Patient Center

Home > Patient Center > Get the Facts on Pain

- Find a Physician
- Get the Facts on Pain
- Cost of Pain to Businesses
- Patient Education
- Eight Opioid Safety Practices for Patients
- Organizations Dedicated to People with Pain
- Press Room
- Position Statements

- AAPM Facts and Figures on Pain
  - Overview
  - What is Chronic Pain?
  - Incidence of Pain, as Compared to Major Conditions
  - The Burden of Pain on Every Day Life
  - Commonly-Reported Pain Conditions
  - Highlights from the National Center for Health Statistics Report
  - Key Findings from the 2006 Voices of Chronic Pain Survey
  - Lost Productive Time and Cost Due to Common Pain Conditions
  - America Speaks: Pain in America
Overview

Pain is associated with a wide range of injury and disease, and is sometimes the disease itself. Some conditions may have pain and associated symptoms arising from a discrete cause, such as postoperative pain or pain associated with a malignancy, or may be conditions in which pain constitutes the primary problem, such as neuropathic pains or headaches.

Millions suffer from acute or chronic pain every year and the effects of pain exact a tremendous cost on our country in health care costs, rehabilitation and lost worker productivity, as well as the emotional and financial burden it places on patients and their families. The costs of unrelieved pain can result in longer hospital stays, increased rates of rehospitalization, increased outpatient visits, and decreased ability to function fully leading to lost income and insurance coverage. As such, patient's unrelieved chronic pain problems often result in an inability to work and maintain health insurance. According to a recent Institute of Medicine Report: "Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research," pain is a significant public health problem that costs society at least $560-$635 billion annually, an amount equal to about $2,000.00 for everyone living in the U.S. This includes the total incremental cost of health care due to pain from ranging between $261 to $300 billion and $297-$336 billion due to lost productivity (based on days of work missed, hours of work lost, and lower wages).

Much more needs to be done to meet these challenges and to increase public awareness of them.

What is Chronic Pain?

While acute pain is a normal sensation triggered in the nervous system to alert you to possible injury and the need to take care of yourself, chronic pain is different. Chronic pain persists. Pain signals keep firing in the nervous system for weeks, months, even years. There may have been an initial mishap -- sprained back, serious infection, or there may be an ongoing cause of pain -- arthritis, cancer, ear infection, but some people suffer chronic pain in the absence of any past injury or evidence of body damage. Many chronic pain conditions affect older adults. Common chronic pain complaints include headache, low back pain, cancer pain, arthritis pain, neuropathic pain (pain resulting from damage to the peripheral nerves or to the central nervous system itself).

A recent market research report indicates that more than 1.5 billion people worldwide suffer from chronic pain and that approximately 3-4.5% of the global population suffers from neuropathic pain, with incidence rate increasing in complementary to age. (1)

Incidence of Pain, as Compared to Major Conditions

Pain affects more Americans than diabetes, heart disease and cancer combined. The chart below depicts the number of chronic pain sufferers compared to other major health conditions.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of Sufferers</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Pain</td>
<td>100 million Americans</td>
<td>Institute of Medicine of The National Academies (2)</td>
</tr>
<tr>
<td>Condition</td>
<td>Number of Americans</td>
<td>Source</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Diabetes</td>
<td>25.8 million</td>
<td>American Diabetes Association (3)</td>
</tr>
<tr>
<td>(diagnosed and estimated undiagnosed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>16.3 million</td>
<td>American Heart Association (4)</td>
</tr>
<tr>
<td>(heart attack and chest pain)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>7.0 million</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>11.9 million</td>
<td>American Cancer Society (5)</td>
</tr>
</tbody>
</table>

The Burden of Pain on Every Day Life

- The total annual incremental cost of health care due to pain ranges from **$560 billion to $635 billion (in 2010 dollars)** in the United States, which combines the medical costs of pain care and the economic costs related to disability days and lost wages and productivity. (2)
- More than half of all hospitalized patients experienced pain in the last days of their lives and although therapies are present to alleviate most pain for those dying of cancer, research shows that **50-75%** of patients die in moderate to severe pain. (7)
- An estimated **20%** of American adults (42 million people) report that pain or physical discomfort disrupts their sleep a few nights a week or more. (8)

Commonly-Reported Pain Conditions

- When asked about four common types of pain, respondents of a National Institute of Health Statistics survey indicated that **low back pain** was the most common (27%), followed by **severe headache or migraine pain** (15%), **neck pain** (15%) and **facial ache or pain** (4%). (6)
- Back pain is the leading cause of disability in Americans under 45 years old. **More than 26 million Americans** between the ages of 20-64 experience frequent back pain. (6)
- Adults with low back pain are often in worse physical and mental health than people who do not have low back pain: **28%** of adults with low back pain report limited activity due to a chronic condition, as compared to **10%** of adults who do not have low back pain. Also, adults reporting low back pain were three times as likely to be in fair or poor health and more than four times as likely to experience serious psychological distress as people without low back pain. (6)

Highlights from the National Center for Health Statistics Report: Health, United States, 2006, Special Feature on Pain (6)

- More than one-quarter of Americans (26%) age 20 years and over - or, an estimated 76.5 million Americans - report that they have had a problem with pain of any sort that persisted for more than 24 hours in duration. [NOTE: this number does not account for acute pain].
- Adults age 45-64 years were the most likely to report pain lasting more than 24 hours (30%). Twenty-five percent (25%) of young adults age 20-44 reported pain, and adults age 65 and over were the least likely to report pain (21%).
Key Findings from the 2006 Voices of Chronic Pain Survey (9)

A 2006 survey conducted for the American Pain Foundation and sponsored by Endo Pharmaceuticals evaluated the impact that chronic pain had on 303 chronic pain sufferers who sought care from their physician and were currently using an opioid to treat their pain.

Control Over Chronic Pain

- More than half of respondents (51%) felt they had little or no control over their pain.
- Six out of ten patients (60%) said they experience breakthrough pain one or more times daily, severely impacting their quality of life and overall well-being.

Impact on Quality of Life

- Almost two-thirds (59%) reported an impact on their overall enjoyment of life.
- More than three quarters of patients (77%) reported feeling depressed.
- 70% said they have trouble concentrating.
- 74% said their energy level is impacted by their pain.
- 86% reported an inability to sleep well.

Lost Productive Time and Cost Due to Common Pain Conditions in the United States Workforce (10)

Data from the American Productivity Audit, a computer assisted telephone survey of health and work, of 28,902 working adults between August, 2001 and July 2002, was used to estimate lost productive time due to headache, arthritis, back pain, and other musculoskeletal conditions expressed in hours per worker per week and calculated in US dollars.

- Over half (52.7%) of the workforce surveyed reported having headache, back pain, arthritis, or other musculoskeletal pain in the past two weeks, and 12.7% of all workforce lost productive time in a two-week period due to pain.
- Headache (5.4%) was the most common pain condition prompting lost productive time: followed by back pain (3.2%), arthritis pain (2%) and other musculoskeletal pain (2%).
- Overall, workers lost an average of 4.6 hours per week of productive time due to a pain condition.
- Other musculoskeletal pain (5.5 hours/week) and arthritis or back pain (5.2 hours/week) produced the largest amounts of lost productive time.
- Headache produced, on average, 3.5 hours of lost productive time per week.
- Age did not seem to attenuate the findings.
- Lost productive time from common painful conditions was estimated to be $61.2 billion per year, while 76.6% of lost productive time was explained by reduced work performance, not absenteeism.

America Speaks: Pain in America (11)

2003 survey conducted by Peter D. Hart Research Associates as a nationwide survey for Research! America. The purpose of this study was to assess the view of Americans about pain in America. The survey's objectives included gauging Americans' perceptions of how pain sufferers and the medical community deal with the problems of chronic pain.

Dealing with Pain
Among the major adjustments that chronic pain sufferers have made are such serious steps as taking disability leave from work (20%), changing jobs altogether (17%), getting help with activities of daily living (13%) and moving to a home that is easier to manage (13%).

A Visit to the Doctor

- Most pain sufferers (63%) have seen their family doctor for help.
- Forty percent made an appointment with a specialist, such as an orthopedist.
- Twenty-five percent have visited a chiropractor or a doctor that specializes in pain management (15%).
- While 43% of pain sufferers have been to only one type of doctor for their pain, a large proportion (38%) have consulted more than one practitioner in the medical community.
- Treatments for pain have yielded mixed results. Although 58% of those who took prescription medication say that doing so was very fairly effective for their pain, only 41% of those who took over-the-counter.

The Pain Gap

- Seven in ten Americans feel that pain research and management should be one of the medical community's top few priorities (16%) or a high priority (55%)
- Almost six in 10 adults (57%) say they would be willing to pay one dollar more per week in taxes to increase federal funding for the scientific research into the causes and treatment of pain.

Prescription Drug Abuse Facts from the Office of National Drug Control Policy (ONDCP)

- Prescription drugs are the second-most abused category of drugs in the United States, following marijuana.(12).
- Among 12th graders, pharmaceutical drugs used non-medically are six of the ten most-used substances (13).
- From 1998 to 2008, the proportion of all substance abuse treatment admissions age 12 or older who reported any pain reliever abuse increased more than fourfold.(14)
- Prescription painkillers are considered a major contributor to the total number of drug deaths. In 2007, for example, nearly 28,000 Americans died from unintentional drug poisoning, and of these, nearly 12,000 involved prescription pain relievers.(15)
- Nearly one-third (29 percent) of people age 12 or older who used illicit drugs for the first time in the past year began by using prescription drugs non-medically.(12)
- According to a 2008 Department of Defense survey, about one in nine active-duty service members (11 percent) reported past-month prescription drug misuse.(16)
- The estimated number of emergency department visits linked to non-medical use of prescription pain relievers nearly doubled between 2004 and 2009.(17)
- In 2009, the number of first-time, non-medical users of psychotherapeutics (prescription opioid pain relievers, tranquilizers, sedatives, and stimulants) was about the same as the number of first-time marijuana users.(12)
- Approximately two million adults age 50 and older (2.1 percent of adults in that age range) used prescription-type drugs non-medically in the past year (18).
- Substance abuse treatment admissions for individuals age 50 or older nearly doubled from 1992 to 2008, climbing from 6.6 percent of all admissions to 12.2 percent. The percentage of primary admissions for prescription drug abuse among older individuals increased from 0.7 percent to 3.5 percent over the same time period.(19)

To view Prescription Drug Abuse Facts at ONDCP. .

Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education and Research (Institute of Medicine Report)
In 2011, at least 100 million adult Americans have common chronic pain conditions, a conservative estimate because it does not include acute pain or children. (20)

Pain is a significant public health problem that costs society at least $560-$635 billion annually (an amount equal to about $2,000.00 for everyone living in the U.S.). (20)

In 2008 the cost to federal and state governments of medical expenditures for pain was $99 billion. (20)

Recent Center for Disease Control and Prevention (CDC) and National Center for Health Statistics (NCHS) data suggest substantial rates of pain from the various causes and that most people in chronic pain have multiple sites of pain. For U.S. adults reporting pain, causes include: severe headache or migraine (16.1%), low back pain (28.1%), neck pain (15.1%), knee pain (19.5%), shoulder pain (9.0%), finger pain (7.6%), and hip pain (7.1%). (21)

According to the National Health and Nutrition Examination Survey (NHANES) data, 17 percent of U.S. children, aged 4-18, experience frequent or severe headaches, including migraine, over the course of a year. Before puberty, boys and girls have headaches at approximately the same rate, but after 12, the rate of recurrent and severe headaches rises among girls. (22)

Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2009
Department of Health and Human Services Report (23)

- Women were more likely to experience pain (in the form of migraines, neck pain, lower back pain, or face or jaw pain) than men. Women were twice as likely to experience migraines or severe headaches, or pain in the face or jaw, than men.
- The percentage of person experiencing migraines or severe headaches was inversely related to age. Twenty percent adults aged 18-44 years experienced a migraine or severe headache in the 3 months prior to the interview compared with 15% of adults aged 45-64, 7% of adults aged 65-74, and 6% of adults aged 75 and over.
- Adults aged 18-44 years were less likely to have experienced pain in the lower back during the 3 months prior to the interview compared with older adults.
- When results are considered by single race without regard to ethnicity, Asian adults were less likely to have pain in the lower back compared to white adults, black adults, and American Indian or Alaska Native (AIAN) adults.
- Adults with a bachelor’s degree or higher were less likely to have migraine headaches, neck pain, lower back pain, or pain in the face or jaw, compared to adults who did not graduate from high school.
- Adults in poor and near poor families were more likely to experience migraine headaches, neck pain, lower back pain, or pain in the face or jaw in the 3 months prior to the interview than were adults in families that were not poor.
- Among adults under age 65, those covered by Medicaid were more likely to have migraine headaches, neck pain, lower back pain, or pain in the face or jaw than those with private insurance or those who were uninsured. Among adults aged 65 and over, those covered by Medicaid and Medicare were more likely to have migraine headaches, neck pain, lower back pain, or pain in the face or jaw than those with private insurance or only Medicare health care coverage.


Overdose deaths involving opioid pain relievers (OPR), also known as opioid analgesics, have increased and now exceed deaths involving heroin and cocaine combined.

- Prescription painkiller overdoses killed nearly 15,000 people in the US in 2008. This is more than 3 times the 4,000 people killed by these drugs in 1999.
- In 2010, about 12 million Americans (age 12 or older) reported nonmedical use of prescription painkillers in the past year.
One in 20 people in the United States, ages 12 and older, used prescription painkillers nonmedically (without a prescription or just for the "high" they cause) in 2010.

Nearly half a million emergency department visits in 2009 were due to people misusing or abusing prescription painkillers.

Sales of OPR quadrupled between 1999 and 2010. Enough OPR were prescribed last year to medicate every American adult with a standard pain treatment dose of 5 mg of hydrocodone (Vicodin and others) taken every 4 hours for a month.

Nonmedicinal use of prescription painkillers costs health insurers up to $72.5 billion annually in direct health care costs.

Certain groups are more likely to abuse or overdose on prescription painkillers:

- Many more men than women die of overdoses from prescription painkillers.
- Middle-aged adults have the highest prescription painkiller overdose rates.
- People in rural counties are about two times as likely to overdose on prescription painkillers as people in big cities.
- Whites and American Indian or Alaska Natives are more likely to overdose on prescription painkillers.
- About 1 in 10 American Indian or Alaska Natives age 12 or older used prescription painkillers for nonmedical reasons in the past year, compared to 1 in 20 whites and 1 in 30 blacks.

Some states have a bigger problem with prescription painkillers than others:

- Prescription painkiller sales per person were more than 3 times higher in Florida (which has the highest rate) than in Illinois (which has the lowest rate).
- In 2008/2009, nonmedical use of painkillers in the past year ranged from 1 in 12 people (age 12 or older) in Oklahoma to 1 in 30 in Nebraska.
- States with higher sales per person and more nonmedical use of prescription painkillers tend to have more deaths from drug overdoses.

REFERENCES:


5) American Cancer Society, Prevalence of Cancer: http://www.cancer.org/docroot/CRI/content/CRI_2_6x_Cancer_Prevalence_How_Many_People_Have_Cancer.asp


7) Source: A Controlled Trial to Improve Care for Seriously Ill Hospitalized Patients. http://jama.ama-assn.org/cgi/content/abstract/274/20/1591.

9) 2006 Voices of Chronic Pain Survey. (American Pain Foundation)


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