

**Introducing Kodak® Carestream 9000 CBCT Scan in Endodontics – Part I**

Conventional radiographs reveal only limited 2D view of the true 3D anatomy. This limitation can be overcome by utilizing small-volume cone beam-computed tomography imaging technology. Kodak® Carestream 9000 CBCT is widely considered to be among the most suitable CBCT units for endodontic application. In order to show PDL space accurately, the Field of View (FOV) cannot exceed 200 µm – the average width of the PDL space; Kodak 9000 unit has the lowest FOV of 79µm. This unit also has the lowest radiation exposure (see figure below). Kodak® Carestream 9000 CBCT Scan service is available at **Metrotown Endodontics**. Since I started to use this new technology in my daily practice, it has helped me to improve the accuracy in both diagnosis and treatment for my patients. In the upcoming issues of **Endodontic Updates**, I will present various types of cases that I encountered which I have found CBCT to be very beneficial.

Sincerely Yours

Dr. Kevin L. Li DMD PhD FRCD©



**Ionizing Radiation Dosages (approximate)**

Activity	Effective Dose in µSv	Dose as Days of Equivalent Background Radiation
1 day background radiation, sea level	7-8	1
1 digital PA radiograph	6	1
4 dental bite-wing radiographs, F-speed film	38	5
FMX; PSP or F-speed film	171	21
<b>Kodak® CBCT focused field, anterior</b>	4.7	<b>0.71</b>
Kodak® CBCT focused field, maxillary posterior	9.8	1.4
Kodak® CBCT focused field, mandibular posterior	38.3	5.47
3D Accutomo, J. Morita	20	3
NewTom 3G, ImageWorks	68	8
Chest x-ray	170	25
Mammogram	700	106
Medical CT, head	2,000	243
Medical Cat Scan (Spiral CT abdomen)	10,000	1,515
Federal Occupation Safety Limit per Year	50,000	7,575

Ludlow JB et al. *Dosimetry of 3 CBCT devices for oral and maxillofacial radiology. Dentomaxillofac Rad* 2006; 35: 219-226.

White SC, Pharoah MJ. *Oral Radiology: Principles and Interpretation*. 2009. Mosby Elsevier, St. Louis, Missouri.

**Kodak® Carestream 9000 CBCT Scan**

