

General Pain

Pain touches everyone at one time or another. Pain does not discriminate; however, its treatment does. For many, pain goes away on its own or after a short course of treatment. But for others, pain becomes all-consuming, affecting every aspect of their lives.

The Institute of Medicine (IOM) is an independent, nonprofit organization that works outside of government to provide unbiased and authoritative advice to decision makers and the public. In 2011, the IOM released a report called "Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research." According to the IOM, **approximately 100 million adults in the United States suffer from common chronic pain conditions** and the annual cost of chronic pain in the U.S. is estimated to be a staggering **\$560-635 billion**, including health care expenses and lost productivity.¹

In 2004, an estimated 186 million work days were lost that year due to back pain alone.² In addition, overexertion, falls and repetitive-use injuries are among the most common forms of worksite injury. According to the 2013 Liberty Mutual Workplace Safety Index, the cost of the most disabling workplace injuries and illnesses in 2011 amounted to \$55.4 billion in direct U.S. workers' compensation costs, averaging nearly **one billion dollars per week**.³

**A challenge
for families
and friends**

Pain causes isolation and strained relationships with families and friends. The National Sleep Foundation reports that two-thirds of chronic pain sufferers experience poor or unrefreshing sleep, robbing them of needed rest.⁴

Worry and fear also play a role in the pain experience. How one copes with pain has been shown to affect pain severity and disability.

One predictor of pain outcomes is called "catastrophizing," which is defined as a negative emotional and cognitive response to pain that involves elements of magnification, helplessness, and pessimism.⁵ This type of research supports the common-sense view that people who live with pain know all too well: pain is more than just a physical experience, but an emotional one, that has the power to touch every part of a person's life.

**Worry
& Fear**

In fact, scientists are taking a closer look at ways to incorporate mind-body awareness techniques into more comprehensive pain and stress management programs. A recent study among burn patients found relaxation breathing to be a simple and inexpensive way for nurses to help their burn patients manage pain and anxiety during dressing changes.⁶

"...Approximately 100 million adults in the U.S. suffer from common chronic pain conditions."¹

PAIN: The Universal Disorder

You know it at once. It may be the fiery sensation of a burn moments after your finger touches the stove. Or it's a dull ache above your brow after a day of stress and tension. Or you may recognize it as a sharp pierce in your back after you lift something heavy.

It is pain. In its most benign form, it warns us that something isn't quite right...At its worst, however, pain robs us of our productivity, our well-being, and, for many of us suffering from extended illness, our very lives. Pain is a complex perception that differs enormously among individual patients, even those who appear to have identical injuries or illnesses.

In 1931, the French medical missionary Dr. Albert Schweitzer wrote, "Pain is a more terrible lord of mankind than even death itself." Today, pain has become the universal disorder, a serious and costly public health issue, and a challenge for family, friends, and health care providers who must give support to the individual suffering from the physical as well as the emotional consequences of pain.

National Institutes of Health. "Pain: Hope through Research."⁷

"...Pain is a more terrible lord of mankind than even death itself."

Dr. Albert Schweitzer

Additionally, the Department of Defense created the Breathe2Relax app, a hands-on diaphragmatic breathing, or "belly breathing" exercise tool. This kind of breathing has been taught for centuries as a way of turning on the body's relaxation response.

Breathing exercises have been documented to decrease the body's "fight-or-flight" stress response, and help with mood stabilization, anger control, and anxiety management. Breathe2Relax is designed to be used as a stand-alone stress reduction tool, or can be used in tandem with clinical care directed by a healthcare worker.⁸

Gender plays a role in how pain is experienced, coped with and treated. Certain conditions such as fibromyalgia and migraine pain are more prevalent among women, while men are at a disproportionately high risk of exposure to HIV and suffer from a larger proportion of injury from burns. Women have been portrayed as "hysterical" in literature, while society encourages men, particularly in certain cultures, to be stoic and bear their pain.⁹⁻¹¹

Gender plays a role

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 and chronic non-cancer). Published research suggests that the sources of pain disparities among racial and ethnic minorities are complex, involving patients (patient/health care provider communication, attitudes), health care providers (decision making), and the health care system (access to pain medication).¹²

Racial and ethnic disparities

PAIN: Hope Through Research

Thousands of years ago, ancient peoples attributed pain to spirits and treated it with mysticism and incantations. Over the centuries, science has provided us with a remarkable ability to understand and control pain with medications, surgery, and other alternative and complementary treatments. Today, scientists understand a great deal about the causes and mechanisms of pain, and research has produced dramatic improvements in the diagnosis and treatment of a number of painful disorders. For people who fight every day against the limitations imposed by pain, the work of National Institute of Neurological Disorders and Stroke (NINDS)-supported scientists holds the promise of an even greater understanding of pain in the coming years. Their research offers a powerful weapon in the battle to prolong and improve the lives of people with pain: hope.

National Institutes of Health. "Pain: Hope through Research."⁷

Hope

Age is a factor when considering disparities in pain care. Children and older adults alike are faced with challenges and misconceptions. Some people think that pain is natural with aging, or that when older adults are not clear in explaining the cause or nature of their pain that they are "just complaining." Pain in children can be a major challenge for parents and health care professionals. Assessment of pain in children, especially those in the preverbal age group, poses a particularly difficult problem. Older adults, children, and their families may experience significant emotional and social consequences because of pain and disability.^{13,14}

Age is a factor when considering disparities in pain care

Within rural populations, the debilitating nature of pain is often made worse by fewer economic resources, geographical isolation, and reduced access to quality medical care. Additionally, the demographic makeup of some rural populations (including poverty and low literacy) corresponds with elevated risk for poor pain-related outcomes.¹⁵

Facts

In a 2009 briefing note by the World Health Organization (WHO), it estimated that 5 billion people live in countries with low or no access to controlled medicines and have no or insufficient access to treatment for moderate to severe pain. In these countries, each year, tens of millions of patients are suffering without adequate treatment:¹⁶

- 1 million end-stage HIV/AIDS patients
- 5.5 million terminal cancer patients
- 0.8 million patients suffering injuries, caused by accidents and violence
- Patients with chronic illnesses
- Patients recovering from surgery

American Chronic Pain Association/American Academy of Pain Medicine Survey

In 2013, the American Chronic Pain Association and American Academy of Pain Medicine released the results of a national survey of 1,255 adults with chronic pain and 505 caregivers. Key findings include:¹⁷

Living with chronic pain is a daily struggle, and many rely on loved ones for daily support.

- 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%).

People with chronic pain worry that asking for help will burden others; some feel they have nobody to ask.

- People with chronic pain report they feel their condition burdens their closest relationships, including those with spouses (67%), children (56%), employers (54%), friends (48%) and other family members (48%).

- Almost nine out of 10 people with chronic pain (88%) say they sometimes feel like a burden asking other people for help.
- Despite receiving help from caregivers, more than one-third (35%) of people with chronic pain report they get less help than they need.
 - The top reason people with chronic pain don't get help is because they are reluctant to ask out of concern they are burdening others.
- Almost one-fifth (17%) of people with chronic pain say they have nobody to turn to for help.

Commonly-Reported Pain Conditions

- According to a 2013 National Center for Health Statistics Report:
 - An estimated 14.2% of the population reports severe headache or migraine in the last three months; however, the prevalence among women (19.1%) is double that of men (9.0%).¹⁸
 - An estimated 27.5% of the general population reports low-back pain and 13.9% reports neck pain in the past three months.¹⁸
- According to a 2011 National Center for Health Statistics Survey, approximately 32.1% of adults report joint pain of any type in the past 30 days; 19.6% report issues with knee pain and 9.0% report shoulder pain.¹⁹

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

Data from the 1999–2002 National Health and Nutrition Examination Survey show that more than one-quarter of Americans (26%) age 20 years and over reported that they had a problem with pain – of any sort – that persisted for more than 24 hours in duration in the month prior to the interview. 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%). More women (27.1%) than men (24.4%) reported that they were in pain. Non-Hispanic white adults reported pain more often than adults of other races and ethnicities (27.8% vs. 22.1% Black only or 15.3% Mexican). Adults living in families with income less than twice the poverty level reported pain more often than higher income adult.²⁰

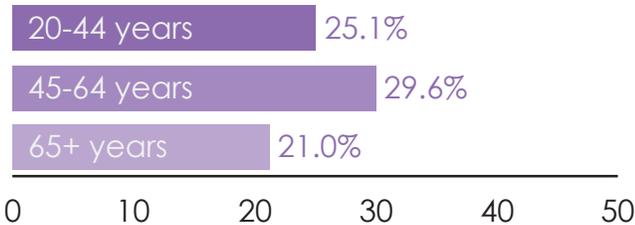
Duration

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

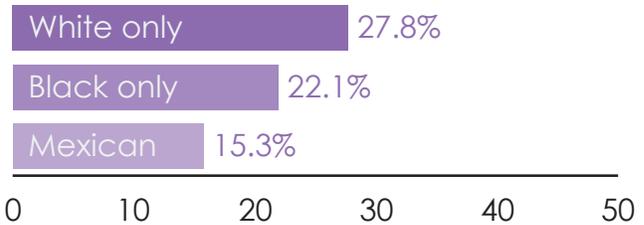
- Less than one month – 32%
- One to three months – 12%
- Three months to one year – 14%
- Longer than one year – 42%

Pain in the past Month Among Adults 20+, 1999-2002

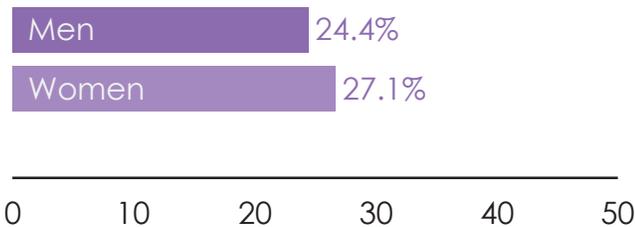
Age



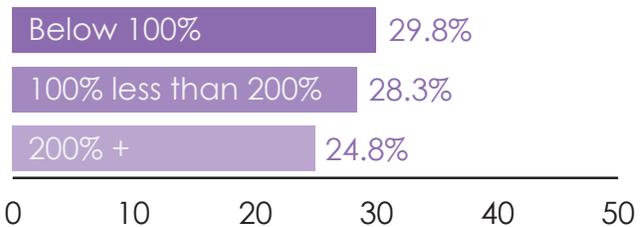
Race & Hispanic Origin



Sex



Percent of Poverty Level



This is not intended to be a comprehensive summary of the available information on this topic. Please consult with your health care professional for additional information. These fact sheets may be printed and used for non-commercial purposes only.

Additional Resources

American Academy of Craniofacial Pain

12100 Sunset Hills Road
Suite 130
Reston, VA 20190
Phone: (800) 322-8651
Phone: (703) 234-4142
Fax: (703) 435-4390
E-mail:
bcarney@drohanmgmt.com
www.aacfp.org

American Academy of Family Physicians

P.O. Box 11210
Shawnee Mission, KS 66207-1210
Phone: (800) 274-2237
Phone: (913) 906-6000
Fax: (913) 906-6075
E-mail: Via website
Twitter: @aafp
www.aafp.org

American Academy of Hospice and Palliative Medicine

8735 West Higgins Road
Suite 300
Chicago, IL 60631
Phone: (847) 375-4712
Fax: (847) 375-6475
E-mail: info@aahpm.org
Twitter: @AAHPM
www.aahpm.org

American Academy of Neurology

201 Chicago Avenue
Minneapolis, MN 55415
Phone: (800) 879-1960
Phone: (612) 928-6000
Fax: (612) 454-2746
E-mail:
memberservices@aan.com
Twitter: @AANPublic
www.aan.com

American Academy of Orthopedic Surgeons

6300 North River Road
Rosemont, IL 60018-4262
Phone: (847) 823-7186
Fax: (847) 823-8125
E-mail: custserv@aaos.org
Twitter: @AAOS1
www.aaos.org

American Academy of Osteopathy

3500 DePauw Boulevard
Suite 1100
Indianapolis, IN 46268-1136
Phone: (317) 879-1881
Fax: (317) 879-0563
<https://netforum.avectra.com/eweb/StartPage.aspx?Site=AAO>

American Academy of Pain Management

975 Morning Star Drive
Suite A
Sonora, CA 95370
Phone: (209) 533-9744
E-mail: info@aapainmanage.org
Twitter: @AAPainManage
www.aapainmanage.org

American Academy of Pain Medicine

8735 West Higgins Road
Suite 300
Chicago, IL 60631-2738
Phone: (847) 375-4731
Fax: (847) 375-6477
E-mail: info@painmed.org
Twitter: @AmerAcadPainMed
www.painmed.org

American Academy of Physical Medicine and Rehabilitation

9700 West Bryn Mawr Avenue
Suite 200
Rosemont, IL 60018-5701
Phone: (847) 737-6000
E-mail: info@aapmr.org
Twitter: @AAPMR
www.aapmr.org

American Academy of Physician Assistants

2318 Mill Road
Suite 1300
Alexandria, VA 22314
Phone: (703) 836-2272
Fax: (703) 684-1924
E-mail: Via website
Twitter: @AAPAorg
www.aapa.org

American Association of Nurse Practitioners

P.O. Box 12846
Austin, TX 78711
Phone: (512) 442-4262
Fax: (512) 442-6469
E-mail: admin@aanp.org
Twitter: @AANP_NEWS
www.aanp.org

Additional Resources

American Chiropractic Association

1701 Clarendon Boulevard
Arlington, VA 22209
Phone: (703) 276-8800
Fax: (703) 243-2593
E-mail:
memberinfo@acatoday.org
Twitter: @ACAtoday
www.acatoday.org

American Chronic Pain Association

P.O. Box 850
Rocklin, CA 95677
Phone: (800) 533-3231
Fax: (916) 632-3208
E-mail: ACPA@theacpa.org
www.theacpa.org

American College of Osteopathic Family Physicians

330 East Algonquin Road
Suite 1
Arlington Heights, IL 60005
Phone: (800) 323-0794
Fax: (847) 228-9755
Twitter: @ACOFP
www.acofp.org

American College of Physicians

190 North Independence Mall
West
Philadelphia, PA 19106-1572
Phone: (800) 523-1546
Phone: (215) 351-2400
Twitter: @ACPinternists
www.acponline.org

American College of Rheumatology

2200 Lake Boulevard NE
Atlanta, GA 30319
Phone: (404) 633-3777
Fax: (404) 633-1870
E-mail: acr@rheumatology.org
Twitter: @ACRheum
www.rheumatology.org

American Geriatric Society

40 Fulton Street
18th Floor
New York, NY 10038
Phone: (212) 308-1414
Fax: (212) 832-8646
E-mail: info.amger@americangeriatrics.org
Twitter: @AmerGeriatrics
www.americangeriatrics.org

American Medical Association

AMA Plaza
330 North Wabash Avenue
Chicago, IL 60611-5885
Phone: (800) 621-8335
E-mail: Via website
Twitter: @AmerMedicalAssn
www.ama-assn.org

American Medical Directors Association

11000 Broken Land Parkway
Suite 400
Columbia, MD 21044
Phone: (800) 876-2632
Phone: (410) 740-9743
E-mail: info@amda.org
Twitter: @AMDALTCMedicine
www.amda.com

American Occupational Therapy Association

4720 Montgomery Lane
Suite 200
Bethesda, MD 20814-3449
Phone: (301) 652-2682
Twitter: @AOTAInc
www.aota.org

American Osteopathic Association

142 East Ontario Street
Chicago, IL 60611
Phone: (800) 621-1773
Phone: (312) 202-8000
Fax: (312) 202-8200
E-mail: Via website
Twitter: @AOAforDOs
www.osteopathic.org

American Pain Society

8735 West Higgins Road
Suite 300
Chicago, IL 60631
Phone: (847) 375-4715
Fax: (866) 574-2654
E-mail: info@americanpainsociety.org
Twitter: @AmericanPainSoc
www.americanpainsociety.org

American Pharmacists Association

2215 Constitution Avenue, NW
Washington, DC 20037
Phone: (202) 628-4410
Fax: (202) 783-2351
E-mail: Via website
Twitter: @pharmacists
www.pharmacist.com

Additional Resources

American Physical Therapy Association

1111 North Fairfax Street
Alexandria, VA 22314-1488
Phone: (800) 999-2782
Fax: (703) 684-7343
E-mail: Via website
Twitter: @APTAtweets
www.apta.org

American Society for Pain Management Nursing

P.O. Box 15473
Lenexa, KS 66285-5473
Phone: (888) 34-ASPMN (27766)
Phone: (913) 895-4606
Fax: (913) 895-4652
E-mail: aspmn@goamp.com
www.aspmn.org

American Society of Anesthesiologists

520 North Northwest Highway
Park Ridge, IL 60068-2573
Phone: (847) 825-5586
Fax: (847) 825-1692
E-mail:
communications@asahq.org
Twitter: @ASALifeline
www.asahq.org

American Society of Clinical Oncology

2318 Mill Road
Suite 800
Alexandria, VA 22314
Phone: (571) 483-1300
E-mail: Via website
Twitter: @ASCO
www.asco.org

American Society of Regional Anesthesia & Pain Medicine

239 Fourth Avenue
Suite 1714
Pittsburgh, PA 15222
Phone: (855) 795-2772
E-mail: Via website
Twitter: @ASRA_Society
www.asra.com

Association of Oncology Social Work

111 Deer Lake Road
Suite 100
Phone: (847) 480-6343
Fax: (847) 480-9282
E-mail: info@aosw.org
Twitter: @oncosocialwork
www.aosw.org

Association of Rehabilitation Nurses

8735 West Higgins Road
Suite 300
Chicago, IL 60631
Phone: (800) 229-7530
E-mail: info@rehabnurse.org
Twitter: @AssocRehabNurse
www.rehabnurse.org

Case Management Society of America

6301 Ranch Drive
Little Rock, AR 72223
Phone: (501) 221-9068
E-mail: cmsa@cmsa.org
Twitter: @CMSANational
www.cmsa.org

Hospice and Palliative Nurses Association

One Penn Center West
Suite 229
Pittsburgh, PA 15276
Phone: (412) 787-9301
E-mail: Via website
Twitter: @HPNAinfo
www.hpna.org

International Association for the Study of Pain

1510 H Street, NW
Suite 600
Washington, DC 20005
Phone: (202) 524-5300
Fax: (202) 524-5301
E-mail: IASPdesk@iasp-pain.org
Twitter: @IASPPAIN
www.iasp-pain.org

International Association of Hospice and Palliative Care

5535 Memorial Drive
Suite F-PMB 509
Houston, TX 77007
Phone: (866) 374-2472
Phone: (936) 321-9846
Fax: (713) 589-3657
E-mail: Via website
Twitter: @IAHPC
www.hospicecare.com

Additional Resources

National Association Directors of Nursing Administration in Long Term Care

Reed Hartman Tower
11353 Reed Hartman Highway
Suite 210
Cincinnati, OH 45241
Phone: (800) 222-0539
E-mail: Via website
Twitter: @NADONA
www.nadona.org

National Association of Social Workers

750 First Street, NE
Suite 700
Washington, DC 20002-4241
Phone: (202) 408-8600
E-mail: membership@naswdc.org
Twitter: @nasw
www.naswdc.org

National Hospice & Palliative Care Organization

1731 King Street
Suite 100
Alexandria, VA 22314
Phone: (703) 837-1500
Fax: (703) 837-1233
E-mail: nhpco_info@nhpco.org
Twitter: @NHPCO_news
www.nhpco.org

Resources verified March 2014.

National Sleep Foundation

1010 N. Glebe Road
Suite 310
Arlington, VA 22201
Phone: (703) 243-1697
E-mail: nsf@sleepfoundation.org
Twitter: @sleepfoundation
www.sleepfoundation.org

Oncology Nursing Society

125 Enterprise Drive
Pittsburgh, PA 15275
Phone: (866) 257-4ONS (667)
Phone: (412) 859-6100
Fax: (877) 369-5497
Fax: (412) 859-6162
Email: customer.service@ons.org
Twitter: @OncologyNursing
www.ons.org

The Pain Community

P.O. Box 1293
Alamo, CA 94507-7293
E-mail: Via website
Twitter: @ThePainComm
<http://paincommunity.org/>

U.S. Pain Foundation

670 Newfield Street
Suite B
Middletown, CT 06457
Phone: (800) 910-2462
E-mail: info@uspainfoundation.org
Twitter: @US_Pain
www.uspainfoundation.org

World Health Organization

Avenue Appia 20
1211 Geneva 27
Switzerland
Phone: + 41 22 791 21 11
Fax: + 41 22 791 31 11
E-mail: Via website
Twitter: @WHO
www.who.int/en/

References

1. IOM (Institute of Medicine). 2011. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. Washington, DC: The National Academies Press.
2. AAOS Now. "Aching Backs Impact Cost, Disability." January 2009. <http://www.aaos.org/news/aaosnow/jan09/research6.asp>. Accessed April 21, 2014.
3. Liberty Mutual Workplace Safety Index. 2013. <http://www.libertymutualgroup.com/>. Accessed July 10, 2014.
4. National Sleep Foundation. "Pain and Sleep." <http://www.sleepfoundation.org/article/ask-the-expert/pain-and-sleep>. Accessed April 21, 2014.
5. Fabian LA, McGuire L, Goodin BR, Edwards RR. "Ethnicity, catastrophizing, and qualities of the pain experience." *Pain Med*. 2011 Feb;12(2):314-21.
6. Park E, Oh H, Kim T. "The effects of relaxation breathing on procedural pain and anxiety during burn care." *Burns*. 2013 Sep;39(6):1101-6.
7. National Institutes of Health, "Pain: Hope through Research." http://www.ninds.nih.gov/disorders/chronic_pain/detail_chronic_pain.htm. Accessed April 21, 2014.
8. Department of Defense. "Breathe2Relax." <http://www.t2.health.mil/apps/breathe2relax>. Accessed April 21, 2014.
9. Hoffmann D, Tarzian A. "The girl who cried pain: a bias against women in the treatment of pain." *J Law Med Ethics*. 2001 Spring;29(1):13-27.
10. American Burn Association. *Burn Incidence and Treatment in the US: 2013 Fact Sheet*. http://ameriburn.org/resources_factsheet.php?PHPSESSID=b44afa1b1bfcf739bfa130e34b758234. Accessed April 21, 2014.
11. Centers for Disease Control. <http://www.cdc.gov/hiv/statistics/basics/index.html>. Last reviewed April 23, 2013. Accessed April 21, 2014.
12. Green CR, et al. "The unequal burden of pain: confronting racial and ethnic disparities in pain." *Pain Med*. 2003 Sep;4(3):277-94.
13. Committee on Psychosocial Aspects of Child and Family Health and Task Force on Pain in Infants, Children, and Adolescents. "The Assessment and Management of Acute Pain in Infants, Children, and Adolescents." *Pediatrics* 2001 Sept(108)3:793-797.
14. Mattsson JY, Forsner M, Arman M. "Uncovering pain in critically ill non-verbal children: nurses' clinical experiences in the paediatric intensive care unit." *J Child Health Care*. 2011 Sep;15(3):187-98.
15. Thorn BE, Day MA, Burns J, Kuhajda MC, Gaskins SW, Sweeney K, McConley R, Ward LC, Cabbil C. "Randomized trial of group cognitive behavioral therapy compared with a pain education control for low-literacy rural people with chronic pain." *Pain*. 2011 Dec;152(12):2710-20.
16. World Health Organization. "Access to Controlled Medications Programme: Improving access to medications controlled under international drug conventions." February 2009. http://www.who.int/medicines/technical_briefing/tbs/ACMP_BrNote_PainGLs_EN_Feb09.pdf. Accessed April 21, 2014.
17. American Chronic Pain Association. Data on file: Versta Research. *Individual Burdens of Pain, Patient Survey*. (2013)
18. National Center for Health Statistics. *Health, United States, 2013: With Special Feature on Prescription Drugs*. Hyattsville, MD. 2014.
19. National Center for Health Statistics. *Health, United States, 2011: With Special Feature on Socioeconomic Status and Health*. Hyattsville, MD. 2012.
20. National Center for Health Statistics. *Health, United States, 2006: With Chartbook on Trends in the Health of Americans*. Hyattsville, MD. 2007.