



# BY THE NUMBERS

## Musculoskeletal Conditions

*Diseases, disorders, and injuries relating to bones, joints, and muscles*

### Leading Cause of Disability/Health Care Cost

- **1 in 2** (126.6 million) adults are affected, greater than the rate of chronic heart and twice that of lung conditions<sup>(i)</sup>
- **\$980 billion (5.76% GDP)**: Annual U.S. cost for treatment and lost wages<sup>(ii)</sup>

### Most Prevalent Musculoskeletal Conditions

- Arthritis and Related Conditions
  - Back and Neck Pain
  - Injuries: Traumatic, Falls, Workplace, Sports, Military
  - Osteoporosis
- **55.4 million** adults report they have arthritis<sup>(iii)</sup>
  - **101.3 million** adults suffer neck and/or low back pain<sup>(iii)</sup>
  - **4.2 million** sports injuries require medical attention each year; 61% of all sports injuries are musculoskeletal<sup>(iv)</sup>
  - **1 in 2 women and 1 in 4 men** over age 50 will have an osteoporosis-related fracture; **20%** mortality rate from hip fracture complications within 12 months<sup>(iii)</sup>
  - **Millions** suffer from other musculoskeletal conditions - spinal deformities, congenital conditions, cancers of bone and connective tissue

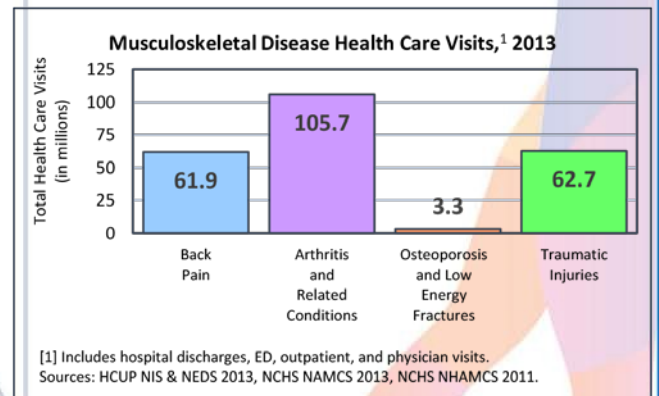
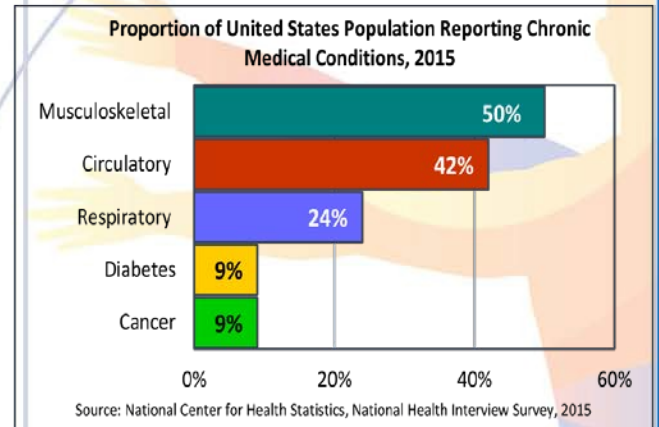
### Health Care Impact

- **19%** of all health care visits, 235.1 million visits<sup>(i)</sup>
- **61.8 million** health care visits for low back pain<sup>(i)</sup>
- **6.4 million** hospitalizations for arthritis and other rheumatic conditions<sup>(i)</sup>
- **62.7 million** health care visits for injuries;  
**10.6 million** health care visits for childhood injuries<sup>(i)</sup>
- **1.04 million** hospital discharges for fractures, 57% for persons age 65 and over<sup>(i)</sup>

### Economic Impact: Lost Work Time and Wages

- **\$53.1 billion**: direct cost to treat musculoskeletal injuries<sup>(ii)</sup>
- **264 million**: lost work days due to back and neck pain<sup>(iii)</sup>
- **12 days** away from work for MSK Disorders, **4 days longer** than for other types of workplace injuries<sup>(iv)</sup>
- **\$71.3 billion**: annual earnings loss for persons with osteoarthritis; **\$7.9 billion** loss with rheumatoid arthritis<sup>(v)</sup>

<sup>(i)</sup> 2013, <sup>(ii)</sup> 2012-2014, <sup>(iii)</sup> 2015, <sup>(iv)</sup> 2014-2016, <sup>(v)</sup> 2008-2014



**THE BY NUMBERS:** Musculoskeletal Conditions is sourced from *The Burden of Musculoskeletal Diseases in the United States (BMUS)*, [www.boneandjointburden.org](http://www.boneandjointburden.org).

The United States Bone and Joint Initiative (USBII) is part of the worldwide campaign to advance understanding, prevention, and treatment of musculoskeletal disorders through education and research. To learn more, visit [www.usbii.org](http://www.usbii.org).



[www.boneandjointburden.org](http://www.boneandjointburden.org)

**References:** For additional information, refer to the tables listed below at [www.boneandjointburden.org](http://www.boneandjointburden.org).

#### **Leading Cause of Disability and Health Care Cost**

- [1] T1.2.1: Self-Reported Select Medical Conditions and Prevalence for Persons Age 18 and Over, by Sex, United States 2015. Source: National Health Interview Survey (NHIS), Adult sample. [www.cdc.gov/nchs/nhis/nhis\\_2015\\_data\\_release.htm](http://www.cdc.gov/nchs/nhis/nhis_2015_data_release.htm) Accessed July 23, 2016.
- [2] T8.6.3: Annual All-cause and Incremental Direct Costs for Arthritis and Joint Pain<sup>2</sup> in Current and 2014 Dollars, United States 1996-2014. Source: Medical Expenditures Panel Survey (MEPS), Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, 2012-2014. <http://meps.ahrq.gov/mepsweb/>

#### **Prevalent**

- [1] T1.3.1: Most Frequently Reported Medical Conditions and Prevalence for Persons Age 18 and Over, with Subconditions, by Sex, United States 2015. Source: National Health Interview Survey (NHIS), Adult sample. [www.cdc.gov/nchs/nhis/nhis\\_2015\\_data\\_release.htm](http://www.cdc.gov/nchs/nhis/nhis_2015_data_release.htm) Accessed July 23, 2016.
- [2] T1.3.1: Most Frequently Reported Medical Conditions and Prevalence for Persons Age 18 and Over, with Subconditions, by Sex, United States 2015. Source: National Health Interview Survey (NHIS), Adult sample. [www.cdc.gov/nchs/nhis/nhis\\_2015\\_data\\_release.htm](http://www.cdc.gov/nchs/nhis/nhis_2015_data_release.htm) Accessed July 23, 2016.
- [3] T5E.1.1: Average Yearly Injuries Resulting from Participation in Sports Activities and Severe Enough to be Treated in Emergency Departments, by Sport Activity, Category of Injury, and Sex, United States 2014-2016. Source: United States Consumer Product Safety Commission. National Electronic Injury Surveillance System, 2014-2016. [https://www.cpsc.gov/Research-Statistics/Accessed November 15](https://www.cpsc.gov/Research-Statistics/Accessed%20November%2015), 2017.
- [4] National Osteoporosis Foundation (NOF). Available at: <https://www.nof.org/preventing-fractures/general-facts/> Accessed November 13, 2018.
- [5] Multiple tables

#### **Health Care Impact**

- [1] T1.9.1: Number of Musculoskeletal Diagnoses for Care Received, All Care Facilities, United States 2013. Source: Healthcare Cost and Utilization Project (HCUP). NIS 2013 & NEDS 2013. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/](http://www.hcup-us.ahrq.gov/), and National Center for Health Studies, NHAMCS\_OP 2011 & NAMCS, 2013. [www.cdc.gov/nchs/](http://www.cdc.gov/nchs/).
- [2] T2A.4.1: Summary of Resource Utilization for Back Pain and Related Conditions by Sex, United States 2013. Source: Healthcare Cost and Utilization Project (HCUP). NIS 2013 & NEDS 2013. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/](http://www.hcup-us.ahrq.gov/), and National Center for Health Studies, NHAMCS\_OP 2011 & NAMCS, 2013. [www.cdc.gov/nchs/](http://www.cdc.gov/nchs/).
- [3] T3A.3.0.1: Healthcare Utilization that Included Arthritis and Other Rheumatic Condition (AORC) Diagnoses for Adults Age 18 & Older, United States, 2013. Source: Healthcare Cost and Utilization Project (HCUP). NIS 2013 & NEDS 2013. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/](http://www.hcup-us.ahrq.gov/), and National Center for Health Studies, NHAMCS\_OP 2011 & NAMCS, 2013. [www.cdc.gov/nchs/](http://www.cdc.gov/nchs/).
- [4] Table 5B.2.1: Healthcare Visits for Musculoskeletal Injuries by Type of Injury, Healthcare Source, and Age, United States 2013. Source: Healthcare Cost and Utilization Project (HCUP). NIS 2013 & NEDS 2013. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/](http://www.hcup-us.ahrq.gov/), and National Center for Health Studies, NHAMCS\_OP 2011 & NAMCS, 2013. [www.cdc.gov/nchs/](http://www.cdc.gov/nchs/).
- [5] T5B.2.1: Healthcare Visits for Musculoskeletal Injuries by Type of Injury, Healthcare Source, and Sex, United States 2013. Source: Healthcare Cost and Utilization Project (HCUP). NIS 2013. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/](http://www.hcup-us.ahrq.gov/).

#### **Economic Burden**

- [1] Table 8.6.5: Annual All-cause and Incremental Direct Costs for Musculoskeletal Injuries in Current and 2014 Dollars, United States 1996-2014. Source: Medical Expenditures Panel Survey (MEPS), Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, 2012-2014. <http://meps.ahrq.gov/mepsweb/>
- [2] Table 2A.12: Trends in Self-Reported Bed Days and Work Days Lost Due to Neck or Back Pain, 2004-2015. Source: National Health Interview Survey (NHIS), Adult sample. [www.cdc.gov/nchs/nhis/nhis\\_2015\\_data\\_release.htm](http://www.cdc.gov/nchs/nhis/nhis_2015_data_release.htm) Accessed July 23, 2016.
- [3] Table 5D.1: Musculoskeletal Disorders (MSDs) for Private Industry Work-Related Injuries and Illnesses Involving Days Away from Work, United States 1992-2016 and Table 5D.2.1: Trends in Injuries Involving Days Away from Work in Private Industry by Sex, United States 2011 to 2016. Source: U.S. Department of Labor, Bureau of Labor Statistics. <https://www.bls.gov/iif/oshcdnew.htm> Accessed December 14, 2017.
- [4] Table 8.13: Average Annual Direct Costs (Persons 18 and over) and Total and Incremental Earnings Losses (Persons Age 18 to 64 Who Ever Worked) for Select Musculoskeletal Diseases, United States 2008-2014. Source: Medical Expenditures Panel Survey (MEPS), Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, 2008-2014. <http://meps.ahrq.gov/mepsweb/>