Longer days, warmer weather, and new life are on the horizon in the Lehigh Valley. As long as there's no April fooling going on, we can say that Spring has officially SPRUNG! Spring is always an exciting time of year, and it usually sparks some enthusiasm in people of all ages. Many look forward to kicking out those winter blues and spending some more time outside. Others anticipate cleaning out closets, garages, and basements. Gardeners begin to plant their bulbs, and children start to count down the months until summer vacation. There's a spirit of rejuvenation, and at HDD, we are caught up in the excitement.
This month, we are focusing on two important topics. Check out some information about radiation in the dental office and see how HDD is participating in Oral Cancer Awareness Month. Happy Spring!

3D Imaging – What’s all the fuss?

As we mentioned in last month's newsletter, we have recently added cone-beam computed tomography (CBCT) functionality to our panoramic x-ray machine. This will allow us to image your jaw bone, teeth, and surrounding structures in three dimensions. We know with any imaging, radiation dose and necessity is always a concern, and it's one we pay close attention to at HDD. With that in mind, we wanted to highlight some details about this new technology, as well as other x-rays that you may have taken in our office.

Radiation is a reality of life, and not just something you are exposed to during dental or medical imaging. Typically, we measure the amount of radiation a person receives in milliSieverts (mSv). The average person receives about 0.008mSv in natural background radiation every day. On a flight between London and Los Angeles, a person will be exposed to 0.080mSv of radiation. In comparison, dental x-ray dosage is actually quite low. Check out these values:
- A bitewing or periapical x-ray (the ones we take when you're seated in the operatory) exposes you to 0.004–0.006mSv.
- Before digital x-rays, the older film style radiographs exposed patients to 0.017mSv. We've improved by 50–75% with modern dentistry!
- A panoramic x-ray (the one that rotates around your head while you are standing) is 0.020mSv.
- Our new 3D images will range from 0.017 to 0.053mSv (depending on the area of interest).

At HDD, we follow the ADA's guidelines to limit your radiation exposure as much as possible. At the same time, we want to ensure that you are receiving optimum care. Several organizations have released position statements outlining when 3D imaging is the modality of choice for visualizing dental problems, making treatment decisions, and executing procedures. For instance, the American Academy of Oral and Maxillofacial Radiology (AAOMR) has recommended "CBCT imaging as the current method of choice for cross-sectional imaging [for implant placement] in that it provides the greatest diagnostic yield at an acceptable radiation dose risk."\(^1\) The American Association of Endodontists joined the AAOMR to release guidelines for the use of CBCT in Endodontics. They advocate 3D imaging as the modality of choice for making complex diagnoses, identifying atypical anatomy for root canals, and as a routine part of planning retreatment and surgical procedures.\(^2\)

Clearly, 3D imaging has some very important uses. At the same time, it does not expose patients to excessively high doses of radiation. We are so excited to use this technology at HDD. Rest assured, we will continue to follow the clinical guidelines for radiology and specifically for 3D imaging. We will always have your best interests in mind!

**Oral Cancer Awareness Month**

April is Oral Cancer Awareness Month, and we want to place a special emphasis on oral cancer screening. Ever wonder why Dr. Gil pulls your tongue out and looks underneath it at your dental visits? No it's not to make sure you're brushing your tongue
(although you should be doing that too!). It's to check for any signs of oral cancer. This is a disease that often goes unnoticed, and, if not fatal, can drastically change your quality of life. For more information, go to the [Oral Cancer Foundation](https://www.oralcancer.org) and check out the infographic below.

**THE WORD OF MOUTH ON ORAL, HEAD + NECK CANCER**

**ORAL + OROPHARYNGEAL CANCER RATES ARE GROWING**

- **529,000+** new cases of oral cancer each year worldwide
- **49,750+** individuals will be diagnosed with oral or oropharyngeal cancer in 2017 in the U.S.
- **132** new cases of oral cancer diagnosed each day
- **9,750** will die of oral cancer

- **More than 40%** of those diagnosed with oral cancer die within five years

**RISK FACTORS FOR ORAL CANCER**

**WHAT RAISES YOUR RISK FOR ORAL CANCER?**

- **Tobacco use:** No amount is safe; risk increases with use
- **Alcohol use:** 7+ drinks per week; 14+ drinks per week
- **Exposure to the HPV-16 virus**
- **The risk is 15X greater for people who both smoke & drink**
FREE Oral Cancer Screenings

Do you or someone you know have one or more risk factors? Haven't been checked lately? Don't worry, we've got you covered. In the month of April, we will be scheduling FREE oral cancer screenings for anyone and everyone. You don't need x-rays, a cleaning, or a comprehensive treatment plan. All are welcome to come in for the 8 step screening. Just call Karen and set up your time today. It only takes 10 minutes and could save your life!

HDD Walks for Oral Cancer

In April 2009, Dr. Julee helped to found the first ever Oral Cancer Walk/5K in Philadelphia. Now the event is 10 years strong and has raised thousands of dollars to help fund research and aid treatment of oral cancer. This year, the walk will be held on April 7th, and HDD has created a team that will be participating and raising money for the Oral Cancer Foundation. If you're interested in walking or running with us, register here. There is a section in the online registration where you'll have the opportunity to join a team, and you'll need to search for "Hamilton Dental Designs." If you'd rather make a donation, consider helping us
reach our fundraising goal here. For more information about the event, visit the website. Also, check out the video below showing clips from the event in 2016. This is an important cause. Please consider helping to aid the fight against oral cancer and to raise awareness along with the team at HDD.

Spring cleaning?

Don't forget about your smile as you clean out and freshen up this Spring. If you haven't scheduled your first visit of the year yet, don't delay! Melissa will be happy to go over the best ways to renew healthy dental habits, and she'll make your teeth sparkle. We are in the process of adding another hygienist to our growing team, so soon there will be more availability for those coveted evening appointments.
Dental Did You Know #10

If you skipped over all that oral cancer text and would rather have Dr. Gil tell you all about it, check out our latest Dental Did You Know.