

SMILES BY ROSIE FAMILY DENTISTRY

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Radiation Safety At Our Office

Looking at teeth visually in the mouth only shows a small percentage of tooth structure.

Radiographs are the only way to diagnose:

- Cavities between the teeth, at the gumline, and through the chewing surfaces of teeth
- Cavities that grow under fillings (recurrent decay)
- Bone between and around teeth, which is how gum disease (periodontitis) is diagnosed
- Tooth infections (abscesses)
- Cysts and lesions inside the bone

If left untreated, issues like cavities can grow and require more extensive treatment. Periodontitis and dental abscesses can lead to serious systemic (full-body) complications, including death.

Why are some xrays taken every 6 months?

- Cavities spread relatively slowly, so in 6 months we can see if a cavity is actively growing while being able to stop it in time.
- Some types of oral issues are caught at a later stage on xrays, and taking films more regularly and at varying angles increases diagnosis accuracy.
- Six month bitewing xrays are recommended by the American Dental Association, though dentists may choose to take films more or less frequently depending on a patient's risk factors.

How safe are dental xrays?

- "The Nomad presents no risk to the patient or to the operator and the measured doses are well below recommended levels." -Goren et al. (2014) *Radiation Exposure with the NOMAD Portable Xray System. British Institute of Radiology. 37 (2).*

Type Of Exposure	Annual Dosage in mSv
Eating one banana	0.01
Dental bitewings - Taken every 6 months	0.013
Dental FMX (full mouth series) - Taken every 3-5 years	0.06
Transatlantic flight	.08
Chest xray	0.1
Mammogram	0.4
Spine CT	6
Abdomen and Pelvis CT	10
Changes in blood cells first visible	100
Lethal dose of radiation	3500 - 5000