



Advancing Otoacoustic Emissions Screening for Early Identification of Hearing Loss in NW and SE Minnesota

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Region 1 & 2

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Vicki Anderson, Educational Audiologist

Holly Wavra, Speech Language
Pathologist - Crookston

Region 10

Christian Wernau, Region 10 Low
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Lyndsey Raffelson, Teacher Deaf Hard of
Hearing - Austin

Jill Achterkirch, Speech Language
Pathologist - Owatonna



What Is a Regional Low Incidence Facilitator?

Purpose and Role

RLIFs support districts serving students with low-incidence disabilities, coordinating technical assistance, training, and regional collaboration to strengthen IDEA implementation and educator capacity.

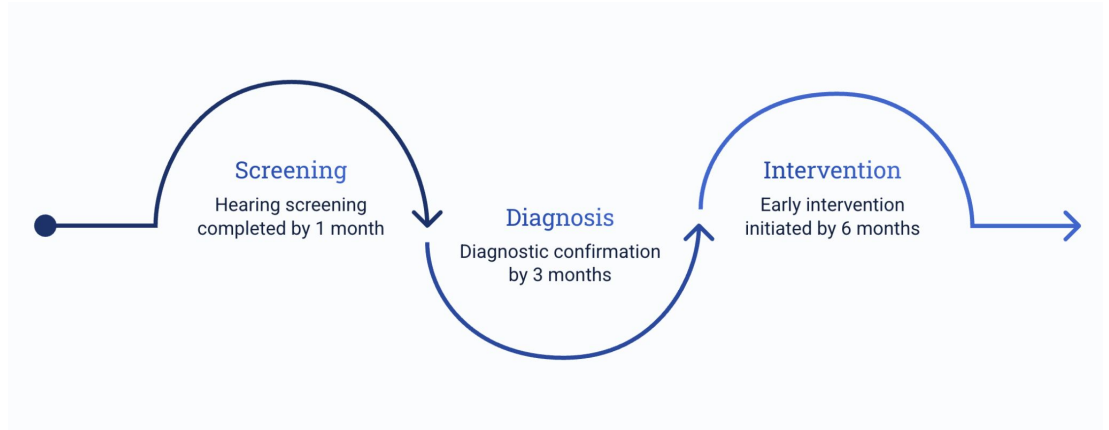
Systems-Level Work

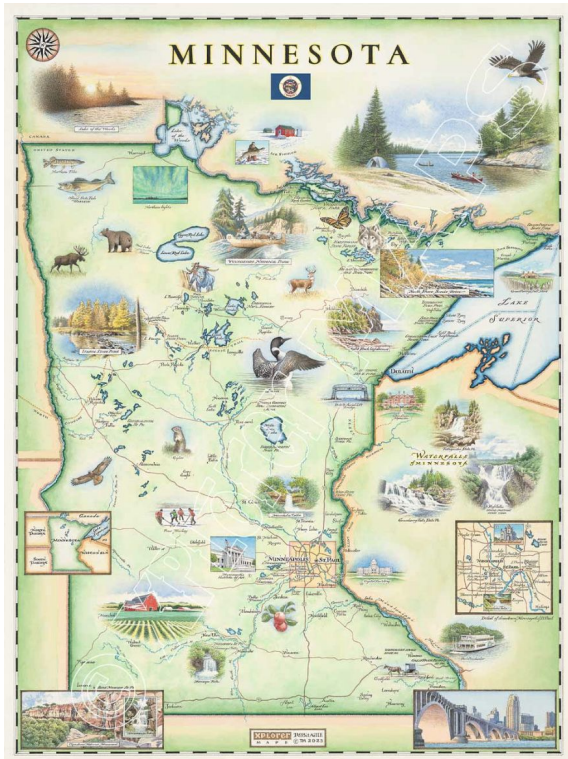
Partners with Minnesota Department of Education, BrightWorks, disability specialists, and community agencies across Minnesota's 11 regions. Focus on sustainability, access, and quality of services.



Minnesota's EHDl 1-3-6 Process- Education-Based Part C

Early screening matters:
Children identified at birth show better outcomes than later-identified hearing loss. Developmental screening data highlights missed opportunities, emphasizing the importance of embedding hearing screening in Early Intervention.





Regional Context: Geography and Scale

Region 1 & 2

Northwest Minnesota

- 42 school districts
- 10 special education units
- 11 Communities of Practice
- 20% receive special education

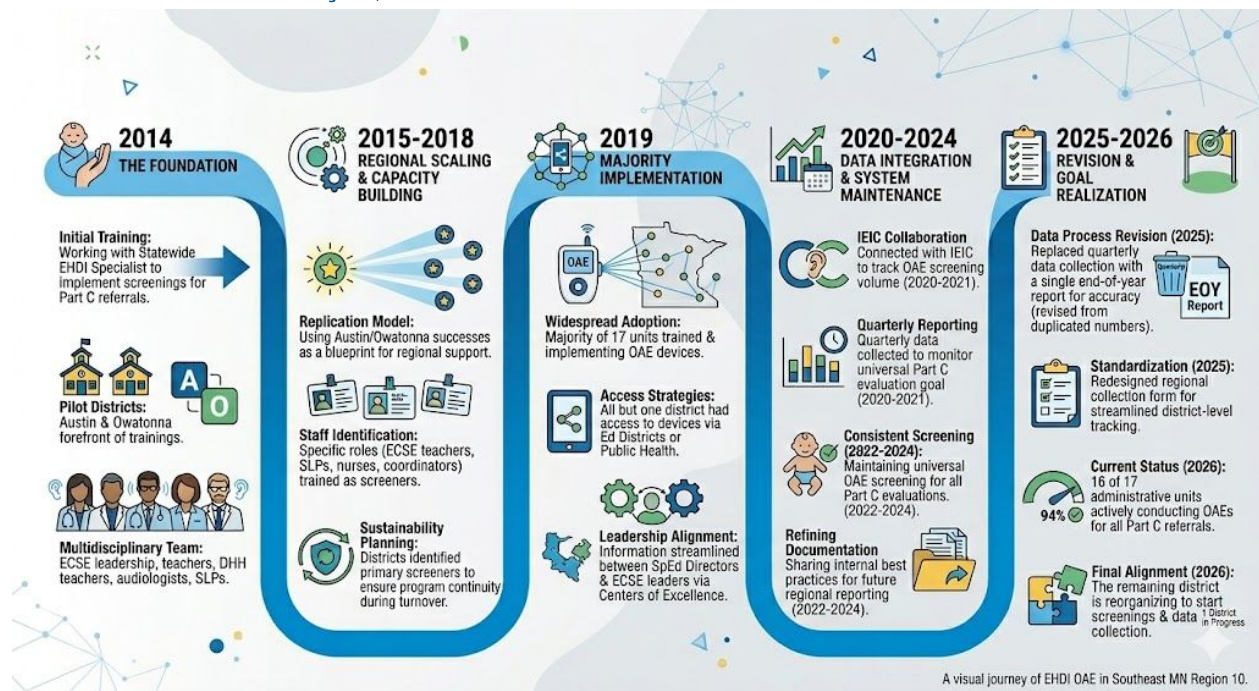
Region 10

Southeast Minnesota

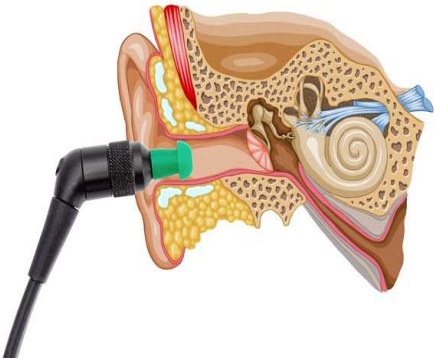
- 50+ school districts
- 17 special education units
- 26 Communities of Practice
- 83,000+ students served



Region 10 OAE Timeline



Region 10: District Implementation - Owatonna



Joined EHDI work in Fall 2014 and obtained first OAE screener by January 2015. OAE screening has since been embedded into our evaluations for all Part C Birth–3 referrals and has expanded to our Part B evaluations (ages 3–5 - for those who have not had pure tone hearing screening). This practice is sustained through designated staff, trainings, on-going maintenance, and administrative support. In 2024, we replaced our initial OAE screener.





Region 10: District Implementation - Austin

EHDI and OAE training through ECHO Initiative (2015). Collaborative equipment selection with audiologist and TDHH-led internal training. OAE screening now embedded as standard Birth–3 practice.



Region 1 & 2: EHDI Initiative Timeline

OAE INITIATIVE TIMELINE





Region 1 & 2: Implementation Supports

Resources Developed

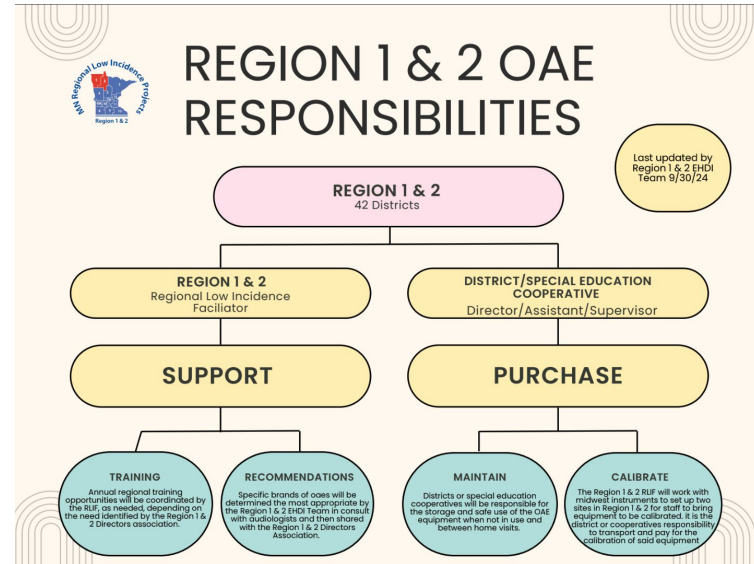
Hearing Screening Road Map

OAE Responsibilities Flow Chart

"How to Take Care of Me" guidance

Distraction toy kits

Mini-grant templates





Professional Learning

Fall 2025 regional OAE training facilitated by:

- RLIF
- TDHH
- Audiologist
- SLP
- Statewide EHDI Specialist
- Midwest Instruments

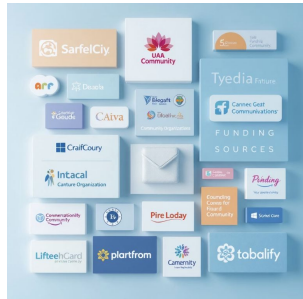




Attaining and Funding OAE Equipment

Funding Strategies

- Federal, state, health and safety funds
- Grants and mini-grants
- Community organizations: Lions, Kiwanis, Sertoma, Rotary
- Hospitals, clinics, pediatric groups
- Education and community foundations



Flexible Models

Shared equipment across districts, partnerships with Head Start, technology budgets. Limited support from MN Department of Health.

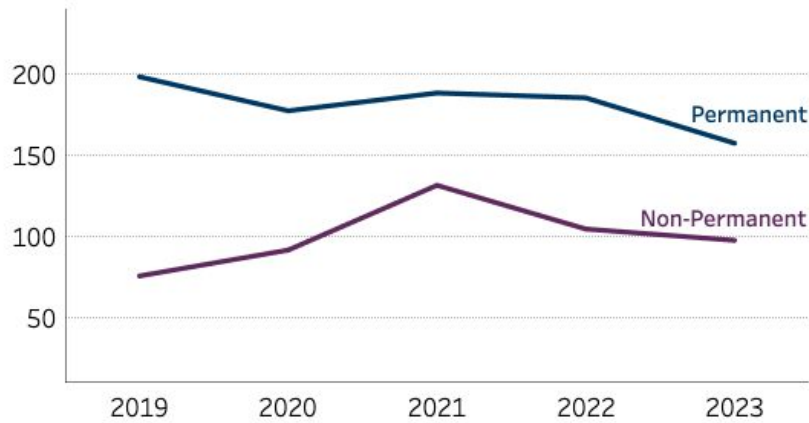


EHDI Data



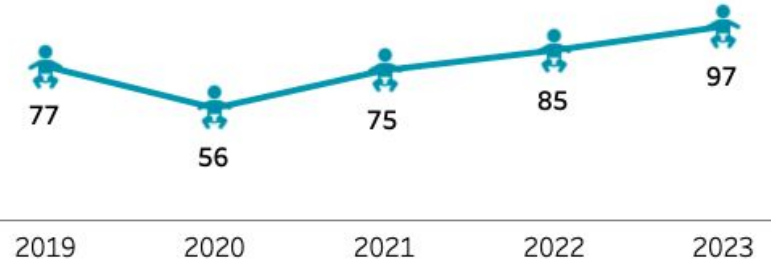
MN EHDl Statewide Data

Each year, an average of 181 children were diagnosed with permanent congenital hearing loss.



An average of 78 children were diagnosed with late onset hearing loss and reported to MDH each year.

Late onset hearing loss refers to instances when a child passed a prior hearing screen but later developed hearing loss.





Statewide Hearing Loss Data and the EHDI 1–3–6 Framework

EHDI Benchmarks

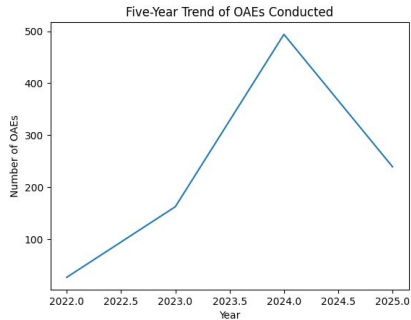
- 1 month: Hearing screening completed
- 3 months: Diagnostic confirmation
- 6 months: Enrollment in Early Intervention

What Minnesota Data Shows

- An average of **181 children per year** are diagnosed with **permanent congenital hearing loss**
 - An additional **78 children per year** are diagnosed with **late-onset hearing loss**
 - Late-onset hearing loss occurs **after a child passes an earlier screen**
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OAE Screening Trends and Timely Identification - Region 10



2022: Early implementation phase with limited reporting and system setup across participating districts.

2023: Increased consistency as providers adopted OAE documentation.

2024: Peak utilization reflecting system maturity, comprehensive training, and standardized procedures statewide.

2025 (partial year): Current data represents ongoing screening.



Referrals vs OAEs Conducted: Universal Screening Matters

The Gap in the Data

Referrals significantly exceed the number of OAEs conducted, indicating that screening is being applied selectively rather than universally across all eligible children entering Early Intervention services.

EHDI Alignment Concerns

Selective screening increases the risk of missed or delayed identification, directly threatening compliance with critical 3- and 6-month EHDI benchmarks for diagnostic confirmation and intervention enrollment.



Universal Screening Matters

Part C Expectation

Default to OAE screening for all referrals unless a valid audiological evaluation within the past 6 months exists.

Universal Screening Supports

- Equity: Ensures all children receive equal access to hearing evaluation regardless of perceived risk factors
 - Consistency: Standardized protocols across districts and providers for reliable system performance
 - Compliance: Meets Part C evaluation requirements and aligns with federal EHDI guidelines
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Data, Documentation, and Sustainability

Data Collection

Students screened, referral follow-through, documentation aligned with ECHO Initiative, *Referrals who deny evaluation are not screened

Sustainability Challenges

Staff turnover, leadership changes, competing district priorities

Regional Strategies

Clear expectations and procedures, ongoing training and refreshers, regional systems that persist beyond individual roles





Why OAEs Were Not Conducted: Policy vs Practice

Appropriate Exceptions

When a recent comprehensive audiological evaluation has been completed within the past 6 months, screening may be appropriately deferred.



EHDI and Part C Clarification

- ★ Functional listening skills alone do not rule out hearing loss.
 - ★ Mild to moderate hearing loss can exist despite apparently normal responses to sound.
 - ★ Best practice supports screening regardless of perceived risk level.
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Systems-Level Takeaways for EHDI and Part C

Strengthening the Continuum

EI-based OAE screening reinforces the complete 1–3–6 continuum, no child falls through the cracks between newborn screening and intervention enrollment.

Regional System Benefits

Coordinated regional systems effectively reduce variability across districts, creating consistent screening practices and equitable access statewide.

Sustainable Implementation

Data-driven guidance and standardized protocols support sustainability and quality assurance despite natural staff turnover in education settings.



Key Takeaways

- ❑ Education-based Part C systems can successfully lead EHDI work
 - ❑ Regional coordination builds consistency and sustainability
 - ❑ Data drives improvement and accountability
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Citations & Resources

- [Newborn Hearing Screening Data Summaries - MN Dept. of Health](#)
- Region 10 IEIC Data collection on OAE Implementation in SEMN Schools
- Region 1 & 2 EHDI Resources - [Shared Google Folder](#)





Questions and Discussion

Looking Ahead

Winter 2026 updated regional survey and continued cross-regional collaboration

Questions?

