Buyer Beware:

How Do You Know that the PPE You are Sourcing is Approved for Use in Healthcare Settings?

Presented by: Mary Govoni, CDA, RDH, MBA Mary Govoni & Associates





1

Thanks to our sponsor!



Can't we just assume that the PPE we purchase and use is safe and effective?



3

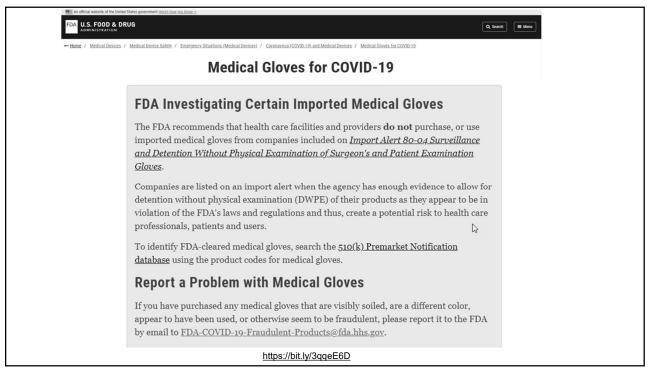
How do we make sure our PPE is safe, effective and meets standards for use in healthcare?

Hint: You need to be armed with the facts.



Δ



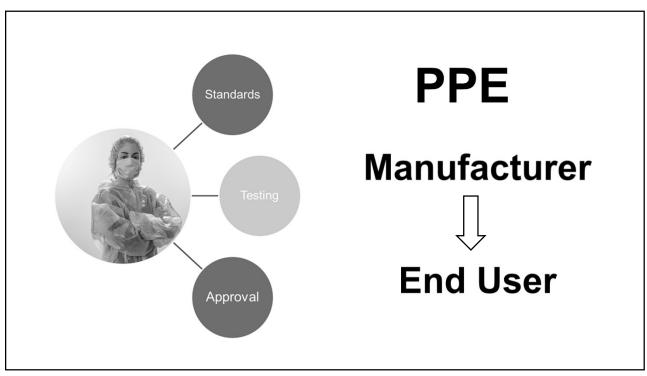


Why???



- Response to global shortages due to COVID-19
- Manufacturers that produce gloves for industry trying to expand markets
- Unscrupulous manufacturers or distributeors

7



Facts You Need to Know About PPE

- Which certifications, approvals or clearances PPE must have to be appropriate for use in healthcare
- What OSHA and CDC guidance to follow for appropriate PPE





9

Organizations that Coordinate Standards

- ► American National Standards Institute ANSI
 - https://ansi.org/
 - Devices marked with number of standard that applies
- Standards Council of Canada
 - https://www.sca.ca

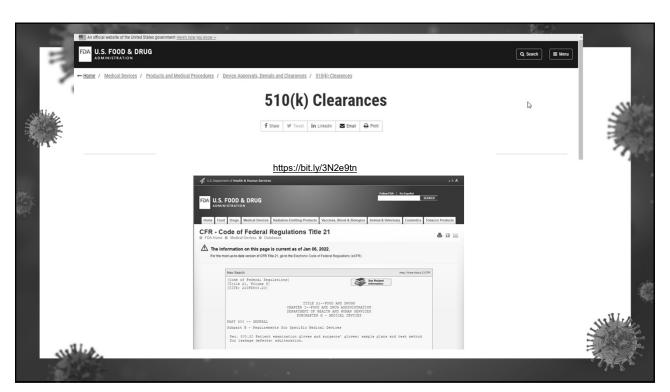


Make certain that your PPE is approved for use in healthcare

- Medical gloves and masks are Class I medical devices (FDA)
- Not all exam gloves are equal in quality
 - Acceptable Quality Limits (AQL) established by the FDA
 - ▶ Measured in percentage of defects per 100 units
- ► Not all gloves are manufactured using GMP



11



OSHA and PPE

| General Industry (29 CFR 1910) | | Related Information | |
|--|--|---------------------|--|
| 1910 Subpart G - Occupational Health and Environmental Control | 1910.94, Ventilation. | Related Information | |
| | 1910.95, Occupational noise exposure. | Related Information | |
| 1910 Subpart H - Hazardous Materials | 1910.120, Hazardous waste operations and emergency response. | Related Information | |
| 1910 Subpart I - Personal Protective Equipment | 1910.132, General requirements. | Related Information | |
| | 1910.133, Eye and face protection. | Related Information | |
| | 1910.134, Respiratory protection. | Related Information | |
| | 1910.135, Head protection. | Related Information | |
| | 1910.136, Foot protection. | Related Information | |
| | 1910.137, Electrical Protective Equipment. | Related Information | |
| | 1910.138, Hand Protection. | Related Information | |
| | 1910.140, Personal fall protection systems. | Related Information | |

Standards

Personal protective equipment is addressed in specific OSHA standards for general industry, maritime, and construction. OSHA requires that many categories of personal protective equipment meet or be equivalent to standards developed by the American National Standards Institute (ANSI).

More »

https://www.osha.gov/personal-protective-equipment

13

Organizations that test PPE

- ► National Institute for Occupational Safety and Health NIOSH U.S.
 - https://cdc.gov/niosh/
- ► American Society for Testing and Materials ASTM U.S. and international
 - https://www.astm.org/

| | Level 1 | ASTM Level 2 | ASTM Level 3 |
|--|---------|--------------|--------------|
| Bacterial Filtration Efficiency @ 3 µm | ≥ 95% | ≥ 98% | ≥ 98% |
| Differential Pressure (mm H ₂ O/cm ²) | < 4.0 | < 5.0 | < 5.0 |
| Sub-Micron Particulate Filtration @ 0.1 | ≥ 95% | ≥ 98% | ≥ 98% |
| Resistance to Penetration by Synthetic Blood (mmHg) | 80 | 120 | 160 |
| Flammability | Class 1 | Class 1 | Class 1 |

- CSA Group Canada and international
 - https://bit.ly/3ilOaPx

Organizations that Certify/Clear/Approve PPE

- ► Food and Drug Administration FDA U.S.
 - https://bit.ly/3iofr3S
 - Quality Systems Regulations and Good Manufacturing Practices
 - https://bit.ly/3traj5a
 - Emergency use authorizations (EUA's)

https://bit.ly/3imhSDI



https://bit.ly/3wow7Ac



15

FDA and PPE U.S. FOOD & DRUG - Home / Medical Devices / Products and Medical Procedures / General Hospital Devices and Supplies / Personal Protective Equipment for Infection Control / Medical Gloves Medical Gloves **Personal Protective Equipment EUAs** About medical gloves Medical gloves are examples of personal protective equipment that are used to protect the wearer and/or the patient from the spread of infection or illness during medical procedures and examinations. Medical gloves are one part of an infection-control Personal Protective Equipment (PPE) refers to protective clothing, helmets, gloves, face strategy. shields, goggles, respirators or other equipment designed to protect the wearer from injury or the spread of infection or illness. Medical gloves are disposable and include examination gloves, surgical gloves, and To help address concerns about availability during the COVID-19 pandemic, the FDA has medical gloves for handling chemotherapy agents (chemotherapy gloves). These gloves are issued Emergency Use Authorizations (EUAs) for certain PPE products including face regulated by the FDA as Class I reserved medical devices that require a 510(k) premarket shields, other barriers, and respiratory protective devices such as respirators. Additionally, notification. FDA reviews these devices to ensure that performance criteria such as leak the FDA has issued recommendations and policies about PPE which can be found here: resistance, tear resistance and biocompatibility are met. Recent Final Medical Device Guidance Documents.

PRE Provides to Disease Control and Prevention Security The National Institute for Occupational Safety and Health (NIOSH) Phttps://www.cdc.gov/niosh/index.htm Phttps://www.cdc.go

17





19

What else can we do to make sure our PPE is safe, effective, and meets the standards for use in healthcare?

What can you do?

- Purchase from reputable manufacturer
 - Research and request samples
- Purchase from reputable supplier
 - Trusted relationships





21

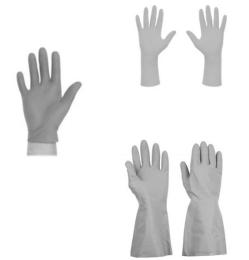
What can you do?



- If purchasing from online or unknown supplier, inquire about ASTM/ANSI certifications, FDA clearance
 - Many online sellers do not vet their products
- If products (gloves) are soiled, discolored or appear to be fraudulent, report to the FDA MedWatch Program
 - https://bit.ly/3iquCJS

Gloves in Healthcare Settings

- Exam/procedure gloves
 - Non-sterile
 - Ambidextrous
- Surgical gloves
 - ▶ Sterile
 - Hand specific
- Utility gloves
 - Typically, reusable but some are disposable



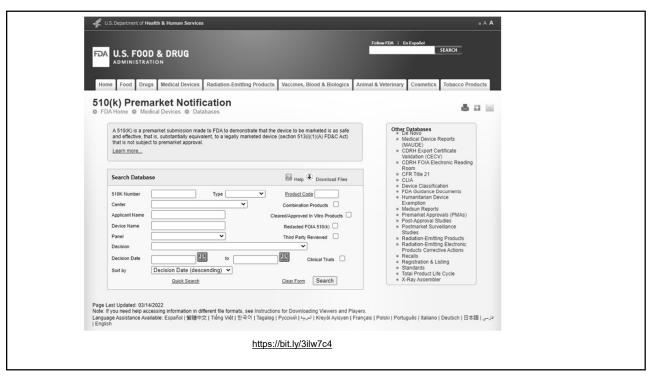
23

Considerations for Glove Selection

- Latex free and powder free
 - Powdered gloves banned by FDA in 2016
- ► Free of irritant chemicals
 - Causes dermatitis in healthcare workers
- Comfort and fit
- Tactile sense
- Manufacturer follows Good Manufacturing Practices
 - Clean factories
 - Humane labor practices
- ▶ Shelf life



25





27

Surge capacity refers to the ability to manage a sudden increase in patient volume that would severely challenge or exceed the present capacity of a facility. While there are no widely accepted measurements or triggers to distinguish surge capacity from daily patient care capacity, surge capacity is a useful framework to approach a decreased supply of gloves during the COVID-19 response. To help healthcare facilities plan and optimize the use of gloves in response to COVID-19, CDC has developed a Personal Protective Equipment (PPE) Burn Rate Calculator. Three general strata have been used to describe surge capacity and can be used to prioritize measures to conserve glove supplies along the continuum of care.

https://bit.ly/3qmzMuN

- <u>Conventional capacity</u>: measures consisting of engineering, administrative, and personal
 protective equipment (PPE) controls that should already be implemented in general infection
 prevention and control plans in healthcare settings.
- Contingency capacity: measure that may be used temporarily during periods of expected glove shortages. Contingency capacity strategies should only be implemented after considering and implementing conventional capacity strategies. While current supply may meet the facility's current or anticipated <u>utilization rate</u>, there may be uncertainty if future supply will be adequate and, therefore, contingency capacity strategies may be needed.
- <u>Crisis capacity</u>: strategies that are not commensurate with U.S. standards of care but may
 need to be considered during periods of known gloves shortages. Crisis capacity strategies
 should only be implemented after considering and implementing conventional and
 contingency capacity strategies. Facilities can consider crisis capacity strategies when the
 supply is not able to meet the facility's current or anticipated <u>utilization rate</u>.

CDC's optimization strategies for glove supply offer a continuum of options for use when glove supplies are stressed, running low, or exhausted. Contingency and then crisis capacity measures augment conventional capacity measures and are meant to be considered and **implemented** sequentially. Once glove availability returns to normal, healthcare facilities should promptly resume standard practices.

Current issues affecting dental practices and the sourcing of gloves

- COST
- Access to preferred types/brands







Limited supply in some areas

29

Unfortunately, cost should not be the main consideration for supply management in issues related to safety.





Buyer Beware – Make Safe/Smart Purchasing Decisions and Follow Guidance for Healthcare Settings

31

