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

<table>
<thead>
<tr>
<th>Pairing</th>
<th># subj. assessed</th>
<th>CORONAL % agreement</th>
<th>ROOT % agreement</th>
<th>CORONAL kappa</th>
<th>CORONAL coeff. Y</th>
<th>ROOT kappa</th>
<th>ROOT coeff. Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>64</td>
<td>1,188</td>
<td>98%</td>
<td>99%</td>
<td>0.94</td>
<td>0.96</td>
<td>0.69</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Pairing</th>
<th># subj.</th>
<th>% teeth assessed</th>
<th># teeth with LOA* of 7+ mm</th>
<th>% pairs +/- 1 mm</th>
<th>% pairs +/- 2 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>64</td>
<td>346</td>
<td>9%</td>
<td>83%</td>
<td>96%</td>
</tr>
</tbody>
</table>

* LOA = loss of attachment relative to the cementoenamel 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