July 15, 2020

To: All Superintendents

From: Arminda Svoboda, Prisons Health Services Unified Command Incident Commander

Dr. Joy McDaniel, Chief of Dentistry

RE: Aerosolized filtering in dental areas in prisons

In order to move to phases of re-opening the Department of Corrections dental services across the state, HEPA filtration units in each dental clinic are required. Each dental clinic in every facility will need to have the filtration. (Example, MCC-TRU, SOU & WSR will all need filtration systems).

Dental procedures produce aerosols (droplets that spread through the air). These aerosols can contain bacteria and viruses, which can remain in the air for several hours before falling to the ground.

“Dental air purifiers would be needed to capture aerosols from the drills, vapors and other contaminants, including mercury from the silver fillings. This requires advanced filtration that can purify air down to a very small size. High-efficiency particulate air (HEPA) is a mechanical air filter. Air is forced through a filter, trapping harmful particles. HEPA is a great option for filtering particles as small as 0.1-0.3 microns.” Dental Office Air Purifiers, Dr. Jeff Bennert

The COVID-19 virus is from .06-.14 microns in size.

Guidance from the CDC:

Use portable, industrial-grade HEPA filter units capable of filtration rates in the range of 300–800 ft³/min. to augment removal of respirable particles as needed. Select portable HEPA filters that can recirculate all or nearly all of the room air and provide the equivalent of ≥12 ACH. Situate portable HEPA units with the advice of facility engineers to ensure that all room air is filtered. Ensure that fresh-air requirements for the area are met. Consider the use of a portable HEPA air filtration unit while the patient is undergoing, and immediately following, an aerosol-generating procedure. Select a HEPA air filtration unit based on its Clean Air Delivery Rate (CADR). The CADR is an established performance standard defined by the Association of Home Appliance Manufacturers and reports the system’s cubic feet per minute (CFM) rating under as-used conditions. The higher the CADR, the faster the air cleaner will work to remove aerosols from the air. Rather than just relying on the building’s HVAC system capacity, use a HEPA air filtration unit to reduce aerosol concentrations in the room and increase the effectiveness of the turnover

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time. Place the HEPA unit near the patient’s chair, but not behind the Dental Health Care Provider (DHCP.) Ensure the DHCP are not positioned between the unit and the patient’s mouth. Position the unit to ensure that it does not pull air into or past the breathing zone of the DHCP.”

Each facility Maintenance Team and Safety Office will need to determine the square footage of the dental clinic area(s), locally source an item for dental leadership review via 213 resource request to DOCLogisticsSection@doc1.wa.gov Once clinical leadership approval is granted, DOC EOC Logistics will purchase and ship to facility. Be sure to provide the product information in your 213.

Below are some examples of the types of stand-alone units for Facility Maintenance and Facility Safety Office to consider. This is not an inclusive list but rather a sample of what could be considered at the local facility level.

Here are a few links to companies that sell Medical Grade HEPA air purifiers (not listed in any particular order).

https://www.oransi.com/p/oransi-ej-air-purifier
https://www.oransi.com/p/650a-portable-commercial-air-purifier
https://www.amazon.com/gp/product/B002VXDCHW/?tag=ezvid02-20
https://www.amazon.com/gp/product/B00GMMYLXC/?tag=ezvid02-20

Thank you for your assistance in expanding the dental services available to our incarcerated population by expediting the installation of HEPA filtration systems as required.

We appreciate your attention to this important matter.