

Dental Health and Lung Disease

How healthy your teeth and gums are can play a role at times in how well your lung disease is controlled. Cavities and gum disease are due in part to bacterial infection. This infection can spread bacteria to the lungs. Also, some lung disease medicines can have a negative effect on teeth or gums, like increasing risk of infection and staining or loss of tooth enamel. This fact sheet with review why good oral/dental health is important in people with lung disease.



How can dental problems affect lung diseases?

Cavities and gingivitis (gum infections) are caused by germs (bacteria). Teeth and gums are reservoirs for germs that can travel down to the lungs and harm them. Bacteria live in dental plaque, a film that forms on teeth. The bacteria will continue to grow and multiply. You can stop this by removing plaque with thorough daily tooth brushing and flossing. Some bacteria can be inhaled into the lungs on tiny droplets of saliva. Healthy lungs have protective defenses to deal with those “invasions.” Disease-damaged lungs are not as able to defend themselves, increasing the risk that the bacteria will cause infections or make lung problems worse.

Gum disease can also worsen the chronic inflammation in lung diseases such as asthma and COPD. Inflammation in the airways is one factor that leads to more frequent symptoms and lung damage. Infected and inflamed gums send out a “distress signal” that places the rest of the body on alert. This can lead to more inflammation in the lungs.

Dentures—no problem?

Actually, dentures can be a problem. Bacteria will build up on dentures if you do not remove and soak them in a cleaning solution during sleeping hours. The bacteria can then be inhaled into the lungs. Dentures often are not as good as healthy teeth to chew so you may have more risk of choking and aspiration into the airways.

Can medications or treatments used for lung problems cause problems for your teeth?

Some medications used with lung disease can have damaging dental side effects. Many inhaled anti-inflammatory and bronchodilator medicines can create a “dry mouth.” Having a dry mouth can make it easier to get cavities and gum disease since the saliva in your mouth helps to protect teeth from bacteria. Chewing sugarless gum or sucking on sugarless candy can help you make more saliva. You can also use artificial

saliva products such as Biotene™. Oxygen or PAP therapy that is not humidified can also cause a dry mouth. Using a humidifier to add moisture to oxygen and CPAP or biPAP devices can be helpful.

Thrush (oral candidiasis) is a fungal (yeast) infection in the mouth that can be caused by inhaled medications such as corticosteroids. We all have various microbes that live in our mouth (normal flora). Candidia yeast can normally live in the mouth, but other mouth flora and a healthy immune system keep it under control. Some drugs can disrupt that normal balance, enabling the yeast to grow and spread. White patches develop on the tongue, cheeks, and throat with thrush. Though they are usually painless, they can become sore, bleed, and cause a burning sensation. Thrush is treated with nystatin or other anti-fungal drugs. You can do some things to reduce the risk of thrush. Using inhalers with a spacer to get more medicine into the lungs and have less land on your teeth. You should rinse the mouth or gargle and brush your teeth well after each inhaler use.

How can I avoid lung problems from dental or gum disease?

Daily oral hygiene can help your teeth and your lungs. You need to deal with the bacteria on your teeth and gums before they can spread to the lungs.

Cavities and gum diseases can be prevented by removing the plaque with thorough daily oral hygiene. You have to stick with it, because bacterial plaque starts to build up again within a few hours after being removed.

- A soft-bristle toothbrush can remove plaque from three surfaces of each tooth—the outside, biting, and inside surfaces.
- Dental floss or a floss substitute, such as Opalpix™, is needed to scrape off plaque off the two side surfaces. The sides of teeth are where cavities and gum infections can be

the most damaging.

- Removing plaque before going to bed is important since a decay-promoting “dry mouth” can occur during sleep.
- You need to brush thoroughly and gently along the gum line of teeth to get rid of plaque. This plaque is hard to see in the groove between the tooth and gums. If you don't remove plaque, the groove gets deeper and you may have damage to the gums and even the supporting bone. If bone erodes, teeth will start to become loose. This is called periodontal disease.
- Tartar is the sandy / gritty deposit that can form when soft plaque isn't removed. It is a sign of poor oral hygiene. Tartar irritates and makes gums more inflamed. Unlike plaque, it cannot be dislodged with brushing and flossing but, instead, tartar needs to be scrapped off by a dentist or hygienist. Get regular cleanings to get rid of tartar. Tartar is more likely to develop on hard to reach surfaces such as the back and side surfaces of lower front teeth and the outside surfaces on the upper back teeth. Pay special attention to cleaning in those locations.
- Fluoridated toothpaste is recommended since fluoride helps prevent cavities by “strengthening” teeth. If you are more prone to getting cavities, your dentist may also suggest a fluoride-containing rinse or gel.
- Some brands of toothpaste, such as Colgate Total™, also contain antibacterial ingredients. You may also use an antimicrobial mouth rinse, such as one that contains chlorhexidine.

Thorough and frequent oral hygiene can go a long way to help prevent getting cavities and gum diseases. However, you should also have regular dental check-ups to detect and treat any problems that may develop early.

Is there anything special I should tell my dentist?

Ask your dentist to help you make a prevention plan based on your unique medical and dental health issues. This plan can include:

- how often to have dental exams and cleanings,
- whether supplemental fluoride would be helpful,
- if antimicrobial rinses are advised,
- how to treat thrush infection if it develops,
- how to deal with dry mouth problems

Neither you nor your dentist want bouts of coughing to occur with sharp dental instruments in your mouth. Try to schedule your dental visits when you are not coughing much or having breathing problems. Let your dentist and staff know ways that might help to avoid stress or problems. For example, if it is easier for you to breathe sitting up more, ask that the dental chair not be fully reclined. Work out a set of hand signals to use when your mouth is full to let them know that you need a break. And have your rescue inhaler on hand, just in case you need to use it during the visit.

Are there resources to help pay for dental treatment?

Daily dental and oral care pays off and prevents problems. Often, people do not have insurance to cover dental care.

Medicare and state Medicaid programs offer little or no dental care coverage. People who have health insurance usually have to pay for separate dental plans. Most community health centers have a dental clinic. Fees are adjusted based on income. You can check for locations at <https://www.findahealthcenter.hrsa.gov>. The Donated Dental Services (DDS) program, a charitable project of Dental Lifeline Network, is available for qualifying people but there can be a long wait for care. Information can be found at dentallifeline.org.

Authors: Larry Coffee, DDS, Marianna Sockrider MD, DrPH

Reviewer: Jean-Marie Bruzzese, PhD

Rx Action Steps

- ✓ Brush your teeth and floss, especially before bedtime.
- ✓ Talk to a dentist about how to prevent problems from any medications you are on.
- ✓ See a dentist promptly if you are having problems with your teeth or gums.
- ✓ Avoid smoking

Healthcare Provider's Contact Number:

Resources

American Thoracic Society

- www.thoracic.org/patients

U.S. Health Resources and Services Administration Directory of Federally Qualified Health Centers

- <https://findahealthcenter.hrsa.gov/>

Dental Lifeline Network

- <https://dentallifeline.org/beyond-teeth/pulmonary-diseases>

Colgate Oral Care

How Oral Bacteria Affect Your Lungs

- <https://www.colgate.com/en-us/oral-health/conditions/respiratory-conditions>

Dentistry Today

The Relationship Between Periodontal Diseases and Respiratory Diseases

- <http://www.dentistrytoday.com/periodontics/1608>

American Academy of Periodontology

Healthy Gums May Lead To Healthy Lungs

- <https://www.perio.org/consumer/healthy-lungs>

Infectious Diseases Society of America

Geriatric Oral Health and Pneumonia Risk

- <https://academic.oup.com/cid/article/40/12/1807/314357>

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