

HANDICAPPING LABIOLINGUAL DEVIATION (HLD) INDEX

(You will need this score sheet and a Boley Gauge or a disposable ruler.)

Orthodontist Name: _____ Provider #: _____

Client Name: _____ Patient PIC #: _____

Procedure: (To be completed by the Orthodontist)

- Position the patient's teeth in centric occlusion.
- Record all measurements in the order given and round off to the nearest millimeter (mm).
- ENTER SCORE "0" IF CONDITION IS ABSENT.
- If anterior crowding and an ectopic eruption are present in the anterior portion of the mouth, score only the most severe condition.
- The use of a recorder (hygienist, assistant or additional staff person) is recommended.

	Conditions	HLD Score
1.	Deep impinging overbite WHEN LOWER INCISORS ARE DESTROYING THE SOFT TISSUE OF THE PALATE (Indicate an "X" if present and score no further.)	
2.	Crossbite of individual anterior teeth WHEN DESTRUCTION OF THE SOFT TISSUE IS PRESENT (Indicate an "X" if present and score no further.)	
3.	Severe traumatic deviations (Retain description of condition in client's file. For example: loss of a premaxilla segment by burns or by accident, the result of osteomyelitis, or other gross pathology.) (Indicate an "X" if present and score no further.)	
4.	Overjet greater than 9mm with incompetent lips or reverse overjet greater than 3.5mm with reported masticatory and speech difficulties (Indicate an "X" if present and score no further.)	
5.	Overjet in mm.	
6.	Overbite in mm.	
7.	Mandibular protrusion, in mm. x 5 =	
8.	Open bite, in mm. x 4 =	

IF BOTH ANTERIOR CROWDING AND ECTOPIC ERUPTION ARE PRESENT IN THE ANTERIOR PORTION OF THE MOUTH, SCORE ONLY THE MOST SEVERE CONDITION. DO NOT SCORE BOTH CONDITIONS.

9.	Ectopic eruption: Count each tooth excluding 3 rd molar (s) x 3 =	
10.	Anterior crowding: Score one point for MAXILLA, and/or one point for MANDIBLE; two points maximum for anterior crowding x 5 =	
11.	Labiolingual spread, in mm	
12.	Posterior unilateral crossbite (must involve two or more adjacent teeth, one of which must be a molar). If present: Score 4	
Total Score		

If a client meets criterion 1, 2, 3, or 4 above OR does not score 30 or above, you must submit a hard copy request.

HANDICAPPING LABIOLINGUAL INDEX (WA-Mod)

SCORING INSTRUCTIONS FOR SEVERE MALOCCLUSIONS

The intent of the HLD Index is to measure the presence or absence, and the degree, of the handicap caused by the components of the Index, and not to diagnose "malocclusion." All measurement are made with a Boley Gauge (or a disposable ruler) scaled in millimeters. Absence of any conditions must be recorded by entering "O" (refer to scoresheet).

The following information should help clarify the categories on the **HLD Index**:

1. **Deep Impinging Overbite:** Indicate an "X" on the scoresheet when lower incisors are destroying the soft tissue of the palate. If you mark an "X" here, do not score any further. This condition is automatically considered a handicapping malocclusion, and no further scoring is necessary.
2. **Crossbite of Individual Anterior Teeth:** Indicate an "X" on the scoresheet when destruction of soft tissue is present. If you mark an "X" here, do not score any further. This condition is automatically considered a handicapping malocclusion and no further scoring is necessary.
3. **Severe Traumatic Deviations:** Traumatic deviations are, for example, loss of a premaxilla segment by burns or by accident, the result of osteomyelitis, or other gross pathology. Indicate with an "X" on the scoresheet and attach documentation and description of condition. If you mark an "X" here, do not score any further. This condition is automatically considered a handicapping malocclusion, and no further scoring is necessary.
4. **Overjet greater than 9 mm:** If the overjet is greater than 9 mm with incompetent lips or the reverse overjet (mandibular protrusion) is greater than 3.5mm with reported masticatory and speech difficulties, indicate an "X" and score no further. If the reverse overjet is not greater than 3.5 mm, score under #7.
5. **Overjet in Millimeters:** This is recorded with the patient's teeth in centric occlusion and measured from the labial portion of the lower incisors to the labial of the upper incisors. The measurement may apply to a protruding single tooth as well as to the whole arch. The measurement is read and rounded off to the nearest millimeter and entered on the scoresheet.
6. **Overbite in Millimeters:** A pencil mark on the tooth indicating the extent of overlap facilitates this measurement. It is measured by rounding off to the nearest millimeter and entered on the scoresheet. "Reverse" overbite may exist in certain conditions and should be measured and recorded.
7. **Mandibular Protrusion in Millimeters:** Score exactly as measured from the labial of the lower incisor to the labial of the upper incisor. The measurement in millimeters is entered on the scoresheet and multiplied by five (5). A reverse overbite, if present, should be shown under "overbite."
8. **Open Bite in Millimeters:** This condition is defined as the absence of occlusal contact in the anterior region. It is measured from edge to edge, in millimeters. The measurement is entered on the scoresheet and multiplied by four (4). In cases of pronounced protrusion associated with open bite, measurement of the open bite is not always possible. In those cases, a close approximation can usually be estimated.
9. **Ectopic Eruption:** Count each tooth, excluding third molars. Enter the number of teeth on the scoresheet and multiply by three (3). If condition #10, anterior crowding, is also present with an ectopic eruption in the anterior portion of the mouth, score only the most severe condition. **DO NOT SCORE BOTH CONDITIONS.**

The customary and accepted conditions of dental ectopia include ectopic eruption such as that when a portion of the distal root of the primary second molar is resorbed during the eruption of the first molar. These include transposed teeth. Also included are teeth in the maxillary sinus, in the ascending ramus of the mandible and other such situations, when teeth develop in other locations, rather than in the dental arches. These are classic textbook examples of ectopic eruption and development of teeth. In all other situations, teeth deemed to be ectopic must be more than 50% blocked out and clearly out of the dental arch. Regarding mutually blocked out teeth, only one will be counted.

10. **Anterior Crowding:** Arch length insufficiency must exceed 3.5 mm. Mild rotations that may react favorably to stripping or mild expansion procedures are not to be scored as crowded. Enter five (5) points each for maxillary and mandibular anterior crowding. If condition #9, ectopic eruption, is also present in the anterior portion of the mouth, score the most severe condition. **DO NOT SCORE BOTH CONDITIONS.**
11. **Labiolingual Spread:** A Boley Gauge (or a disposable ruler) is used to determine the extent of deviation from a normal arch. Where there is only a protruded or lingually displaced anterior tooth, the measurement should be made from the incisal edge of that tooth to the normal arch line. Otherwise, the total distance between the most protruded tooth and the lingually displaced anterior tooth is measured. The labiolingual spread probably comes close to a measurement of overall deviation from what would have been a normal arch. In the advent that multiple anterior crowding of teeth is observed, all deviations from the normal arch should be measured for labiolingual spread, but only the most severe individual measurement should be entered on the index.
12. **Posterior Unilateral Crossbite:** This condition involves two or more adjacent teeth, one of which must be a molar. The crossbite must be one in which the maxillary posterior teeth involved may be both palatal or both completely buccal in relation to the mandibular posterior teeth. The presence of posterior unilateral crossbite is indicated by a score of four (4) on the scoresheet.