## Vision

- 28-1 Dilated eye examinations
- 28-2 Vision screening for children
- 28-3 Impairment due to refractive errors
- 28-4 Impairment in children and adolescents
- 28-5 Impairment due to diabetic retinopathy
- 28-6 Impairment due to glaucoma
- 28-7 Impairment due to cataract
- 28-8 Occupational eye injury
- 28-9 Protective eyewear
- 28-10 Vision rehabilitation services and devices
  - 28-10a Rehabilitation services
  - 28-10b Visual and adaptive devices

## Hearing

- 28-11 Newborn hearing screening, evaluation, and intervention
- 28-12 Otitis media
- 28-13 Rehabilitation for hearing impairment
- 28-14 Hearing examination
- 28-15 Evaluation and treatment referrals
- 28-16 Hearing protection
- 28-17 Noise-induced hearing loss in children
- 28-18 Noise-induced hearing loss in adults
Vision

28-1.  (Developmental) Increase the proportion of persons who have a dilated eye examination at appropriate intervals.

Comments

An operational definition could not be specified at the time of publication.

A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

A proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

See Part C for a description of NHIS and BRFSS and Appendix A for focus area contact information.

28-2.  (Developmental) Increase the proportion of preschool children aged 5 years and under who receive vision screening.

Comments

An operational definition could not be specified at the time of publication.

A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

See Part C for a description of NHIS and Appendix A for focus area contact information.

28-3.  (Developmental) Reduce uncorrected visual impairment due to refractive errors.

Comments

An operational definition could not be specified at the time of publication.

A proposed national data source is the National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
28-4. Reduce blindness and visual impairment in children and adolescents aged 17 years and under.

**National Data Source**  National Health Interview Survey (NHIS), CDC, NCHS.

**State Data Source**  Not identified.

**Healthy People 2000 Objective**  Not applicable.

**Measure**  Rate per 1,000 population.

**Baseline**  25 (1997).

**Numerator**  Number of children and adolescents aged 17 years and under who have trouble seeing, even when wearing glasses or contact lenses.

**Denominator**  Number of children and adolescents aged 17 years and under.

**Population Targeted**  U.S. civilian, noninstitutionalized population.

**Questions Used To Obtain the National Data**

- Does—have any trouble seeing?
  
  (If age 2+ years:) even when wearing glasses or focus area contact lenses?

**Expected Periodicity**  Annual.

**Comments**  See Part C for a description of NHIS and Appendix A for focus area contact information.

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28-5. (Developmental) Reduce visual impairment due to diabetic retinopathy.

**Comments**  An operational definition could not be specified at the time of publication.
A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

A proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

Diabetic retinopathy is a complication of diabetes that damages the retina and is a major cause of blindness among people with diabetes.

See Part C for a description of NHIS and BRFSS and Appendix A for focus area contact information.

28-6.  (Developmental) Reduce visual impairment due to glaucoma.

Comments
An operational definition could not be specified at the time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

From the 1999 NHIS, the proposed question used to obtain the national data is:

➤ Have you EVER been told by a doctor or other health professional that you had glaucoma?

See Part C for a description of NHIS and BRFSS and Appendix A for focus area contact information.

28-7.  (Developmental) Reduce visual impairment due to cataract.

Comments
An operational definition could not be specified at the time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.
The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

From the 1999 NHIS, the proposed question to obtain the national data is:

- These next questions are about your eyesight. Do you now have cataracts?

Cataract is classified as a cloudiness of the lens that may prevent a clear image from forming on the retina.

See Part C for a description of NHIS and BRFSS and Appendix A for focus area contact information.

### 28-8. (Developmental) Reduce occupational eye injury.

**Comments**

An operational definition could not be specified at the time of publication.

Proposed national data sources are the Annual Survey of Occupational Injuries and Illnesses (ASOII), DOL, BLS and the National Electronic Injury Surveillance System (NEISS), CPSC, and NIOSH.

See Appendix A for focus area contact information.

### 28-9. (Developmental) Increase the use of appropriate personal protective eyewear in recreational activities and hazardous situations around the home.

**Comments**

An operational definition could not be specified at the time of publication.

A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

Recreational activities include baseball, basketball, tennis, racquetball, and hockey.

Hazardous situations around the home include cooking and yard work.
See Part C for a description of NHIS and Appendix A for focus area contact information.
A proposed data source is the State-based Early Hearing Detection and Intervention (EHDI) Program Network, CDC.

See Part C for a description of NHIS and Appendix A for focus area contact information.

## 28-12. Reduce otitis media in children and adolescents.

<table>
<thead>
<tr>
<th>National Data Sources</th>
<th>National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS; National Hospital Ambulatory Medical Care Survey (NHAMCS), CDC, NCHS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Data Source</td>
<td>Not identified.</td>
</tr>
<tr>
<td>Healthy People 2000</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Objective</td>
<td></td>
</tr>
<tr>
<td>Measure</td>
<td>Rate per 1,000 population.</td>
</tr>
<tr>
<td>Baseline</td>
<td>344.7 (1997).</td>
</tr>
<tr>
<td>Numerator</td>
<td>Number of visits to ambulatory care facilities with a diagnosis of otitis media (any mention of ICD-9-CM codes 381.0-381.4, 382) among children and adolescents aged 17 years and under.</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of children and adolescents aged 17 years and under.</td>
</tr>
<tr>
<td>Population Targeted</td>
<td>U.S. civilian, noninstitutionalized population.</td>
</tr>
<tr>
<td>Questions Used To Obtain the National Data</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Expected Periodicity</td>
<td>Annual.</td>
</tr>
<tr>
<td>Comments</td>
<td>The number of otitis media visits to ambulatory care facilities obtained from NAMCS are added to the number of visits obtained from NHAMCS. Otitis media, commonly called ear infection, is an inflammation of the middle ear caused by viral or bacterial infection. Ambulatory care facilities include physicians’ offices, hospital emergency departments and outpatient departments.</td>
</tr>
</tbody>
</table>
28-13. (Developmental) Increase access by persons who have hearing impairments to hearing rehabilitation services and adaptive devices, including hearing aids, cochlear implants, or tactile or other assistive or augmentative devices.

Comments

An operational definition could not be specified at the time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

The proposed questions to obtain the national data will be included in the 2001 NHIS.

Rehabilitation services are those services that address the needs in daily living skills that are directly related to hearing loss.

Adaptive devices include large-print materials (books, newspaper), check-writing guides, high-contrast watch dials, and auditory aids, such as talking computers.

A hearing aid is an electronic device that brings amplified sound to the ear, usually consisting of a microphone, amplifier, and receiver.

Cochlear implant is a medical device that bypasses damaged structures in the inner ear and directly stimulates the auditory nerve, allowing some deaf individuals to hear and to maintain or develop speech and language.

Tactile devices are mechanical instruments that make use of touch to help individuals to communicate who have certain disabilities, such as deafness and blindness.
Assistive devices are technical tools and devices used to aid individuals who have communication disorders in performing actions, tasks, and activities. Examples include alphabet boards, text telephones (TT/TTY/TTD), and text-to-speech conversion software. (See Focus Area 6. Disability and Secondary Conditions.)

See Part C for a description of NHIS and Appendix A for focus area contact information.

28-14. (Developmental) Increase the proportion of persons who have had a hearing examination on schedule.

Comments

An operational definition could not be specified at the time of publication.

Proposed national data sources are the National Health Interview Survey (NHIS), CDC, NCHS, and the National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

The proposed questions to obtain the national data will be included in the 2001 NHIS.

See Part C for a description of NHIS, NHANES, and Appendix A for focus area contact information.

28-15. (Developmental) Increase the number of persons who are referred by their primary care physician for hearing evaluation and treatment.

Comments

An operational definition could not be specified at the time of publication.

Proposed national data sources are the National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS, and the National Health Interview Survey (NHIS), CDC, NCHS.

See Part C for a description of NAMCS and Appendix A for focus area contact information.
28-16. (Developmental) Increase the use of appropriate ear protection devices, equipment, and practices.

Comments
An operational definition could not be specified at the time of publication.
A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.
The proposed questions to obtain the national data will be included in the 2001 NHIS.
See Part C for a description of NHIS and Appendix A for focus area contact information.

28-17. (Developmental) Reduce noise-induced hearing loss in children and adolescents aged 17 years and under.

Comments
An operational definition could not be specified at the time of publication.
A proposed national data source is the National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
Noise-induced hearing loss is caused by either a one-time exposure to very loud sound(s) or by repeated exposure to sounds at various loudness levels over an extended period of time. Hearing loss may be temporary or permanent.
See Part C for a description of NHANES and Appendix A for focus area contact information.

28-18. (Developmental) Reduce adult hearing loss in the noise-exposed public.

Comments
An operational definition could not be specified at the time of the publication.
Proposed national data sources are the National Health Interview Survey (NHIS), CDC, NCHS and the National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

Proposed questions used to obtain the national data will be included in the 2001 NHIS.

Hearing loss for adults aged 20 to 69 years is determined from a hearing test conducted in each ear at 500, 1000, 2000, 3000, 4000, 6000, and 8000 Hz.

See Part C for a description of NHIS and Appendix A for focus area contact information.