

STATISTICAL BRIEF #194

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Average Annual Health Care Use and Expenses for Shingles among the U.S. Civilian Noninstitutionalized Population, 2003–2005

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Introduction

Shingles is a viral infection caused by the varicella-zoster virus. Shingles causes burning or shooting pain, tingling or itching, and blisters. This Statistical Brief presents estimates based on the Household Component of the Medical Expenditure Panel Survey (MEPS-HC) on the use of and expenditures for ambulatory care and prescribed medications to treat shingles, pain resulting from shingles, and vision complications among the U.S. civilian noninstitutionalized population. Average annual estimates (in 2005 dollars) for the period 2003–2005 are shown by type of service and source of payment. Data for three years were combined to improve the precision of the estimates, and expenditure data for 2003 and 2004 were adjusted to 2005 dollars using the Personal Health Care Expenditure Price Index. All differences between estimates noted in the text are statistically significant at the 0.05 level or better.

Findings

Number of reported cases, total average health care use, source of payment, and expenditures for shingles

In 2003–2005, an annual average of 1.1 million persons had shingles or its complications, and 0.9 million sought medical treatment (figure 1). There was an annual average of 2.1 million ambulatory care visits for the treatment of shingles. From 2003–2005, an average of \$566 million per year (in 2005 dollars) was spent on health care for shingles and its complications (estimate not shown).

Reports of Shingles, by age

During 2003–2005, an annual average of 0.4 percent of the population reported shingles (figure 2). The elderly were more than seven times as likely to report shingles as the non-elderly (1.5 percent of elderly versus 0.2 percent of non-elderly).

Average mean health care expenditures for shingles

Among those who received treatment for shingles, \$525 per person (in 2005 dollars), on average, was spent on treatment (figure 3).

Highlights

- On average in 2003–2005, 1.1 million persons, per year, had shingles or its complications; and .9 million sought medical treatment.
- Medical spending to treat shingles or its complications totaled on average \$566 million per year for 2003–2005 (in 2005 dollars).
- For 2003–2005, there was an annual average of 2.1 million ambulatory care visits for the treatment of shingles or its complications.
- The elderly were seven times as likely to report shingles as the non-elderly (1.5 percent of elderly versus 0.2 percent of non-elderly).
- Among those who received treatment for shingles, \$525 per person (in 2005 dollars), on average, was spent on treatment.

Average mean health care expenditures for shingles, by type of service

Among those with an ambulatory visit related to shingles, \$317 per person (in 2005 dollars), on average, was spent on shingles-related ambulatory visits (figure 3). An average of \$157 was spent per person on the prescription medicines for shingles-related treatment among those who obtained prescription medications for shingles treatment.

Distribution of average annual health care expenditures for shingles, by source of payment

For the treatment of shingles among those age 0–64 during 2003–2005, on average more than half (50.7 percent) of the expenditures were paid by private insurance, followed by out-of-pocket payments (35.3 percent) (figure 4). For shingles treatment among those age 65 and older, 40.2 percent of total payments were made by Medicare, followed by out-of-pocket payments (29.3 percent).

Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 2003, 2004, and 2005 Full Year Consolidated Files (HC-079, HC-089, and HC-097), Medical Conditions Files (HC-078, HC-087, and HC-096), Office-Based Medical Provider Visit Files (HC-077G, HC-085G, and HC-94G), Outpatient Department Visits Files (HC-077F, HC-085F, and HC-094F), Emergency Room Visit Files (HC-077E, HC-085E, and HC-094E), and Prescribed Medicine Files (HC-077A, HC-085A, and HC-094A).

Definitions

Shingles or its complications

This brief analyzes individuals with shingles reported as a condition bothering the person and shingles reported in connection with reported health care utilization (e.g., a person who reported purchasing a drug was asked what condition the drug was intended to treat) or reported disability days. The conditions reported by the respondent were recorded by the interviewer as verbatim text, which was then coded by professional coders to fully specified ICD-9-CM codes. Conditions with an ICD9 code of 053 were classified as shingles or its complications.

Expenditures

Payments from all sources for hospital inpatient care, ambulatory care provided in offices and hospital outpatient departments, care provided in emergency departments, as well as prescribed medicine purchases reported by respondents in the MEPS-HC. Sources include direct payments from individuals, private insurance, Medicare, Medicaid, Workers' Compensation, and miscellaneous other sources. Expenditure data for 2003 and 2004 were adjusted to 2005 dollars using the Personal Health Care Expenditure Price Index (Centers for Medicare and Medicaid Services, Office of the Actuary).

About MEPS-HC

MEPS-HC is a nationally representative longitudinal survey that collects detailed information on health care utilization and expenditures, health insurance, and health status, as well as a wide variety of social, demographic, and economic characteristics for the civilian noninstitutionalized population. It is cosponsored by the Agency for Healthcare Research and Quality and the National Center for Health Statistics.

For more information about MEPS, call the MEPS information coordinator at AHRQ (301-427-1656) or visit the MEPS Web site at <http://www.meps.ahrq.gov/>.

References

For a detailed description of the MEPS-HC survey design, sample design and methods used to minimize sources of nonsampling errors, see the following publications:

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPH Pub. No. 97-0026. Rockville, MD: Agency for Health Care Policy and Research, 1997. http://www.meps.ahrq.gov/data_files/publications/mr1/mr1.shtml

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 2. AHCPR Pub. No. 97-0027. Rockville, MD: Agency for Health Care Policy and Research, 1997. http://www.meps.ahrq.gov/data_files/publications/mr2/mr2.shtml

Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, July 2003: 41(7) Supplement: III-5–III-12.

For more information about shingles, see the following publications:

National Institute on Aging. Age Page: Shingles. Bethesda, MD: NIA, 2006.
<http://www.niapublications.org/agepages/PDFs/Shingles.pdf>

National Institute of Allergy and Infectious Diseases. Shingles. Bethesda, MD: National Library of Medicine and the National Institutes of Health, 2007.
<http://www.nlm.nih.gov/medlineplus/shingles.html>

Suggested Citation

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http://www.meps.ahrq.gov/data_files/publications/st194/stat194.pdf

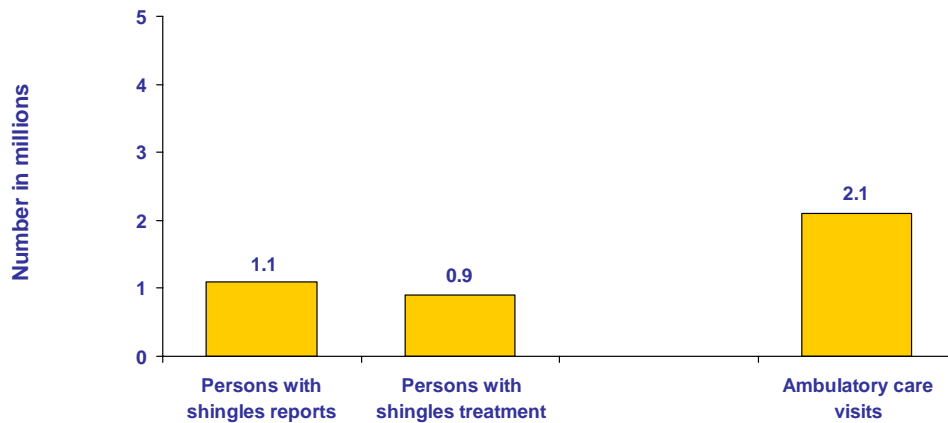
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other MEPS data and tools and to share suggestions on how MEPS products might be enhanced to further meet your needs. Please e-mail us at mepsdpd@ahrq.gov or send a letter to the address below:

Steven B. Cohen, PhD, Director
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540 Gaither Road
Rockville, MD 20850



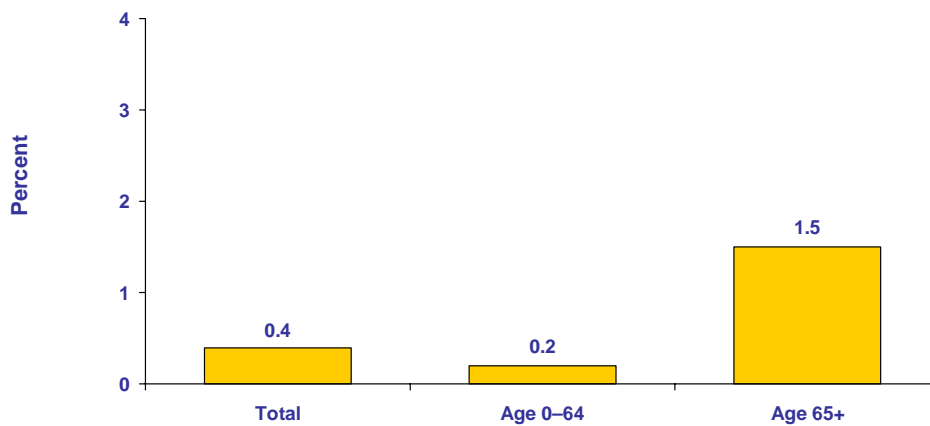
Figure 1. Average annual estimates of reported shingles cases, treated cases, and ambulatory visits for shingles, 2003–2005



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2003–2005



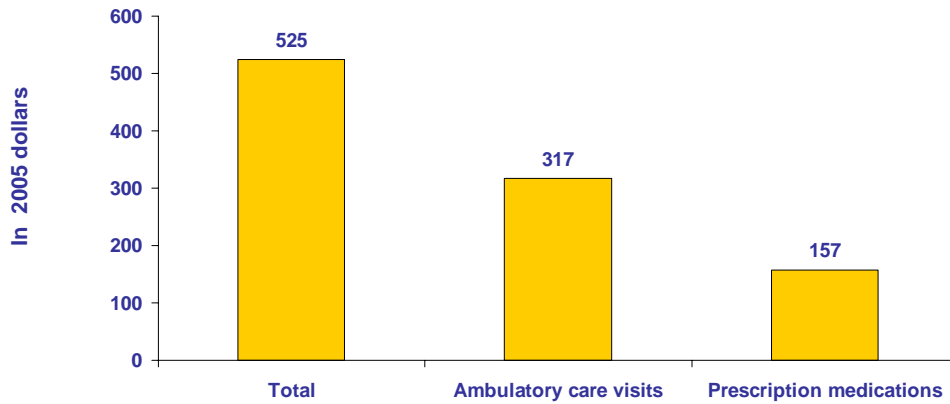
Figure 2. Average annual percentage of population reporting shingles, by age, 2003–2005



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2003–2005



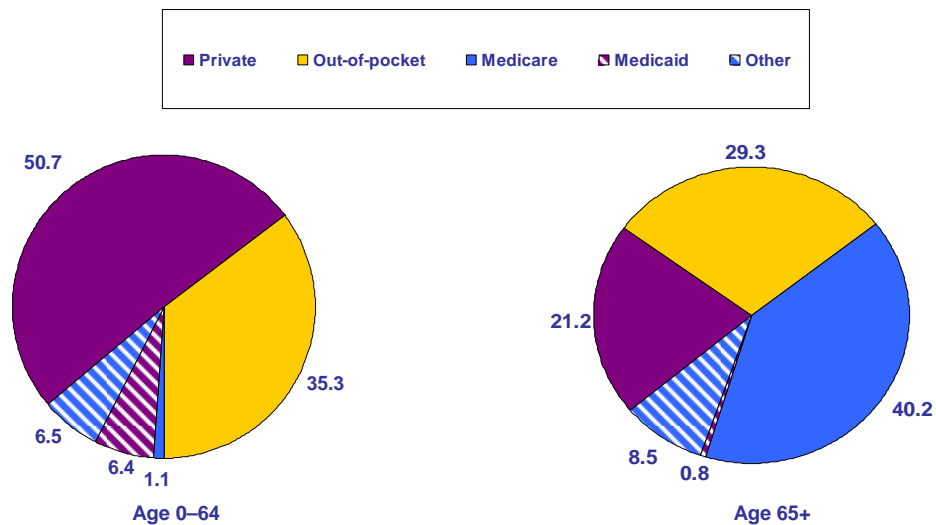
Figure 3. Average annual mean expenditures per person with expense, by type of service for shingles, 2003–2005



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2003–2005



Figure 4. Percentage distribution of average annual expenditures for shingles, by age and source of payment, 2003–2005



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2003–2005