

Handicapping Labio-Lingual Deviations Form (The HLD Index No. 4)

FOR OFFICE USE ONLY First Reviewer: _____ Second Reviewer: _____ Third Reviewer: _____

The Handicapping Labio-Lingual Deviations Form (HLD) is a quantitative, objective method for measuring malocclusion. The HLD provides a single score, based on a series of measurements that represent the degree to which a case deviates from normal alignment and occlusion. You will need this form and a Boley Gauge.

The following documents **must** be submitted with this form: X-rays photos

Procedure

1. Occlude patient or models in occlusion position.
2. Record all measurements in the order given, and rounded off to the nearest millimeter.
- 3. Enter score "0" if condition is absent.**
4. Start by measuring **overjet** of the most protruding incisor.
5. Measure **overbite** from the labio-incisal edge of overlapped front tooth (or teeth) to point of maximum coverage.
6. Score all other conditions listed.
- 7. Ectopic eruption and anterior crowding: Do not double score.** Record the more serious condition.
8. Deciduous teeth and teeth not fully erupted are not to be scored.

Patient's name (please print): _____

Member ID No.: _____

Address: _____

Street	City/County	State	Zip
Conditions Observed			HLD Score
Cleft palate			Score "X"
Deep impinging overbite			Score "X"
Anterior impactions			Score "X"
Severe traumatic deviations			Score 15
Overjet in mm			X1
Overbite in mm			X1
Mandibular protrusion in mm			X5
Open bite in mm			X4
Ectopic eruption (number of teeth, excluding third molars)			X3
Anterior crowding: maxilla: _____ mandible: _____			X5 ea
Labio-lingual spread, in mm (anterior spacing)			X1
Posterior unilateral crossbite			Score 4
Total:			_____

A score of 28 and over constitutes a severe and handicapping malocclusion.

I certify under the pains and penalties of perjury that I am the prescribing provider identified below. Any attached statement on my letterhead has been reviewed and signed by me. I certify that the medical necessity information (per 130 CMR 450.204) on this form is true, accurate, and complete, to the best of my knowledge. I understand that I may be subject to civil penalties or criminal prosecution for any falsification, omission, or concealment of any material fact contained herein.

Prescribing provider's signature: _____

(Signature and date stamps, or the signature of anyone other than the provider, are not acceptable.)

Printed name of prescribing provider: _____

Date: _____

Handicapping Labio-Lingual Deviations Index Scoring Instructions

All measurements must be made with a Boley Gauge, scaled in millimeters. Absence of any conditions must be recorded by entering "0."

The following information should help clarify the categories on the HLD Index.

1. **Cleft Palate Deformities:** Indicate an "X" on the form. (This condition is considered to be a handicapping malocclusion.)
2. **Deep Impinging Overbite:** Indicate an "X" on the form when lower incisors are destroying the soft tissue of the palate. (This condition is considered to be a handicapping malocclusion.)
3. **Anterior Impactions:** Indicate an "X" on the form. Anterior impactions include central incisors, lateral incisors, and canines in the maxillary and mandibular arches.
4. **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. The presence of severe traumatic deviations is indicated by a score of 15 of the form.
5. **Overjet in Millimeters:** This is recorded with the patient in the centric occlusion and measured from the labial of the lower incisor to the labial of the upper incisor. The measurement could 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 form.
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 form. 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 form and multiplied by 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. This measurement is entered on the form and multiplied by 4. In cases of pronounced protrusion associated with open bite, measurement of the open bite is not always possible. In those cases, use a close approximation.
9. **Ectopic Eruption:** Count each tooth, excluding third molars. Enter the number of teeth on the form and multiply by 3. If "Condition No. 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.
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 5 points for maxillary and mandibular anterior crowding. If "Condition No. 9, Ectopic Eruption," is also present in the anterior portion of the mouth, score the most severe condition. Do not score both conditions.
11. **Labio-Lingual Spread:** The Boley Gauge 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 labio-lingual spread probably comes close to a measurement of overall deviation from what would have been a normal arch. If multiple anterior crowding of teeth is observed, all deviations from the normal arch should be measured for labio-lingual 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 either 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 4 on the form.