



Data Collection Worksheet

Please Note: The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

To obtain the Tooth Surface Index of Fluorosis (TSIF), each fully erupted, unrestored tooth surface is examined and assigned a score on a 0 to 7 scale noted below. Two scores are assigned to the anterior teeth from the labial and lingual aspects, and three scores are assigned to the posterior teeth from the buccal, lingual, occlusal aspects. The tooth surfaces are not dried before the examination. The thought is that teeth should be assessed in their natural state and that those opacities that are visible only after drying should not be included in the definition of fluorosis (Rozier, 1994).

If more than one category of fluorosis exists on a tooth surface, for example, discrete pitting and staining (Score = 6) and confluent pitting (Score = 7), the highest numerical score is assigned to that surface.

The TSIF is not an interval scale, so the scores are not averaged. For the TSIF, there are a maximum of 72 scores per subject.

Clinical Criteria and Scoring System for the Tooth Surface Index of Fluorosis

(Score = 0)

Enamel shows no evidence of fluorosis.

(Score = 1)

Enamel shows definite evidence of fluorosis, namely areas with parchment-white color that total less than one-third of the visible enamel surface. This category includes fluorosis confined only to incisal edges of anterior teeth and cusp tips of posterior teeth ("snowcapping").

(Score = 2)

Parchment-white fluorosis totals at least one-third of the visible surface, but less than two-thirds.

(Score = 3)

Parchment-white fluorosis totals at least two-thirds of the visible surface.

(Score = 4)

Enamel shows staining in conjunction with any of the preceding levels of fluorosis. Staining is defined as an area of definite discoloration that may range from light to very dark brown.

(Score = 5)

Discrete pitting of the enamel exists, unaccompanied by evidence of staining of intact enamel. A pit is defined as a definite physical defect in the enamel surface with a rough floor that is surrounded by a wall of intact enamel. The pitted area is usually stained or differs in color from the surrounding enamel.

(Score = 6)

Both discrete pitting and staining of the intact enamel exist.

(Score = 7)

Confluent pitting of the enamel surface exists. Large areas of enamel may be missing and the anatomy of the tooth may be altered. Dark-brown stain is usually present.

[img[fluorosis_image001.jpg|Coronal Caries]]

Protocol source: <https://www.phenxtoolkit.org/protocols/view/81201>