

Perceptual cough assessment for SLPs

Based on James A Curtis, PhD, CCC-SLP, BCS-S's discussion of cough assessment on Episode 29 of the *Speech Scope* podcast and the tutorial on his website.

4 reasons why SLPs should assess cough

1. **Cough assessment can improve dysphagia screening.** Impaired cough often co-occurs with impaired swallow function.
2. **Cough effectiveness affects airway clearance.** An effective cough can help clear penetrated or aspirated material from the airway.
3. **Cough can help inform risk and clinical decision-making.** Impaired cough in a person with dysphagia is associated with increased risk of adverse outcomes, such as aspiration pneumonia.
4. **Impaired cough is a potential treatment target.** SLPs can incorporate Voluntary Cough Skill Training (VCST) or cough strength training with dysphagia therapy to help improve the patient's ability to clear penetration or aspiration when it occurs.

Dr. Curtis's preferred pattern for voluntary cough assessment

1. **Sequential cough**
 - a. Trial 1 - patient is provided with verbal instruction only.
 - b. Trial 2 - patient is provided with verbal instruction + clinician model.
2. **Single cough**
 - a. Trial 1 - patient is provided with verbal instruction only.
 - b. Trial 2 - patient is provided with verbal instruction + clinician model.

Auditory-perceptual descriptors for cough assessment

Dr. Curtis's descriptors from his cough tutorial (Curtis, n.d.):

- **Perceived strength:** WNL, mildly impaired, moderately impaired, severely impaired.
- **Perceived crispness:** WNL, mildly impaired, moderately impaired, severely impaired.
- **Perceived amount of voicing:** 0-100%, defined as the percentage of time spent with voicing during the expulsive cough phase.
- **Type of expiratory effort:** cough, throat clear, huff, vocalization/grunt, other.
- **Number of expiratory efforts.**

Integrate your perceptual cough assessment into the larger clinical picture

- Is your patient demonstrating a perceptually strong and coordinated cough?
- **Is their cough perceptually weak?** Consider whether respiratory muscle strength may be contributing and whether exercises such as Expiratory Muscle Strength Training (EMST) and/or Inspiratory Muscle Strength Training (IMST) are indicated.
- **Do you detect dyscoordination?** Consider whether Voluntary Cough Skill Training (VCST) may be appropriate.

Learn more about auditory-perceptual assessment of cough

Good places to learn more about James Curtis's approach to cough assessment. Links are in the references.

- Episode 29 of the *Speech Scope* podcast, available on Medbridge.com, YouTube, and various podcast platforms.
- Cough Assessment tutorial on his webpage (text and videos).
- Free cough assessment training on OSF, including practice listening to and imitating coughs.

References

- Baar, S. (Host), & Curtis, J. (Guest). (2026). Dysphagia management and cough rehab: How can SLPs assess and treat? (No. 29) [Audio podcast episode]. In *Speech Scope*. Medbridge.
<https://www.medbridge.com/educate/courses/dysphagia-management-and-cough-rehab-how-can-slp-s-assess-and-treat-sarah-baar-james-curtis>
- Curtis, J. A. (2022). Auditory-perceptual assessment of cough: Reliability [Training materials]. OSF. <https://osf.io/ahfr4>
- Curtis, J. A. (n.d.). Voluntary and reflex cough assessment.
<https://www.jamescurtisphd.me/tutorials/cough/cough-assessment>