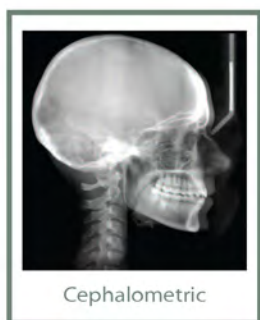


PLANMECA®

RADIOLOGY Patient
Overview



Your Guide to Understanding
Dental X-rays, and Your Health...



PLANMECA and the ALARA Principle (As Low As Reasonably Achievable)

PLANMECA's follows the clinical values that emphasize the use of the least amount of radiation to achieve the best results possible. This commitment to "As Low As Reasonably Achievable" or the ALARA radiation principle keeps both dentist and patient safe and is the premise of PLANMECA's X-ray equipment. The ability to use the least amount of radiation possible is made possible by PLANMECA's patented Selectively Compliant Articulated Robotic Arm technology built into its ProMax platform. This robotic arm allows for precise imaging anywhere in the maxillofacial/cranial region and eliminates exposure to areas not needed for diagnosis.

The Three Most Common Types Of X-rays Are:

Extraoral Bitewing – Bitewing X-rays are the most common form of X-rays taken during a dental exam as they show dental cavities between teeth. However, not all bitewing X-rays are created equal: those taken with the PLANMECA ProMax may reduce radiation up to 40% in comparison with intraoral bitewings. The ProMax is statistically proven to detect more dental caries than those taken with traditional intraoral bitewing X-rays. Extraoral bitewings offer better infection control and diagnostic quality than bitewing's taken with intraoral sensors. The ProMax Extraoral Bitewing eliminates a patient from gagging and provide a better patient experience.

Panoramic – The Panoramic X-ray gives a broad overview of the entire mouth. This X-ray supplies information about the teeth, upper and lower jawbone, sinuses and the other hard and soft tissues of the head and neck.

Periapical or (PA) – Periapical X-rays show the entire tooth, including the roots as well as the bone surrounding them. These X-rays are useful to diagnose a dental abscess as well as periodontal gum disease.

What Are 3D X-rays?

3D CBCT X-rays are a compact, safer, faster version of a regular CAT scan or CT. In 3D dental X-rays, a cone shaped X-ray beam used during rotation, produces cross sectional images of bone and some soft tissues in varying degrees of detail depending on pre-determined level of resolution. Though there are many other imaging techniques, some more detailed, 3D CBCT imaging has the unique ability to offer clear images with limited patient exposure to radiation and provides only the necessary detail needed to make a proper diagnosis. Your doctor would use 3D X-ray for a variety of diagnostic tests including:

- Oral surgery
- Implant planning
- Orthodontic planning & implant anchorage
- Cephalometric analysis
- TMJ analysis
- Airway study (sleep apnea)
- Jaw tumors
- Impacted teeth
- Periodontal diseases
- Endodontic anomalies implants, oral surgery, and problems related to gums

What Is A Cephalometric Scan?

A cephalometric x-ray, also simply known as a ceph, is a diagnostic radiograph used primarily for orthodontic treatment planning, and is taken during the orthodontic records appointment. Cephalometric x-rays are also used by otolaryngologists -- doctors who specialize in the treatment of ear, nose and throat (ENT) disorders such as sleep apnea -- because these x-rays can provide a view of the patient's airways.

How Often Should Radiographs Be Taken?

How often X-rays (radiographs) should be taken depends on your present oral health, your age, your risk for disease, and any signs and symptoms of oral disease you may be experiencing. For example, children may require X-rays more often than adults. This is because their teeth and jaws are still developing. Also their teeth are more likely to be affected by tooth decay than those of adults.

If you are a new patient, the dentist may recommend radiographs to determine the present status of your oral health and to help identify changes that may occur later. A new set of X-rays may be needed to help your dentist detect any new cavities, determine the status of your gum health or evaluate the growth and development of your teeth. If a previous dentist has any radiographs of you, your new dentist may ask you for copies of them. Ask both dentists to help you with forwarding your X-rays.

What If I'm Pregnant And Need A Dental Radiograph Examination?

A radiograph may be needed for dental treatment that can't wait until after the baby is born. Because untreated dental infections can pose a risk to the fetus, dental treatment may be necessary to maintain the health of the mother and child. Radiation exposure resulting from dental X-rays is low. However, every precaution is taken to ensure that radiation exposure is As Low As Reasonably Achievable (the ALARA principle). A leaded apron minimizes exposure to the abdomen and should be used when any dental radiograph is taken. Also, a leaded thyroid collar can protect the thyroid from radiation, and should also be used whenever possible. The use of a leaded thyroid collar is recommended for women of childbearing age, pregnant women and children. Dental X-ray exams do not need to be delayed if you are trying to become pregnant or are breast feeding.