

## **X-ray Frequency and Safety**

X-rays are safe and frequency depends on your dental needs.

**Q: It seems like every time I go to the dentist they want to take x-rays. How often should dental x-rays be taken and how safe are they?**

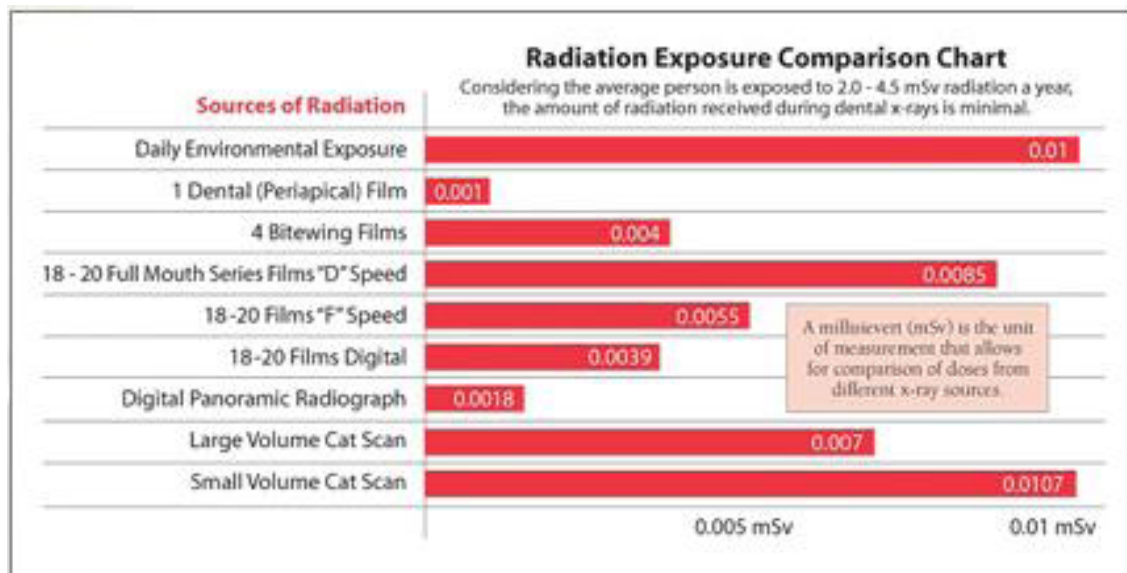
This is a frequently asked and important question. Today's x-ray machines and image capturing techniques are so sensitive, the amount of radiation needed for diagnosis is negligible, almost next to nothing compared to what you get from every day background radiation.

Since we know our annual background exposure to natural x-radiation (all around us) is from 2 to 4.5 mSv, and more if you like to take airplane rides, we can then make a comparison to dental x-ray examinations.

Dental radiographs are completely safe; The x-ray machines take images of only the necessary structures, so there is no scatter of the x-rays to other tissues. Your dentist will always take the precaution of making you wear a lead apron to shield the rest of your body.

### **Radiation Exposure Comparison**

Considering the average person is exposed to 2.0 – 4.5 mSv radiation a year, the amount of radiation received during dental x-rays is minimal.



How often radiographs are needed depends on your individual health needs. Your dentist will review your history, examine your mouth and teeth then decide whether you need radiographs and what type.

After overall oral health and dental status have been preliminarily determined, more detailed images can be taken using smaller radiographs of individual teeth called periapicals, or bitewing radiographs for example. These routine pictures taken with a standard technique give your dentist a multitude of information about tooth decay and periodontal (gum) disease (which results in bone loss), all imaged in great detail with extraordinarily little radiation.

Once your dentist has a track record with you and has made an evaluation of your individual risk for cavities or gum disease, he will be able to assess the interval and type of radiographs necessary to monitor you over time. Please feel free to discuss your concerns directly with your dentist and ask to review your radiographs with you, you'll learn a great deal and probably feel a lot more comfortable when you have direct answers to your questions.