of ways to **reduce your use** of PPE.

Reuse

Implement ways to **safely decontaminate and reuse** PPE.

Repurpose

Use alternative **types or sources for PPE.**

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Decontamination and Reuse of disposable n95 respirators

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Crisis capacity to ensure continued availability

National or healthcare facility-level

The CDC recommended the healthcare system focus efforts on three FFR reprocessing techniques

Preservation Thread / Healthcare Resilience Taskforce

April 2020

- New guidance recommends researchers, decontamination companies, healthcare systems, or individual hospitals should focus current efforts **on ultraviolet germicidal irradiation (UVGI), vaporous hydrogen peroxide (VHP), and moist heat incubation**
  - —VHP is a promising method with a potential for high capacity throughput, but certain VHP systems, such as the Clarus® R VHP generator, may be more compatible with FFR decontamination
  - —Moist heat caused minimal degradation in the filtration and fit performance of the tested FFRs. One limitation of the moist heat method is the uncertainty of the disinfection efficacy for various pathogens.
  - —UVGI is a promising method but the disinfection efficacy is dependent on dose. Moreover, UVGI is unlikely to kill all the viruses and bacteria on an FFR due to shadow effects produced by the multiple layers of the FFR's construction

Method	Treatment level	Antimicrobial efficacy	Filtration performance	Fit performance	Material degradation
VHP	Various concentrations and dwell times tested	>99.999%	Passed	Unaffected for up to 20 treatments	Degradation of straps notes after 30 cycles
Moist heat	99.99%	99.99%	6 of 6 models passed after 3 cycles	Passed	Some respirators experienced seal compromise
UVGI	0.5–950 J/cm2	99.9% for all tested viruses	Passed	90–100% passing rate after 3 cycles	Reduction of material durability at higher doses

Summary prepared by the Healthcare Resiliency Task Force Preservation Thread
Source: CDC, "Decontamination and Reuse of Filtering Facepiece Respirators using Contingency and Crisis Capacity Strategies,'Last Updated March 31, 2020

Table 3. Summary of decontamination method antimicrobial efficacy

Method	Treatment level	Microbe tested	Antimicrobial efficacy	References
Vaporous hydrogen peroxide (VHP)	**Battelle report:** Bioquell Clarus C HPV generator: The HPV cycle included a 10 min conditioning phase, 20 min gassing phase at 2 g/min, 150 min dwell phase at 0.5 g/min, and 300 min of aeration. **Bergman et. al.:** Room Bio-Decontamination Service (RBDS™, BIOQUELL UK Ltd, Andover, UK), which utilizes four portable modules: the Clarus® R HPV generator (utilizing 30% H_2O_2), the Clarus R20 aeration unit, an instrumentation module and a control computer. Room concentration = 8 g/m^3, 15 min dwell, 125-min total cycle time. **Kenney personal communication:** Bioquell BQ-50 generator: The HPV cycle included a 10 minute conditioning phase, 30–40 min gassing phase at 16 g/min, 25 min dwell phase, and a 150 min aeration phase.	*Geobacillus stearothermophilus spores* T1, T7, and phi-6 bacteriophages	>99.999%	3, 4, 6

Method	Treatment level	Microbe tested	Antimicrobial efficacy	References
Ultraviolet germicidal irradiation (UVGI)	0.5–1.8 J/cm²	Influenza A (H1N1) Avian influenza A virus (H5N1), low pathogenic Influenza A (H7N9), A/Anhui/1/2013 Influenza A (H7N9), A/Shanghai/1/2013 MERS-CoV SARS-CoV H1N1 Influenza A/PR/8/34 MS2 bacteriophage	99.9% for all tested viruses	12, 13, 14
Microwave generated steam	1100–1250 W microwave models (range: 40 sec to 2 min)	H1N1 influenza A/PR/8/34	99.9%	14
Microwave steam bags	1100 W, 90 sec (bags filled with 60 mL tap water)	MS2 bacteriophage	99.9%	15

Method	Treatment level	Microbe tested	Antimicrobial efficacy	References
Moist heat incubation	15–30 min (60°C, 80% RH)	H1N1 influenza A/PR/8/34	99.99%	14
Liquid hydrogen peroxide	1 sec to 30 min (range: 3–6%)	Not evaluated	Not evaluated	
Ethylene oxide	1 hour at 55°C; conc. range: 725–833 mg/L	Not evaluated	Not evaluated	

FDA Emergency use authorized n95 decontamination systems

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Sterilucent HC 80TT

Steris VPro

ASP Sterrad 100NX

Sterizone VP4

Battelle Critical Care Decontamination System

Battelle CCDS™[1] Process

HEALTH CARE PROVIDER SIGN-UP PROCESS
Battelle CCDS Critical Care Decontamination System™

BATTELLE

1 Sign up with Battelle

- Visit battelle.org/decon to fill out the enrollment form
- Battelle emails enrollee links to the enrollment contract, instructions, and the Battelle POC

2 Contact Us to Get Your Code

- Enrollee signs contract and contacts Battelle POC to receive their 3-digit codes for each facility

3 Properly Label Respirators

- Once the 3-digit codes are received from Battelle, enrollee collects N95 respirators
- N95 respirators must be unsoiled (free of blood, mucus, make-up, lip balm, etc.) and labeled with a permanent marker

4 Collect & Bag All N95 Respirators

- Enrollee collects all N95 respirators into a single plastic bag
- Once the plastic bag is filled, tie off the bag and put it into another plastic bag

5 Properly Package

- Clean the outside bag with disinfectant
- Shipping box must be labeled with the 3-digit code and a biohazard sticker

6 Ship to CCDS Site

- Enrollee contacts their chosen logistics provider to coordinate pick-up and delivery of their N95 respirators
- Enrollee can either use a logistics provider of their choice or Battelle's preferred logistics provider

7 Decontaminated & Returned

- Your shipments are barcoded to ensure chain of custody
- Your N95 respirators are processed and then verified to ensure they are free of decontaminant
- Your decontaminated N95 respirators are returned to your facility

[1] Patent Pending

BATTELLE

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- Preservation of PPE (Reduce, Reuse, Repurpose) can manage demand at healthcare facility level as resupplies can resume;

- Reminder to use hierarchy of controls
  - Elimination
  - Substitution
  - Engineering Controls
  - Safe Work Practices
  - PPE

- COVID-19 crisis, there are authorized capabilities to decontaminate N-95 respirators for safe reuse;

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CARES Act Provider Relief Fund

Division Chief Pete Lawrence

Oceanside (CA) Fire Department

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CARES Act (P.L. 116-136)

- $100 billion for the Public Health and Social Services Emergency Fund
- Funds for Medicare providers and suppliers caring for COVID patients
- Funds used to create the CARES Act Provider Relief Fund
- Three primary funding opportunities for fire/EMS agencies:
  - CMS Round I Allocation
  - CMS Round II Allocation
  - HRSA COVID Uninsured Claims

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CMS Round I Allocation

- Round I funding total was $30 billion
- CMS provides Medicare-enrolled suppliers/providers with payment of 6.19% of 2019 Medicare fee-for-service (FFS) receipts
- Payments distributed between April 10 – 17 via direct deposit
- Payments based on TIN and not NPI
  - Check with treasurer's office if no payment received

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CMS Round II Allocation

- Round II funding is $20 billion, and payments are not automatic
- EMS agencies will need to report some financial information to CMS including their 2018 Medicare FFS receipts
- Payments will be proportional to 2018 Medicare FFS payments
- Visit https://www.hhs.gov/coronavirus/cares-act-provider-relief-fund/index.html for more information

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Round I/II Terms and Conditions

- Agencies accepting Round I and/or II funds must agree to some terms and conditions
  - Medicare provider/supplier in good standing
  - Funds used to prevent, prepare for, and respond to COVID-19
  - Funds can also be used to …"cover lost revenues attributable to coronavirus." This includes revenue reductions due to call volume decreases
    - See - https://www.hhs.gov/sites/default/files/terms-and-conditions-provider-relief-30-b.pdf
  - Funds can't offset expenses already reimbursed through another source
  - Record keeping requirements for expenses

- Limitation on Out-of-Pocket Expenses for presumptive or confirmed COVID Patients

Recipient not…to collect from the patient out-of-pocket expenses in an amount greater than what the patient would have otherwise been required to pay if the care had been provided by an in-network Recipient.

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Limitation on Out-of-Pocket Expenses

What it is

- Prevents billing different in/out of network amounts
- Important for agencies with in-network agreements
- Allows agencies to collect copay/patient's share of bill as if transport had been in-network

What it is *not*

- Not a ban on balance billing
- Not a limit on billing to insurance companies
- Not a ban on out-of-pocket expenses
- Not a ban on copays or cost share on bill

IAFC anticipates that revenue from Round I and II funds will exceed losses from billing rules for most fire/EMS agencies

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HRSA Uninsured Patients Fund

- HRSA will be paying for care provided to uninsured COVID patients
- Payments will be at the Medicare rate up to a total of $10 billion
- HRSA will begin accepting claims on May 6
- Agencies must submit claims through HRSA portal:
  - https://www.hrsa.gov/coviduninsuredclaim
- May offset losses from CMS Rounds I/II terms and conditions

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Email: covid19tf@iafc.org

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