



# Impressions

Issue 10

Stay Connected to the Bureau of Oral Health and Dental Services

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## Celebrating Black History Month The Pioneers of African American Dentistry

In the late 17th Century, African American patients had a tough time finding proper dental care, and dentists of color were even harder to come by. Prior to dental schools, aspiring dentists learned the trade through apprenticeships which were often limited to white practitioners. When the first dental school opened in 1840, it refused to admit students of color - a trend that continued for a couple decades. These barriers limited care to underserved communities, and dissuaded bright and capable applicants from pursuing medical careers, but it didn't stop everyone. Here are three of some of the most influential African Americans in the history of dentistry.



(Source: Harvard.edu)

### Robert Tanner Freeman

The child of slaves, Dr. Robert T. Freeman emerged from poverty to become the first professionally trained black dentist. He entered Harvard Medical School in 1867, four years after the end of the Civil War. Following his graduation, Freeman mentored black youth who wanted to pursue careers in dentistry.

### George Franklin Grant

Dr. George F. Grant enrolled in Harvard Medical School shortly after Dr. Freeman. Upon graduating, he became the University's first black faculty member and taught at the School of Mechanical Dentistry for 19 years.



(Source: Blackpast.org)

### Ida Gray Nelson Rollins

Growing up in a single-mother household, Dr. Nelson Rollins worked as a seamstress to support her family. Her career path changed when she took a part-time job working for Dr. Jonathan Taft, the first Dean of the University of Michigan School of Dentistry. Soon after, he admitted Rollins to the University and she became the first black female dentist.

While these three paved the way for black dental professionals of the future, the present day need for more black dentists remains. According to a 2016 article published in the Journal of Public Health Dentistry, the underrepresentation for black dentists is extraordinary, and the black dentists that are in practice are shouldering a disproportionate share of dental care for minority and underserved communities. A recent National Bureau of Economic Research paper indicated that African American men are more likely to feel comfortable with – and take health cues from – doctors who look like them. The findings also suggest that increased screening by a more diverse physician workforce could help close the life expectancy gap between white and black men. Increasing the diversity of dental providers in the U.S. is an important part of solving access to care barriers and increasing health equity for all.



DELAWARE HEALTH AND SOCIAL SERVICES  
Division of Public Health  
Bureau of Oral Health and Dental Services

# National Eating Disorder Awareness Week is February 24 - March 1, 2020

National surveys estimate that around 30 million people in the United States will suffer from an eating disorder (ED) at some point in their lives. This includes men, women, people of all gender identities, all race and ethnicity groups, and all income groups. In addition to affecting people from all walks of life, eating disorders affect all systems of the body, resulting in hormonal disruptions, infertility, bone loss, osteoporosis, gastrointestinal issues, heart problems, kidney failure, and oral health complications. While eating disorders are treatable, there is a particularly high mortality rate among teenagers. Eating disorders are serious conditions for which advocacy and education in the U.S. continue to grow.

## What do eating disorders have to do with oral health?

As with many other diseases, the mouth is often the first place where signs and indications of illness begin to appear. A dentist or dental hygienist may be able to spot someone suffering from an eating disorder before they've even admitted having symptoms to their friends, family, or primary care provider. Lack of essential vitamins and nutrients become obvious in the mouth, and stomach acids from purging by vomiting can damage tooth structure.

### Some signs of eating disorders in the mouth are:

- Dry mouth
- Enlarged salivary glands
- Cracked lips/mouth sores
- Tooth erosion
- Tooth sensitivity to hot and cold
- Brittle, yellowing teeth

## Oral Health Recommendations for Eating Disorders

Eating and digestion begin in the mouth. All eating disorders affect the mouth in one or more places, but there are ways to counter the damaging effects of these conditions while hopefully seeking treatment. The three most common types of eating disorders are:

**Anorexia.** This typically involves an extreme fear of gaining weight or becoming fat. Even people who may be very thin or even extremely underweight may see themselves as "fat." They may starve themselves to try to reach their ideal weight and they may also exercise excessively.

**Bulimia.** Like anorexia, bulimia also includes the fears of being overweight, but it also includes hidden periods of overeating (binge eating) which may occur several times a week or even several times a day. While overeating, individuals may feel completely out of control. They may gulp down thousands of calories often high in carbohydrates and fat in amounts greater than what an average person would eat at one sitting. After they overeat, the individuals try to "undo" the fact that they ate too much as quickly as possible by forcing themselves to "throw up," or by the misuse of laxatives or enemas. This is often referred to as "binging and purging."

**Binge Eating or Compulsive Overeating.** This may affect almost as many men as women. In the past, these individuals were sometimes described as "food addicts." They overeat (binge eat) as noted in bulimia above, but do not regularly try to get rid of the food immediately by throwing up or by

misusing laxatives or enemas. Feelings of guilt may make it easier for the person to overeat again.

**Tips to preventing eating disorders.** Resist the urge to brush teeth after vomiting. Instead of brushing, which only spreads acid around on the teeth and causes further damage, it is safer to rinse with water or baking soda after throwing up, which is less abrasive and helps to minimize the level of acidity in the mouth. Brushing may occur safely about an hour after vomiting. Understand that consuming sugary foods put you at a greater risk for cavities, especially when coupled with dry mouth, a common symptom of ED. Maintain good oral hygiene by brushing with a fluoride toothpaste, flossing, and using a fluoride mouth rinse at night before bed to help re-strengthen enamel. Avoid hot and cold food and drink which may be painful due to sensitivity from erosion. See your dentist regularly and confide in him or her the details of your disorder so you may receive the best care possible.

Anorexia, Bulimia, and Binge Eating are often classified as the three most common eating disorders, but there are others. Learn about other disorders, treatment, and resources at the National Eating Disorders Association's website:

<https://www.eatingdisorderhope.com/information/help-overcome-eating-disorders/neda>

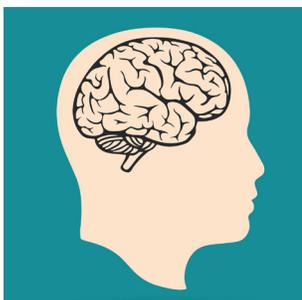
# Oral Health and Bacteremia

## How germs in the mouth use the bloodstream as a highway to reach the entire body

Bacteremia is an invasion of the bloodstream by bacteria. You may have heard of the need for prophylactic antibiotics before getting dental treatment to reduce the risk of bacteria spreading through the bloodstream. New studies are finding that maintaining oral health may be more effective than antibiotic prophylaxis in reducing the risk of bacteremia. Dental professionals everywhere are part of a movement to help people understand that oral health and overall health are vitally intertwined. As developing research continues, it is revealing the harmful effects of oral bacteria on major body systems and organs are.

You swallow plenty of bacteria that end up in your gut, but your bloodstream is also a convenient form of transport. Each time you chew, brush, or floss, these germs get pushed into small vessels in your gums. The base of each of your teeth is protected by what's called biological width. In a healthy mouth, the immune system keeps germs from entering the body and causing infection, but when you have chronic gum disease or other oral infections, oral bacteria is able to break into the bloodstream and travel to organs throughout the body.

### The Brain

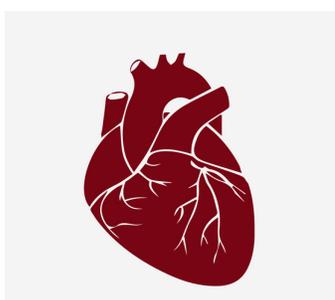


(Source: Getty Images)

Researchers now know that one of the most harmful oral bacterium associated with gum disease, porphyromonas gingivalis (Pg), can travel across the blood-brain barrier and cause pathological changes associated with Alzheimer's Disease.

When tooth decay is left untreated for too long, or when a tooth breaks, an infection can develop inside or under the tooth. Whenever dental infection is present, there is the possibility of bacteria traveling from the tooth to the surrounding tissues and bones.

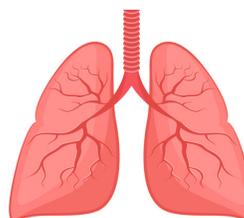
### The Heart



(Source: Getty Images)

Oral health and heart disease are connected by the spread of bacteria – and other germs – from your mouth to other parts of your body through the blood stream. When these bacteria reach the heart, they can attach themselves to any damaged area and cause inflammation. Other cardiovascular conditions such as atherosclerosis (clogged arteries) and stroke have also been linked to inflammation caused by oral bacteria, according to the American Heart Association.

### The Lungs



(Source: Getty Images)

Tooth decay, tender gums, and periodontal disease are all signs of poor oral health, but did you know they also increase the risk of lung infection? When oral bacteria travel from the mouth to the lungs, they can give way to things like pneumonia, increasing one's symptoms of chronic respiratory conditions such as emphysema. There is a clear link between poor oral health and chronic respiratory disease.

### The Kidneys



(Source: Getty Images)

Just as research indicates bacteria associated with disease in the mouth can affect major organs such as the heart through bacteria in the blood stream, developing studies show kidneys are similarly at risk. New research reveals that patients with chronic kidney disease who also have severe gum disease or periodontitis have a higher risk of death than chronic kidney disease patients with healthy gums.

## Systemic Inflammation

It isn't just the bacteria alone that cause problems for your health. It's also your body's immune response. When your body senses infection, it responds by releasing many chemical triggers that activate your immune response, also known as an inflammatory response. It can cause swelling, but it has many other effects. Systemic inflammation has been linked with metabolic disorders, cancer, Alzheimer's disease, and autoimmune disorders, among other serious health conditions. This includes rheumatoid arthritis, where your immune system attacks joint tissues as if they were invading bacteria. As long as your gums remain chronically infected with gum disease, your body will continue its elevated immune response, with serious consequences for your health.

## We have questions for you!

We have a New Year's resolution to help everyone be more aware of how much oral health affects overall health. Each month we will be sending out a short, informational multiple-choice quiz and everyone who takes the quiz will be entered to win a prize.

The winner for the month of February is Paul Westlake and he is the new owner of an Oral B Vitality Floss Action Electric Toothbrush! Keep an eye out for the monthly surveys and enter for your chance to win awesome prizes while learning how to keep your mouth and body healthy!