





3D

WHAT ARE THE BENEFITS TO CBCT 3D SCANS?

Unlike 2D scans, which are "flat" images, 3D scans allow us to completely visualize the region of interest. Like the difference between a photo and a sculpture, 3D scans give us the details we need to make more accurate diagnoses and more effective treatment plans.

Major professional dental organizations recommend the use of CBCT scanning in many diagnostic and treatment planning examinations over the use of 2D intraoral radiography.





3D Imaging (CBCT) Patient Education Information



Welcome to our practice!

To ensure that we provide you with the best care possible, we use a number of imaging systems to improve our diagnostic capabilities and treatment planning. This may mean prescribing intraoral or extraoral X-rays or even a CBCT (3D) scan.



WHAT IS CONE BEAM COMPUTED TOMOGRAPHY (3D)?

Cone beam computed tomography, or CBCT, is a variation of the traditional computed tomography (CT) used in medical environments. The CBCT system used in our practice captures information using a cone-shaped X-ray beam, which is then used to reconstruct a 3D image of the area of interest.

The CBCT scan captures all the anatomy in one single coneshaped beam rotation, subjecting the patient to 10 times less radiation exposure. CBCT offers higher resolution, sharper images, and better metal artifact reduction compared to medical CT. Medical CT machines rotate around the patient's head several times to collect adequate information—resulting in overlapping of radiation.



WHAT HAPPENS DURING THE CBCT SCAN?

During the scan, you will be positioned in the CBCT machine. For your comfort, we have chosen a Carestream Dental CBCT system, which features an open design and can accommodate patients of all sizes. A member of our team will carefully position your head and ask you to keep still during the scan. The positioning scan should only take one minute or less.

Low Dose CBCT Scans





WHAT ARE THE RISKS ASSOCIATED WITH CBCT?

CBCT scans use a much lower radiation dose than medical CT Scans. While a medical CT scan of the jaw may expose a patient to a radiation dose equivalent to 179-578 days of background radiation—that is, the amount of radiation you are exposed to in your daily life—a CBCT scan of the same area is comparable to only 6-8 days of background radiation.

That said, our practice only prescribes CBCT examinations when the situation calls for it. And, when we perform the scan, we adhere to the As Low as Reasonably Achievable (or ALARA) principle to ensure your total safety.