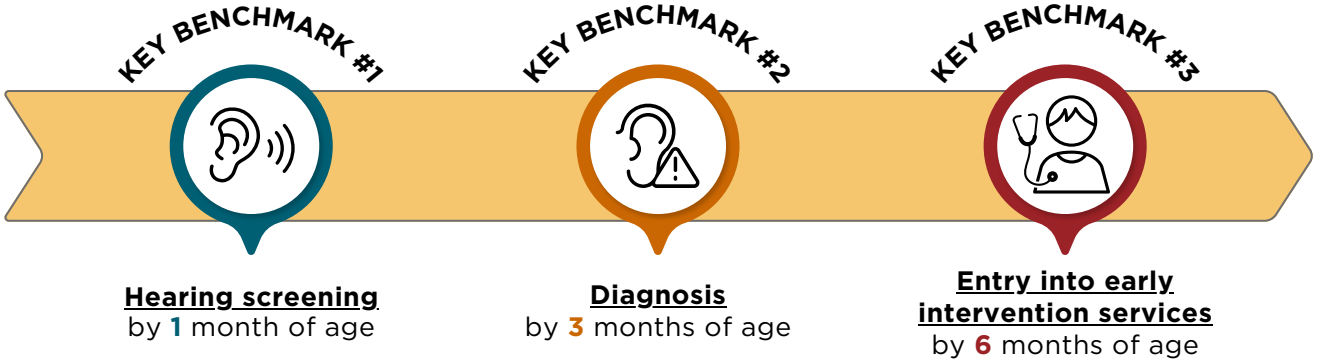
2022
NEWBORN HEARING SCREENING IN MAINE

A DATA BRIEF BY THE MAINE NEWBORN HEARING PROGRAM FOR HEALTHCARE PROVIDERS AND BIRTHING CENTERS

The Maine Newborn Hearing Program (MNHP) at the Maine CDC promotes and supports hearing screening for all Maine newborns and refers those in need for further testing and/or intervention services.

Early identification of hearing loss and early intervention can minimize the impact hearing loss has on a child and family. According to the American Academy of Pediatrics' *Early Hearing Detection and Intervention (EHDI)* **1-3-6** *Guidelines*, all children should receive:



Hearing screening by **1** month of age

Diagnosis by **3** months of age

Entry into early intervention services by **6** months of age

MAINE HEARING SCREENING DATA

KEY BENCHMARK #1: 94% (n=11,046) of babies born in Maine were screened within 1 month of age.

SCREENING PREVALENCE

Of **11,730 births** that occurred in Maine in 2022:

- **96%** (n=11,226) **received a newborn hearing screening**
- **4%** (n=504) had no documented screening

The most common reason for a lack of documented screening was due to the infant being delivered at home.

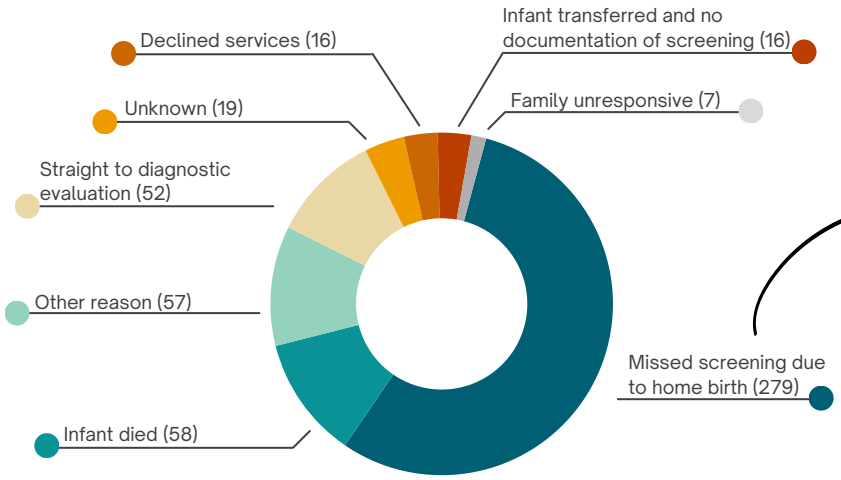


Figure 1: *Reasons for lack of infant hearing screening documentation (n=504)*

SCREENING RESULTS

Of 11,226 infants screened:

- **97%** (n=10,931) **passed**
- **3%** (n=295) **did not pass** and were referred for additional testing

SCREENING HOME BIRTHS

Births that occur at a hospital are more likely to be screened than births that occur at home.

In 2022, 98% of hospital births were screened compared to 29% of home births.

About **1 in 4 home births** received a hearing screen.

MAINE DIAGNOSTIC DATA

KEY BENCHMARK #2: 74% (n=256) of infants had a complete diagnosis within 3 months of age.

DIAGNOSIS PREVALENCE

Of 347 newborns with a screening who were referred for further testing (n=295) or without a screening who went straight to diagnostic testing (n=52):

- **85%** (n=294) had an audiological report with a **complete diagnosis** sent to MNHP.
- **15%** (n=53) **did not have diagnostic data reported to MNHP** for the following reasons:

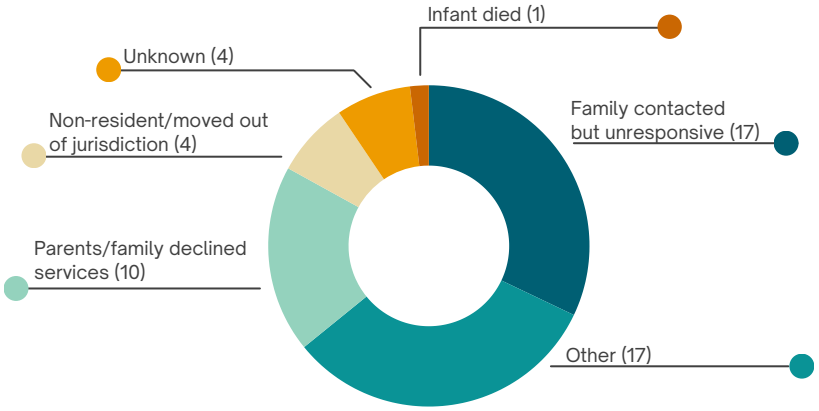
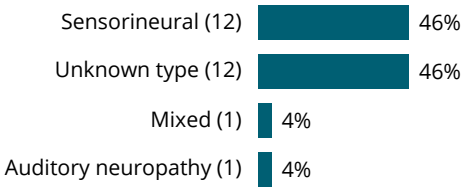


Figure 2: *Reasons for lack of documented diagnosis (n=53)*

DIAGNOSIS RESULTS

Of the 294 newborns with a complete reported diagnosis**:**

- **91%** (n=268) diagnosed with **typical hearing**
- **9%** (n=26) diagnosed with **permanent hearing loss** of the following types:



LOST TO FOLLOW-UP

6% (n=21) of Maine infants referred for further testing were **lost to follow-up (LFU).***

*LFU is defined as instances where family was contacted but unresponsive, unable to contact, or unknown reason for no documented diagnosis.

MAINE EARLY INTERVENTION DATA

KEY BENCHMARK #3: 62% (n=16) of infants with hearing loss were enrolled in early intervention within 6 months of age.

Of the **26** infants who were diagnosed with hearing loss in 2022:

- 96% (n=25) were **referred** to an early intervention (Part C) provider
- 96% (n=25) had **confirmed enrollment** with an early intervention (Part C) provider sent to MNHP

ROOM TO IMPROVE

The goal of MNHP is to ensure that every child receives care that meets the *EHDI* **1-3-6** *Guidelines.* Maine already screens almost all newborns for hearing loss, but there is room to improve rates of screening among home births, diagnoses within 3 months of birth, and enrollment of those with confirmed hearing loss in early intervention within 6 months of birth. MNHP continues to work with providers and families to ensure that infants with hearing loss are identified early and receive appropriate services.

For more information: Maine Newborn Hearing Program, 207-287-8427
www.maine.gov/dhhs/mecdc/population-health/mch/cshn/hearing-screening

Note: 2022 Maine Newborn Hearing Screening data were obtained via *Maine Smart CHSTS Newborn Screening Portal,* the Maine Newborn Hearing Program's data reporting platform. Data are submitted to the portal by screening facilities, audiologists, and early intervention providers to provide comprehensive surveillance on hearing loss and treatment in infants across the state.
Additional Data Sources: Hearing Loss in Newborns: The '1-3-6' Guidelines - *Medscape* - Apr 23, 2018

Updated August 2024