Good oral hygiene can serve as a means to prevent airway infections in patients, especially those over the age of 70. Individuals with periodontal disease are at a 25% higher risk for heart disease, three times the risk for diabetes and 20% higher risk for high blood pressure. These are all conditions that increase the risk for severe COVID-19.

Each of these comorbidities is associated with altered oral biofilms and periodontal disease.

The importance of regular oral health visits should be stressed for all patients, but especially those with HIV, to decrease the risk of severe complications from a COVID-19 infection.

HIV and Oral Health
Treating Patients with HIV (PWH) In the Era of COVID-19

ABOUT THE SOUTHEAST AETC
The Southeast AIDS Education and Training Center (SE AETC) offers comprehensive, collaborative educational opportunities designed to increase the size and strength of the HIV clinical workforce. We work to empower providers to improve outcomes along the HIV Care Continuum, with the ultimate goal of reducing the rate of new HIV infections.
What is Coronavirus disease 2019 (COVID-19)?


COVID-19 TRANSMISSION
COVID-19 is transmitted mainly three ways in oral health care settings:
1. Direct transmission through inhalation of droplets generated through coughing or sneezing;
2. Direct transmission via exposure of mucous membrane such as eye, nasal or oral mucosa to infectious droplets;
3. Indirect transmission via contaminated surfaces.

HIV AND COVID-19
We are still learning about COVID-19 and how it affects people with HIV (PWH). Based on limited data, PWH who are on effective treatment to manage their HIV have the same risk for COVID-19 as people who do not have HIV.

Older adults and people with serious underlying medical conditions might be at increased risk for severe illness from COVID-19. The risk for people with HIV getting sick is greatest in:
• People with a low CD4 cell count
• People not on effective HIV antiretroviral therapy (ART).

For this reason, it is important to emphasize that PWH can care for themselves by taking HIV medicine regularly and following the advice of their healthcare provider.

HIV, COVID AND ORAL HEALTH
Recent studies are examining the relationship between oral health and COVID-19.

Researchers have found a link between poor oral hygiene and severity of complications from the virus that causes COVID-19. The oral microbial flora of the mouth was explored in connection with outcomes from COVID-19.

Periodontitis or infection of the gums is one of the most prevalent causes of harmful bacteria in the mouth. These bacteria lead to the formation of cytokines and Tumor necrosis factor (TNF), which can be detected in the saliva and can reach the lungs, leading to infection within the lungs. Inadequate oral hygiene can increase the risk of inter-bacterial exchanges between the lungs and the mouth, increasing the risk of respiratory infections and potentially post-viral bacterial complications.


DENTAL PRACTICE PROTOCOLS
- Screen and triage all patients and personnel before they enter the dental office.
- Implement universal source control measures for staff and patients including the use of CDC-recommended personal protective equipment (PPE).
- Utilize EPA-approved disinfectants.
- Encourage social distancing.
- Require frequent handwashing.

RESOURCES
- https://www.cdc.gov/oralhealth/infectioncontrol/index.html
- https://www.epa.gov/pesticide-registration/list-n-disinfectants-coronavirus-covid-19

AEROSOL-GENERATING PROCEDURES
Aerosol-generating procedures (AGPs) are widely performed worldwide in oral health care settings. AGPs are defined as any medical, dental or patient-care procedure resulting in the production of airborne particles which can remain suspended in the air, travel over a distance and may cause infection if they are inhaled.

RAPID CONTAMINATION
Clinical procedures that use spray-generating equipment cause aerosolization in the treatment area, leading to rapid contamination of surfaces and potential for the infection to spread. The risk of airborne COVID-19 transmission when AGPs are performed can therefore not be excluded.