**NEWBORN HEARING SCREENING, DIAGNOSIS, AND EARLY INTERVENTION (EI) BY MATERNAL AGE**

- **INFANTS SCREENED**
  - Younger than 15: 98.4%
  - 15 - 19: 98.9%
  - 20 - 24: 98.6%
  - 25 - 34: 98.5%
  - 35 - 50: 98.1%
  - 51 or older: 96.5%

- **INFANTS EVALUATED FOR DIAGNOSIS AMONG THOSE WHO DID NOT PASS HEARING SCREENING**
  - Younger than 15: N/A
  - 15 - 19: 48.0%
  - 20 - 24: 52.7%
  - 25 - 34: 60.6%
  - 35 - 50: 62.7%
  - 51 or older: N/A

- **INFANTS ENROLLED IN EI AMONG THOSE DIAGNOSED WITH HEARING LOSS**
  - Younger than 15: N/A
  - 15 - 19: 51.2%
  - 20 - 24: 49.4%
  - 25 - 34: 56.9%
  - 35 - 50: 60.9%
  - 51 or older: N/A

N/A: Not applicable – The number of infants reported is too small to report

Numerator: Number of infants in maternal age-specific category (e.g., 15-19 years) receiving hearing screening/evaluated for diagnosis/enrolled in early intervention.

Denominator: Total number of infants in maternal age-specific category (e.g., 15-19 years).

Data reported by 44 out of 56 jurisdictions that responded to the HSFS in 2019: AL, AK, American Samoa, AZ, AR, Commonwealth of the Northern Mariana Islands, CT, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, Marshall Islands, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NY, NC, OH, OR, Palau, Puerto Rico, RI, SC, SD, TN, UT, VT, VA, WA, WI, WY.

*Each jurisdiction’s submitted data underwent a cleaning and error check process. Jurisdictions reporting ≥20% of total infants receiving service (e.g., hearing screening) in the “Unknown” category, for each demographic variable, were excluded from this analysis.*
Source: 2019 CDC Hearing Screening and Follow-up Survey (HSFS)*

**NEWBORN HEARING SCREENING, DIAGNOSIS, AND EARLY INTERVENTION (EI) BY SEX**

<table>
<thead>
<tr>
<th>HSFS INDICATOR</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANTS SCREENED</td>
<td>98.5%</td>
<td>98.7%</td>
</tr>
<tr>
<td>INFANTS EVALUATED FOR DIAGNOSIS AMONG THOSE WHO DID NOT PASS HEARING SCREENING</td>
<td>58.4%</td>
<td>57.3%</td>
</tr>
<tr>
<td>INFANTS ENROLLED IN EI AMONG THOSE DIAGNOSED WITH HEARING LOSS</td>
<td>60.2%</td>
<td>59.0%</td>
</tr>
</tbody>
</table>

Numerator: Number of sex-specific (e.g., male) infants receiving hearing screening/evaluated for diagnosis/enrolled in early intervention.
Denominator: Total number of sex-specific (e.g., male) infants.

Data reported by 54 out of 56 jurisdictions that responded to the HSFS in 2019: AL, AK, American Samoa, AZ, AR, CA, Commonwealth of the Northern Mariana Islands, CT, DE, District of Columbia, GA, Guam, HI, ID, IL, IN, IA, KS, KY, LA, ME, Marshall Islands, MD, MA, MI, Micronesia, MN, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, Palau, Puerto Rico, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY.

*Each jurisdiction’s submitted data underwent a cleaning and error check process. Jurisdictions reporting ≥20% of total infants receiving service (e.g., hearing screening) in the “Unknown” category, for each demographic variable, were excluded from this analysis.*
Source: 2019 CDC Hearing Screening and Follow-up Survey (HSFS)*

Each jurisdiction’s submitted data underwent a cleaning and error check process. Jurisdictions reporting ≥20% of total infants receiving service (e.g., hearing screening) in the “Unknown” category, for each demographic variable, were excluded from this analysis.

Numerator: Number of infants in maternal education-specific category (e.g., College Graduate or more) receiving hearing screening/evaluated for diagnosis/enrolled in early intervention.
Denominator: Total number of infants in maternal education-specific category (e.g., College Graduate or more).
Data reported by 43 out of 56 jurisdictions that responded to the HSFS in 2019: AL, AK, American Samoa, AZ, AR, Commonwealth of the Northern Mariana Islands, CT, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, Marshall Islands, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NC, OH, OR, Palau, Puerto Rico, RI, SC, SD, TN, UT, VT, VA, WA, WI, WY.
Source: 2019 CDC Hearing Screening and Follow-up Survey (HSFS)*

Each jurisdiction’s submitted data underwent a cleaning and error check process. Jurisdictions reporting ≥20% of total infants receiving service (e.g., hearing screening) in the “Unknown” category, for each demographic variable, were excluded from this analysis.

Numerator: Number of infants in maternal race-specific category (e.g., Asian) receiving hearing screening/evaluated for diagnosis/enrolled in early intervention.
Denominator: Total number of infants in maternal race-specific category (e.g., Asian).
Data reported by 46 out of 56 jurisdictions that responded to the HSFS in 2019: AL, AK, American Samoa, AZ, AR, Commonwealth of the Northern Mariana Islands, CT, GA, GU, HI, ID, IL, IN, IA, KS, KY, LA, ME, Marshall Islands, MA, MI, Micronesia, MN, MO, MT, NV, NH, NJ, NM, NY, NC, OH, OK, OR, Palau, Puerto Rico, RI, SC, SD, TN, UT, VT, VA, WV, WI, WY.
**NEWBORN HEARING SCREENING, DIAGNOSIS, AND EARLY INTERVENTION (EI) BY MATERNAL ETHNICITY**

<table>
<thead>
<tr>
<th>HSFS INDICATOR</th>
<th>Hispanic</th>
<th>Non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFANTS SCREENED</td>
<td>98.4%</td>
<td>98.5%</td>
</tr>
<tr>
<td>INFANTS EVALUATED FOR DIAGNOSIS AMONG THOSE WHO DID NOT PASS HEARING SCREENING</td>
<td>57.2%</td>
<td>61.8%</td>
</tr>
<tr>
<td>INFANTS ENROLLED IN EI AMONG THOSE DIAGNOSED WITH HEARING LOSS</td>
<td>60.3%</td>
<td>57.7%</td>
</tr>
</tbody>
</table>

**Numerator:** Number of infants in maternal ethnicity-specific category (e.g., Hispanic) receiving hearing screening/evaluated for diagnosis/enrolled in early intervention.

**Denominator:** Total number of infants in maternal ethnicity-specific category (e.g., Hispanic).

Data reported by 44 out of 56 jurisdictions that responded to the HSFS in 2019: AL, AK, American Samoa, AZ, AR, Commonwealth of the Northern Mariana Islands, CT, GA, GU, HI, IL, IN, IA, KS, KY, LA, ME, Marshall Islands, MA, MI, MN, MO, MT, NE, NV, NH, NJ, NM, NY, NC, OH, OR, Palau, Puerto Rico, RI, SC, SD, TN, UT, VT, VA, WA, WI, WY.

*Each jurisdiction’s submitted data underwent a cleaning and error check process. Jurisdictions reporting ≥20% of total infants receiving service (e.g., hearing screening) in the “Unknown” category, for each demographic variable, were excluded from this analysis.*
Formulas Used:
Percentage of infants screened for each category is calculated among the total occurrent births (i.e., \( \% \text{ Males Screened} = \left( \frac{\text{# Total Pass Screening:Male} + \text{Total Not Pass Screening:Male}}{\text{# Total Occurrent Births:Male}} \right) \times 100 \) ).

Percentage of infants receiving diagnostic testing for each category is calculated among the total number of infants not passing hearing screening (i.e., \( \% \text{ Males Receiving Diagnostic Testing After Not Passing Hearing Screening} = \left( \frac{\text{# Total with No Hearing Loss:Male} + \text{Total with Permanent Hearing Loss:Male}}{\text{# Total Not Pass Screening:Male}} \right) \times 100 \) ).

Percentage of infants enrolled in Part C Early Intervention services for each category is calculated among the total number of infants with hearing loss (i.e., \( \% \text{ Males Enrolled in Part C Early Intervention After Diagnosed with Hearing Loss} = \left( \frac{\text{# Total Enrolled in Part C Early Intervention: Male}}{\text{# Total with Hearing Loss:Male}} \right) \times 100 \) ).

*Each jurisdiction’s submitted data underwent a cleaning and error check process. Jurisdictions reporting ≥20% of total infants receiving service (e.g., hearing screening) in the “Unknown” category, for each demographic variable, were excluded from this analysis.*