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I Fact Sheet Dental Technology I

# Technology in the Dental Office

There is a multitude of equipment in every dental office. It's this equipment, as well as advances in dental procedures, which allow your dentist to provide you with the highest quality oral health care. With today's technologies, dentists are equipped to manage your dental health, all while ensuring your safety and comfort. Learn more about common technologies used in the dental office.

## Digital X-rays

Digital X-rays can help your dentist spot a number of issues in your mouth, including decay and possible bone loss. Dentists also use this imaging during treatment planning.

To capture a digital image, your dentist first will put a sensor or phosphor plate in your mouth before taking a digital X-ray. This sensor allows the image to be viewed on a computer screen, where it can be adjusted for contrast and brightness—allowing for optimal diagnosis. The digital X-ray process is much faster than traditional X-ray systems, decreasing your radiation exposure and eliminating potential treatment disruptions.

## Intraoral cameras

With an intraoral camera, your dentist will be able to spot problematic areas in your mouth, such as fractured teeth, receding gums, and broken restorations. An intraoral camera also is used to help you better understand the condition of your teeth, and why your dentist is ordering specific treatment or procedures. An intraoral camera looks like a wand or pen. Its images can be projected onto a computer screen in the operator's office for easy viewing by the patient and doctor.



## Cone-beam computed tomography imaging

Cone-beam computed tomography (CBCT) imaging can help your dentist plan for dental implants, evaluate abnormal teeth, and diagnose cavities. Also, CBCT imaging helps your dentist spot any dental trauma. This X-ray machine is designed to rotate around your head, capturing data using a cone-shaped X-ray beam and giving your dentist a 3-D view of your teeth, mouth, jaw, neck, ears, nose, and throat.

## CAD/CAM technologies

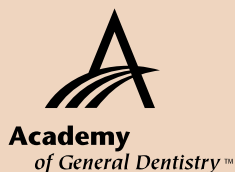
In the past, when you needed a dental restoration, such as a crown, your dentist would make a mold of the tooth in question and the area surrounding it and send the mold to a lab, which would make the permanent crown. This process would take a week or more, after which the patient, fitted with a temporary crown, would have to return to the office for the final crown placement. However, computer-assisted design and computer-assisted

manufacturing (CAD/CAM) technologies speed up this process by creating your new restoration in the office while you wait.

## Dental lasers

A dental laser is an instrument that produces a very narrow, intense beam of light energy, which is used to help remove or shape tissue in the mouth. Your dentist may use a dental laser for tooth-whitening procedures, gum disease therapy, the detection and removal of tooth decay, and the detection and filling of cavities. Your dentist also may use a laser to remove lesions from your mouth or relieve canker sore pain. These lasers can reduce symptoms and the healing times associated with a number of dental therapies, as well as help control bleeding and reduce the prevalence of mouth bacteria in diseased gum tissue and tooth cavities.

Talk with your dentist if you have any questions about these technologies or others that are available in the dental office.



## KnowYourTeeth.com

Brought to you by the Academy of General Dentistry (AGD), this website answers important dental health questions, offers the latest information on current treatments, provides tips for first-rate oral hygiene, and helps visitors find highly qualified general dentists near where they live.

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