



Diplomate, American Board of Pediatric Dentistry

Advancing the Science and Art of Pediatric Dentistry

# "THE WHOLE TOOTH"

## The Benefits of X-Rays

The use of X-rays in dentistry is considered a necessary component of a thorough dental examination. Many diseases of the mouth cannot be seen with the naked eye. If X-rays are not used, small cavities between the teeth, abscesses, cysts, tumors and other diseases may be impossible to detect until obvious signs and symptoms have developed and the progression of oral disease is quite severe. Finding and treating dental problems at an early stage can save time, cost and discomfort. If you have a hidden tumor, early diagnostic X-rays may even help save your life.

### WHAT ABOUT THE RADIATION DAMAGE?

Scientists have known for some time that exposure to large amounts of radiation can be harmful to your body. With the modern techniques and equipment used in the dental offices of today, the amount of radiation received in a routine dental examination is extremely

small. Therefore, the risk of harmful effects from dental Xrays is negligible.

#### A COMPARISON

We are exposed to natural background radiation all the time from the earth, sun, moon, and stars. It has been estimated that the average person receives about 300 millirem of radiation every year from the natural environment. By comparison, the four bitewing X-rays we recommend most patients have every year deliver 2 millirem of radiation.

### HOW WE LIMIT YOUR RADIATION EXPOSURE

There are many precautions we follow to help limit your radiation exposure:

- A lead shield, impenetrable by X-rays, covers your body.
- High speed film is used, so that the picture can be exposed with the smallest amount of X-ray dosage possible.

- The X-ray tube is designed to filter out and restrict the size of the Xray beam.
- The Ohio Department of Radiation Protection tests our X-ray equipment to assure safety to staff and patients.
- Routine, diagnostic bitewing X-rays are taken of the back molars only, where the possibility of decay between the teeth is more likely.

Problems cannot be treated without first being diagnosed. One of the most valuable diagnostic tools ever developed in medicine is the X-ray machine. By using Xrays carefully and prudently. we are able to offer our patients the excellent care they deserve.