

**Summary of inter-examiner reliability results for the 24-month field phase**

(July 9, 1996)

Five examiners participated in the 24-month field phase of the FDCS. Re-examinations were done on 64 subjects, which were dispersed temporally throughout the field phase. These 64 subjects had a mean (S.D.) of 18.6 (7.8) teeth (range of 2 to 30) and a mean (S.D.) of 0.3 (0.7) retained root fragments (range of 0 to 4).

For the sake of consistency across examination time points, agreement between examiners was forced for these per-subject measures: number of teeth, retained root fragments, fixed prosthetic pontics and cantilevers.

**Summary of inter-examiner agreement for surface-specific coronal and root caries assessments**

Pairing	# subj.	# teeth assessed	CORONAL % agreement	ROOT % agreement	CORONAL kappa	CORONAL coeff. Y	ROOT kappa	ROOT coeff. Y
Overall	64	1,188	98%	99%	0.94	0.96	0.69	0.89

Using data from the primary examiner, these 64 subjects had the following characteristics:

- a) % subjects with one or more carious crown surfaces: 47%
- b) % subjects with one or more carious root surfaces: 39%
- c) % subjects with one or more carious tooth surfaces: 58%
- d) mean coronal DS: 2.6 (4.4); range of 0 to 23
- e) mean coronal DFS: 18.1 (18.8); range of 0 to 74
- f) mean root DS: 1.8 (3.7); range of 0 to 19
- g) mean root DFS: 2.2 (3.7); range of 0 to 19

Summary of inter-examiner agreement for periodontal attachment level

Pairing	# subj.	# teeth assessed	% teeth assessed with LOA* of 7+ mm	% pairs +/- 1 mm	% pairs +/- 2mm
Overall	64	346	9%	83%	96%

\* LOA = loss of attachment relative to the cemento-enamel junction

Mean (S.D.) attachment loss in teeth assessed was 3.6 mm (2.4)

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Tooth-level estimates of inter-examiner agreement were done on these measures:

- 1) teeth that have bulk restoration fracture(s)
  - a) 64 subjects assessed, who had 1,188 teeth and a mean (S.D.) of 0.2 (0.5) bulk fractures (range of 0 to 2).
  - b) 19 teeth were called as having a bulk fracture by at least one examiner
  - c) percent agreement=99%; Y=0.85; kappa=0.46
- 2) teeth that have cusp/incisal edge fracture(s)
  - a) 64 subjects assessed, who had 1,188 teeth and a mean (S.D.) of 0.2 (0.4) cusp fractures (range of 0 to 2).
  - b) 18 teeth were called as having a cusp fracture by at least one examiner
  - c) percent agreement=99%; Y=0.93; kappa=0.71
- 3) teeth that have root defect(s)
  - a) 64 subjects assessed, who had 1,188 teeth and a mean (S.D.) of 0.1 (0.8) root defects (range of 0 to 6).
  - b) 10 teeth were called as having a root defect by at least one examiner
  - c) percent agreement=99%; Y=0.92; kappa=0.78
- 4) teeth that are mobile
  - a) 64 subjects assessed, who had 1,188 teeth and a mean (S.D.) of 0.6 (1.7) mobile teeth (range of 0 to 10).
  - b) 44 teeth were called as mobile by at least one examiner
  - c) percent agreement=99%; Y=0.93; kappa=0.80

Y = coefficient of colligation