

Overview of Pain

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“The duty to relieve pain and suffering is central to the physician’s role as healer and is an obligation physicians have to their patients.”

— American Medical Association Code of Ethics

Declaration of Montreal

The International Association for the Study of Pain, “Declaration of Montreal: Declaration that Access to Pain Management Is a Fundamental Human Right,” September 2010, states:

Recognizing the intrinsic dignity of all persons and that withholding of pain treatment is profoundly wrong, leading to unnecessary suffering which is harmful; we declare that the following human rights must be recognized throughout the world:

- The right of all people to have access to pain management without discrimination
- The right of people in pain to acknowledgment of their pain and to be informed about how it can be assessed and managed
- The right of all people with pain to have access to appropriate assessment and treatment of the pain by adequately trained health care professionals

Source: International Association for the Study of Pain

What is Pain?

An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

- Pain is always subjective
- The inability to communicate verbally does not negate the possibility that an individual is experiencing pain and is in need of appropriate pain-relieving treatment
- It is unquestionably a sensation in a part or parts of the body, but it is also always unpleasant and therefore also an emotional experience

Source: International Association for the Study of Pain

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Types of Pain: Acute and Chronic (1/2)

Acute Pain

- Results from disease, inflammation, or injury to tissues
- Generally comes on suddenly, for example, after trauma or surgery, and may be accompanied by anxiety or emotional distress
- Can usually be diagnosed and treated, and the pain is self-limiting, that is, it is confined to a given period of time and severity
- In some rare instances can become chronic

Source: National Institute of Neurological Disorders and Stroke

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Types of Pain: Acute and Chronic (2/2)

Chronic Pain is widely believed to represent disease itself

- Can be made much worse by environmental and psychological factors
- Persists over a longer period of time than acute pain and is resistant to most medical treatments
- It can, and often does, cause severe problems for patients
- A person may have two or more co-existing chronic pain conditions, including chronic fatigue syndrome, endometriosis, fibromyalgia, inflammatory bowel disease, interstitial cystitis, temporomandibular joint dysfunction, and vulvodynia

Source: National Institute of Neurological Disorders and Stroke

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How Does Pain Work?

Pain is a complicated process that involves a number of chemicals found naturally in the brain and spinal cord

- These chemicals, called *neurotransmitters*, transmit nerve impulses from one cell to another

We may experience pain as a prick, tingle, sting, burn, or ache

- Receptors on the skin trigger a series of events, beginning with an electrical impulse that travels from the skin to the spinal cord
- The spinal cord acts as a sort of relay center where the pain signal can be blocked, enhanced, or otherwise modified before it is relayed to the brain

Source: National Institute of Neurological Disorders and Stroke

Pain Prevalence

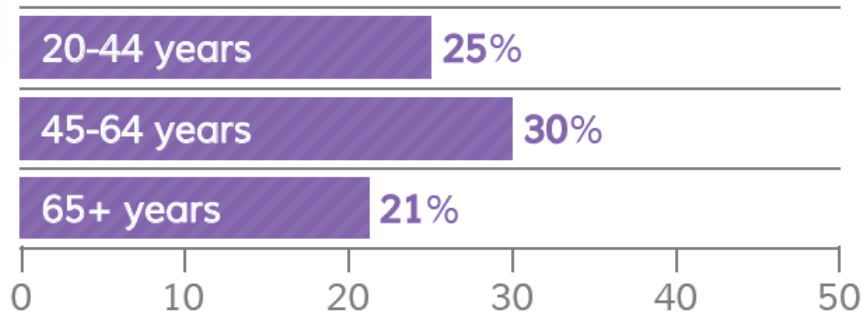
According to the Institute of Medicine, approximately
100 million adults
in the United States suffer from common
chronic pain conditions

Source: Institute of Medicine (IOM)

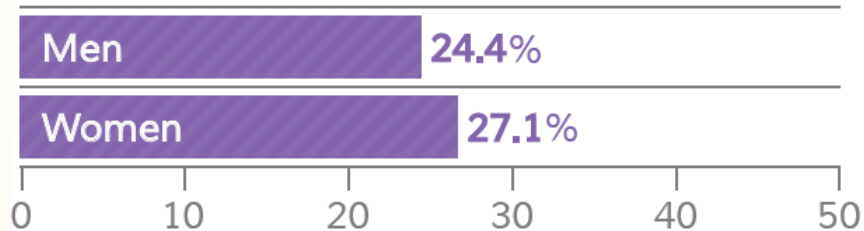
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Pain Prevalence by Demographic*

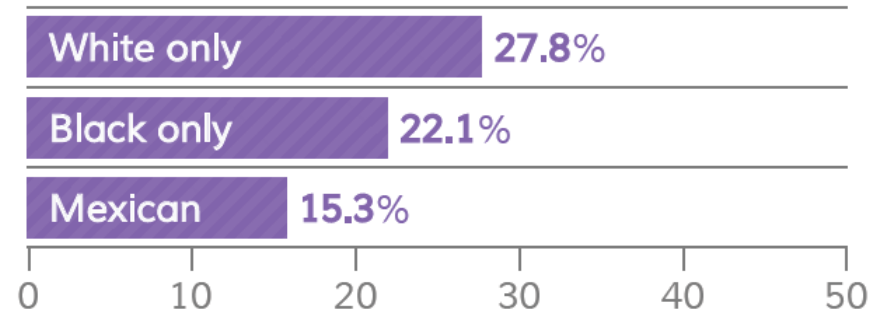
Age



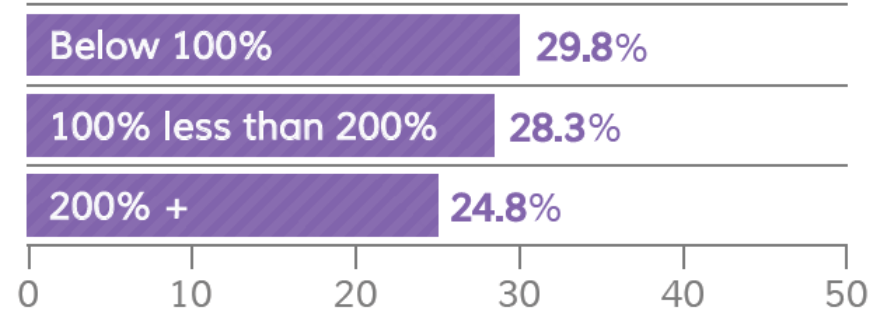
Sex



Race & Hispanic Origin



Percent of Poverty Level



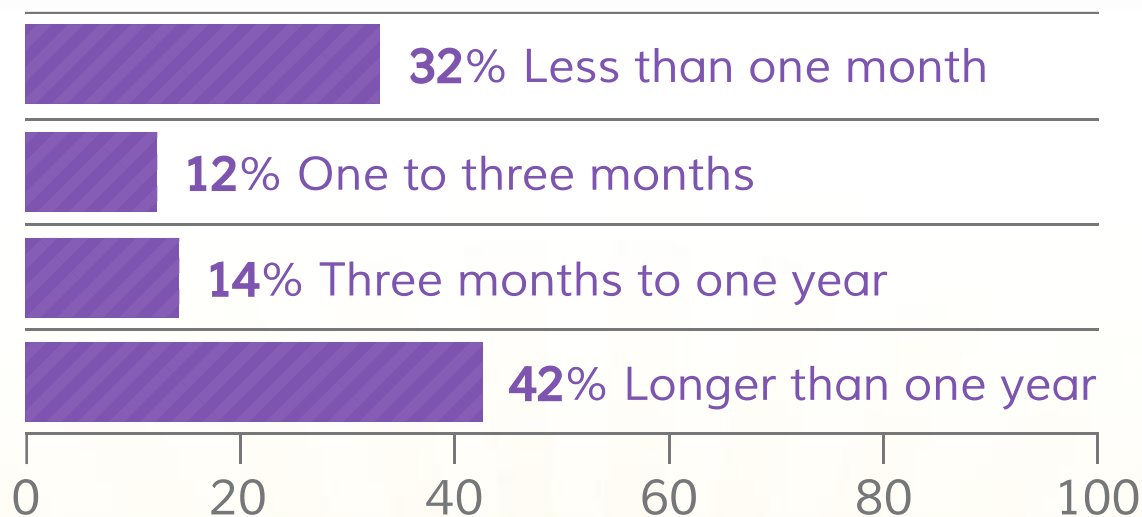
*"Pain in the Past Month Among Adults 20+, 1999-2002"

Source: National Center for Health Statistics

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Duration of Pain

Adults 20 years of age and over who report pain said that it lasted:



Source: National Center for Health Statistics (NCHS, 2006)

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Common Pain Conditions

Arthritis

50 million U.S. adults (about 1 in 5) have a diagnosis of arthritis

Cancer

13.7 million Americans who have ever had cancer are alive today

1.6 million new cases of cancer are diagnosed each year in the U.S.

Fibromyalgia

5-10 million Americans live with fibromyalgia

Headache

28 million Americans (13% of the population) are affected by migraine symptoms

Joint Pain

33.3% of adults report joint pain of any type in the past 30 days; 20.3% report issues with knee pain and 9.4% report shoulder pain

Back Pain

Back pain affects 8 out of 10 people at some point during their lives

Approximately one-quarter of U.S. adults reported having low-back pain lasting at least one whole day in the past three months; 7.6% reported at least one episode of severe acute low-back pain within a one-year period

Temporomandibular Joint Disorder

35 million U.S. adults suffer from TMJD and related symptoms

Source: Centers for Disease Control and Prevention (CDC), American Cancer Society, American Pain Society, National Headache Foundation, NCHS, Medline, Ann Intern Med, TMJ Association

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Cost of Pain

According to the Institute of Medicine, annual costs associated with pain are estimated to be a staggering **\$560-635 billion**

Cost of pain not only includes direct costs associated with doctor's visits, diagnostics and medication, but indirect costs such as lost productivity

- Lost productive time from common pain conditions among active workers costs an estimated \$61.2 billion per year
- The majority (76.6%) of the lost productive time was explained by reduced performance while at work and not work absence

Source: IOM; JAMA (2003, 2008); CDC

Living with Chronic Pain is a Daily Struggle

In 2013, the American Chronic Pain Association and American Academy of Pain Medicine released the results of a national survey about people living with pain. Key findings include:

- Nearly all respondents (94%) feel that living with pain is a daily struggle
- Nine out of 10 people with chronic pain (91%) say it is disruptive to their daily lives. Four in 10 (40%) describe it as very disruptive
- Four out of five (82%) people with chronic pain turn to family members or friends for help with daily tasks; almost half rely primarily on their spouses or partners (47%)
- Nearly all (95%) caregiver respondents help with daily tasks on at least one day a week
- Four in 10 caregivers (40%) wish there were others to help with daily tasks, and one-third (37%) struggle to balance their own needs with those of their loved one in pain
- Pain tends to dominate conversations with one-third of family members (34%), and they sometimes feel burned out hearing about the person's pain (46%)

Source: ACPA

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Disparities in Pain Care (1/2)

Pain Does Not Discriminate, But Its Treatment Does

Racial and ethnic disparities in pain perception, assessment, and treatment are found in all settings (e.g., postoperative, emergency room) and across all types of pain (e.g., acute, cancer, chronic non-cancer)

Studies indicate that physicians demonstrate the least confidence in diagnosing **women's medical conditions**, and that women suffering with chronic pain are frequently told they have psychiatric conditions

The prevalence of pain in **elderly** nursing home residents is estimated at 40-80%

More than 50% of U.S. nursing home residents have substantial cognitive impairment or dementia, which can complicate pain assessment and treatment

Source: Pain Med, J Women's Health, BMC Geriatrics, New England J Med, National Rural Health Assn

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Disparities in Pain Care (2/2)

Critically ill **pediatric patients** are frequently exposed to acute, established and chronic pain as a result of their disease processes or intensive care therapies. However, pain experienced by children with special health care needs or developmental disabilities may be particularly difficult to assess accurately. Children who are non-verbal due to illness, cognitive impairment, sedation or ventilation may be at an increased risk for suffering from pain

Rural residents are less likely to have employer-provided health care coverage or prescription drug coverage, and the rural poor are less likely to be covered by Medicaid benefits than their urban counterparts, which can limit access to pain treatment

Source: Pain Med, J Women's Health, BMC Geriatrics, J Child Health Care, National Rural Health Assn

Access to Pain Care

People living with pain often face an uphill road. Many share similar stories, which may include:

- Seeing multiple health care providers before finding someone who listens and is willing to provide care and/or correctly diagnose their condition
- Difficulty getting access to certain treatments, providers with training in pain management and/or sufficient health insurance coverage (many join the ranks of the uninsured or underinsured)
- Feeling as though their financial well-being is threatened by out-of-pocket health care costs, and, in some cases, limited ability to work

Prescription Drug Abuse

- Prescription drug abuse is a major public health issue
- People who receive prescription medication for their pain can play a role in protecting their medication from theft and abuse
- Among persons aged 12 or older in 2011-2012 who used pain relievers nonmedically in the past 12 months, 54.0% got the drug they most recently used from a friend or relative for free
 - Another 19.7% reported they got the drug from one doctor
 - An annual average of 4.3% got pain relievers from a drug dealer or other stranger, and 0.2% bought them on the Internet

Source: Substance Abuse and Mental Health Services Administration

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Future of Pain Research

Scientists supported by the National Institutes of Health (NIH) are at the forefront of pain research. Developing better pain treatments is the primary goal of all pain research being conducted by NIH. However, funding for pain research at the federal level remains a challenge.

In the summer of 2009, key elements of the National Pain Care Policy Act were incorporated into the Patient Protection and Affordable Healthcare Act, which President Barack Obama signed into law on March 23, 2010. These provisions include:

- Mandating an Institute of Medicine conference on pain to address key medical and policy issues affecting the delivery of quality pain care
- Establishing a training program to improve the skills of health care professionals to assess and treat pain
- Enhancing the pain research agenda for the NIH

Resources

Contact information for these organizations and more is available at:
www.IntheFaceofPain.com

American Academy of Pain Management

Twitter: [@AAPainManage](https://twitter.com/AAPainManage)
www.aapainmanage.org

American Academy of Pain Medicine

Twitter: [@AmerAcadPainMed](https://twitter.com/AmerAcadPainMed)
www.painmed.org

American Chronic Pain Association

www.theacpa.org

American Pain Society

Twitter: [@AmericanPainSoc](https://twitter.com/AmericanPainSoc)
www.americanpainsociety.org

International Association for the Study of Pain

Twitter: [@IASPPAIN](https://twitter.com/IASPPAIN)
www.iasp-pain.org

U.S. Pain Foundation

Twitter: [@US_Pain](https://twitter.com/US_Pain)
www.uspainfoundation.org

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