

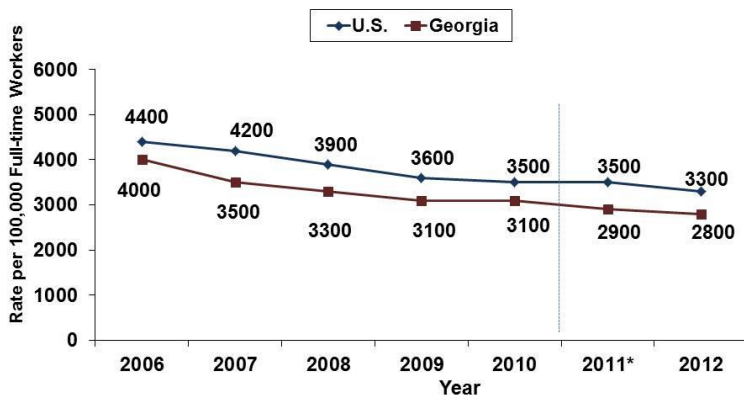
# 2012 Georgia Occupational Health Indicators: A Look at Key Trends

The Council of State and Territorial Epidemiologists (CSTE), in association with the National Institute of Occupational Safety and Health (NIOSH), has recommended that states conduct surveillance for a set of 22 occupational health indicators (OHIs) across five main categories: health effects, exposures, hazards, interventions and socioeconomic impact.

Detailed data and examination of key annual trends among some of the OHIs of special interest in Georgia are reported below. These detailed analyses examine not only data from 2012, but allow for assessment of ongoing health trends in the state. Demographic, as well as basic information for all 22 recommended indicators are available in Part 1 of this data summary series, while additional state-specific indicators are available in Part 3.

## Non-fatal Work-related Injuries and Illnesses Reported by Employers

Figure 1. Annual incidence rate of total non-fatal work-related injuries and illnesses, Georgia and U.S., 2006-2012

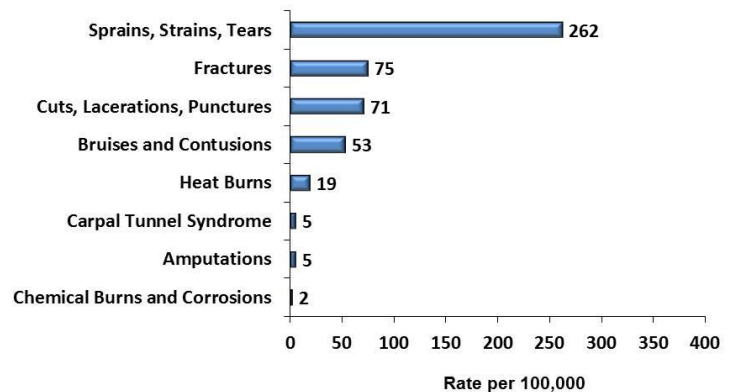


Source: BLS Survey of Occupational Injuries and Illnesses (SOII)  
\*Data for 2011 - 2012 may not be directly comparable to data from previous years due to changes in coding structures for injuries and illnesses

- During 2012, an estimated 74,800 work-related injuries and illnesses occurred among workers in Georgia. That is approximately 205 work-related injuries/illnesses per day.<sup>1</sup>
- The overall work-related injury/illness rate in 2012 was about 2,800 per 100,000 full-time workers in Georgia (Figure 1).<sup>1</sup>
- The 2012 incidence rate of work-related injuries involving days away from work was 800 per 100,000 full-time workers.<sup>1</sup>
- During 2012, about 729 per 100,000 full-time workers in Georgia suffered from a work-related traumatic injury or disorder.<sup>1</sup>

- Non-fatal work-related injuries were most commonly due to falls on the same level (128 per 100,000), transportation incidents (50 per 100,000) and violence and other injuries by persons or animals (43 per 100,000).<sup>1</sup>
- Non-fatal work-related injuries most commonly resulted in sprains, strains and tears (262 per 100,000 full-time workers) (Figure 2).<sup>1</sup>
- During 2012, non-fatal work-related injuries/illnesses resulted in a median of 7 days lost from work.<sup>1</sup>
- Georgia industries with the highest incidence rate of non-fatal injury/illness per 100,000 full-time workers during 2012 included: agriculture, forestry, fishing and hunting (7,000 per 100,000) and education and health services (3,800 per 100,000).<sup>1</sup>

Figure 2. Most common non-fatal work-related injuries, Georgia, 2012



Source: Survey Occupational Injuries and Illnesses (SOII)

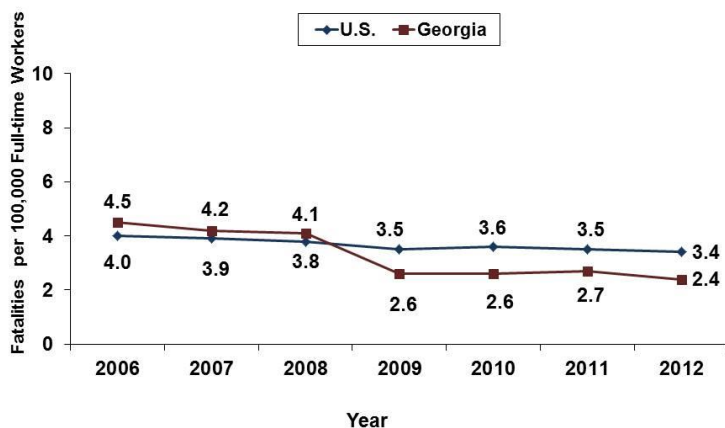


## Work-related Hospitalizations

- Work-related hospitalizations represent some of the most severe and costly work-related injuries and illnesses.<sup>2</sup>
- Georgia had 2,717 work-related hospitalizations in 2012, corresponding to a hospitalization rate of 62.0 per 100,000 employed persons.<sup>3</sup>
- The majority of work-related hospitalizations in Georgia during 2012 were due to injuries and poisonings (41 percent), musculoskeletal disorders (36 percent), and infections of skin and subcutaneous tissue (5 percent).<sup>3</sup>

## Fatal Work-related Injuries

Figure 3. Rate of fatal work-related injuries, Georgia and U.S., 2006-2012

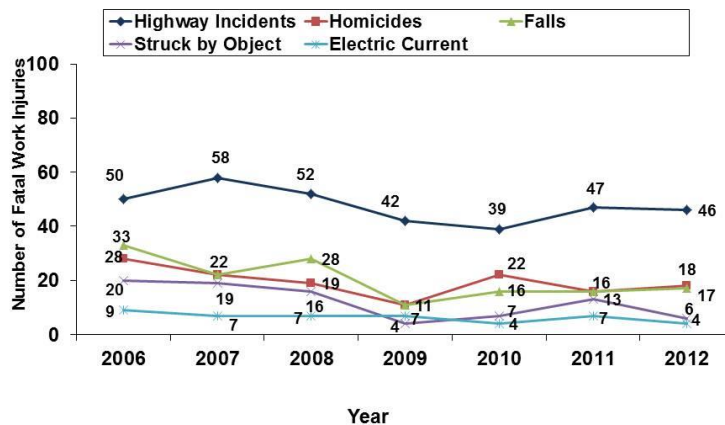


\*Georgia mortality data for 2009 may be unreliable  
Source: Census of Fatal Occupational Injuries (CFOI)

- A total of 101 fatal work-related injuries were reported by Georgia employers during 2012.<sup>4</sup>
- The rate of fatal work-related injuries in Georgia during 2012 was 2.4 per 100,000 full-time workers, a slight decrease from the rates observed in previous years (Figure 3).<sup>4</sup>
- The rate of fatal work-related injuries in Georgia was slightly greater than the national rate during 2006-2008 and remained lower than the national rate during 2009-2012.<sup>4</sup>

- The highest rates of fatal injuries in Georgia during 2012 occurred among workers in the agriculture, forestry, fishing and hunting industry (17.7 per 100,000), followed by the transportation and utilities (8.2 per 100,000), and construction industries (5.8 per 100,000).<sup>4</sup>
- The five most frequent causes of fatal work-related injuries were highway accidents, homicides, falls, being struck by an object, and having contact with electric current (Figure 4).<sup>4</sup>

Figure 4. Five most frequent work-related fatal injury events, Georgia, 2006-2012



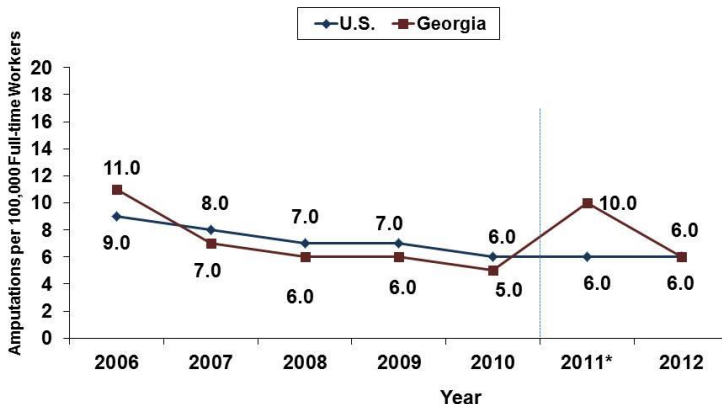
Source: Census of Fatal Occupational Injuries (CFOI)

There were 2,717 work-related hospitalizations in Georgia in 2012, along with 101 fatal work-related injuries, or 2.4 per 100,000 full-time workers.

## Work-related Amputations with Days Away from Work, Reported by Employers

- Work-related amputations are serious and preventable injuries usually resulting from occupational hazards or improper use of equipment.<sup>2</sup>
- In 2012, there were 170 work-related amputations in Georgia that involved days away from work.<sup>1</sup>

Figure 5. Rate of work-related amputations with days away from work, Georgia and U.S., 2006-2012



Source: Survey of Occupational Injuries and Illnesses (SOII)  
 \*Data from 2011–2012 may not be directly comparable to data from previous years due to changes in coding structures for injuries and illnesses

- The incidence rate of work-related amputations in Georgia in 2012 was 6.0 per 100,000 full-time workers, which was the same as the national rate (Figure 5).<sup>1</sup>
- During 2012 work-related amputation cases resulted in a median of 50 days away from work.<sup>1</sup>
- The majority of amputation cases were among workers in the manufacturing industry.<sup>1</sup>
- Most of the work-related amputation cases resulted from being caught in an object, equipment or material.<sup>1</sup>
- The hand was the most common body part affected.<sup>1</sup>

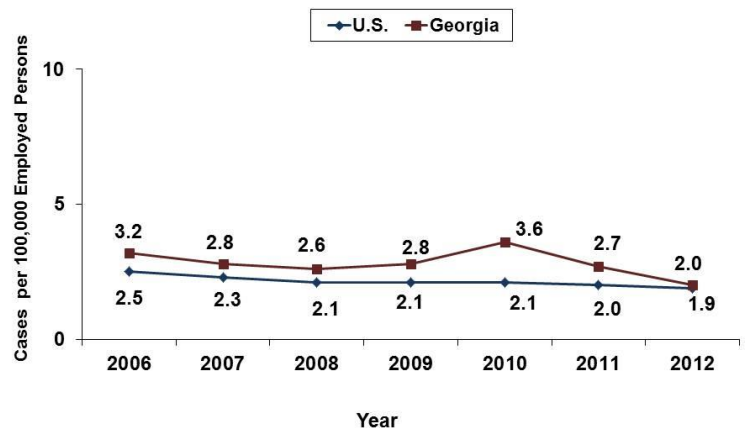
## Acute Work-related Pesticide Poisonings Reported to Poison Control Centers

- Workers who handle pesticides are at an increased risk for exposure which can result in both short-term and long-term adverse health effects, such as eye and skin irritation, headache, difficulty breathing, asthma, cancer and Parkinson's disease.<sup>5</sup>
- A total of 88 work-related pesticide poisonings/exposures were reported to the Georgia Poison Center during 2012 (Table 1).<sup>6</sup>

**Table 1. Annual Number of Reported Work-related Pesticide Poisoning Cases, Georgia, 2006-2012**

Year	Reported Cases
2006	111
2007	92
2008	82
2009	96
2010	151
2011	116
2012	88

Figure 6. Annual incidence rate of reported pesticide poisoning cases, Georgia and U.S., 2006-2012



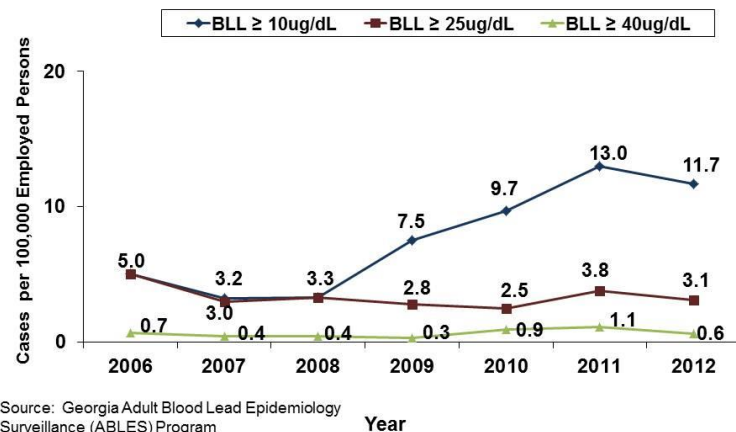
Source: American Association of Poison Control Centers

- Georgia's rate of reported work-related pesticide poisonings was higher than the U.S. rate during 2006-2012 (Figure 6).<sup>6</sup>
- Georgia had the 21<sup>st</sup> highest incidence rate of reported work-related pesticide poisonings in the nation during 2012.<sup>6</sup>
- The annual incidence rate of work-related pesticide poisonings in Georgia declined from 3.2 per 100,000 employed persons in 2006 to 2.0 per 100,000 in 2012 (Figure 6).<sup>6</sup>

## Elevated Blood Lead Levels among Adults

- Lead is a toxic metal found in both the environment and the workplace.<sup>7</sup>
- Industries at high risk for lead exposure include: battery manufacturing, secondary smelting, refining of nonferrous metals, and painting and paper hanging.<sup>7</sup>
- The average blood lead level for the general population is less than 1.5 µg/dL.<sup>2</sup>
- Adult blood is considered elevated at 10 µg/dL; however, toxicity may occur at levels as low as 5 µg/dL.<sup>7</sup>
- Exposure to low doses of lead have been associated with hypertension, cognitive dysfunction, adverse effects on renal function, and adverse effects on female reproductive outcomes.<sup>2</sup>
- In 2012, 743 cases (aged 16 years and older) of elevated blood lead (levels of 10 µg/dL or greater) were reported to the Georgia Adult Blood Lead Epidemiology Surveillance (ABLES) Program; 514 of these cases were newly-identified or incident cases.<sup>8</sup>
- In 2012, the incidence rate of reported elevated blood lead (levels of 10 µg/dL or greater) in Georgia decreased from 13.0 per 100,000 employed persons in 2011 to 11.7 per 100,000 (Figure 7).<sup>8</sup>

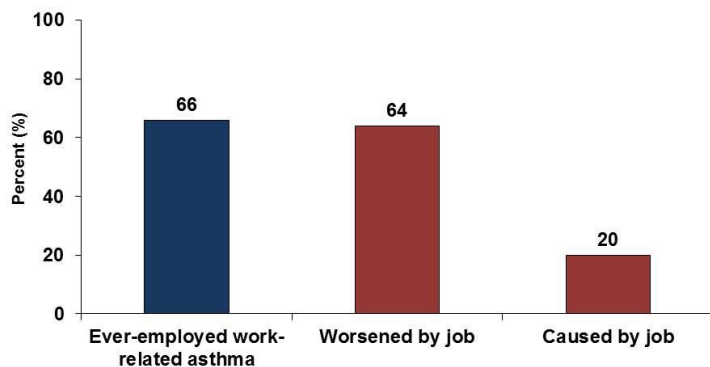
Figure 7. Annual incidence rate of elevated blood lead levels among persons aged 16 years and older, Georgia, 2006-2012



## Asthma among Adults Caused or Made Worse by Work

- Work-related asthma can be either existing asthma that is worsened by factors related to the environment or the workplace (work-exacerbated asthma) or a new onset of asthma attributed to the workplace environment.<sup>2</sup>
- An estimated 36 to 58 percent of adult asthma in the United States is caused or made worse by work-related exposures.<sup>2</sup>
- Work-related asthma commonly occurs among workers in industries, such as healthcare, manufacturing and farming, where there are frequent exposures to chemical fumes, dust or other irritants.<sup>9</sup>

Figure 8. Proportion of ever-employed adults with current asthma who report their asthma is work-related, Georgia, 2012-2013



Source: Georgia BRFS Asthma Call-Back Survey

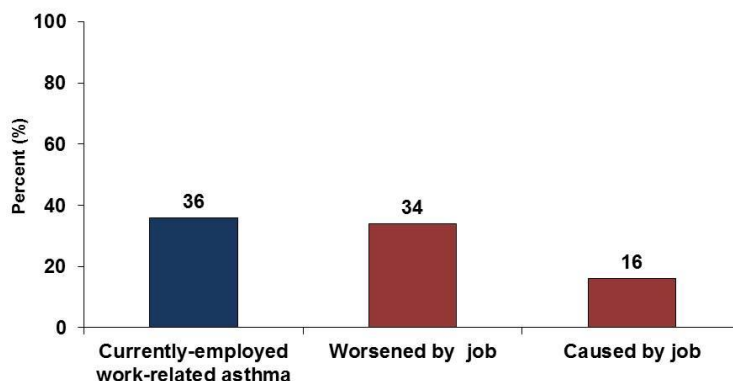
Table 2. Prevalence (%) of work-related asthma among adults with asthma who were ever-employed, Georgia, 2012-2013	
<b>Overall</b>	66% (57% - 76%)
<b>Sex</b>	
Male	79% (65%-93%)
Female	60% (49%-71%)
<b>Race/Ethnicity</b>	
White, non-Hispanic	73% (63% - 83%)
Black, non-Hispanic	52% (35% - 70%)
Hispanic	~
<b>Age Group (years)</b>	
18-34	~
35-54	70% (58%-82%)
55+	64% (54%-73%)
<b>Income (annual)</b>	
≤\$24,999	64% (48% - 79%)
\$25,000-\$49,999	68% (49% - 88%)
\$50,000+	62% (44%-79%)

~ Not shown due to sample size less than 50

# 2012 Georgia Occupational Health Indicators

- About 8 percent of adults in Georgia had current doctor-diagnosed asthma during 2012-2013.<sup>10</sup>
- During 2012-2013, about 66 percent (399,000) of adults in Georgia with current asthma who were ever employed reported that their asthma was caused or made worse by exposures at work (Figure 8).<sup>11</sup>
- Work-related asthma was higher among ever-employed adults who are male, non-Hispanic white, aged 35-54 years or who earn less than \$50,000 annually (Table 2).<sup>11</sup>
- About 34 percent of currently-employed adults say their asthma is made worse by their current job and 16 percent say that their asthma was caused by their current job (Figure 9).<sup>11</sup>

Figure 9. Proportion of currently-employed adults with current asthma who report their asthma is work-related, Georgia, 2012-2013



Source: Georgia BRFSS Asthma Call-Back Survey

## About Public Health's Role in Occupational Health Surveillance:

State health agencies, such as the Georgia Department of Public Health, are vested with the legal authority to require disease reporting and collect health data that play a central role in public health surveillance. National statistics on occupational injuries and illnesses have been collected largely outside of the public health infrastructure and rely almost entirely on data reported by employers. However, state health agencies that have access to a wide variety of public health data systems have an important role in the surveillance of occupational diseases, injuries and hazards.<sup>2</sup> With additional data sources, such as the Georgia Hospital Association's hospital discharge records and the Georgia Adult Blood Lead Epidemiology and Surveillance Program (ABLES), the Department of Public Health is able to link surveillance findings with intervention efforts both at statewide and local levels.

To access the full Georgia Occupational Health Indicators Surveillance Report visit:

<http://dph.georgia.gov/georgia-occupational-health-and-safety-surveillance-program>

## References:

1. BLS Survey of Occupational Injuries and Illnesses (SOII).
2. Council of State and Territorial Epidemiologists. Occupational Health Indicators: A Guide for Tracking Occupational Health Conditions and Their Determinants. June 2015.
3. Georgia Hospital Association.
4. BLS Census of Fatal Occupational Injuries (CFOI).
5. National Institutes of Health Agricultural Health Study (AHS).
6. American Association of Poison Control Centers (AAPCC).
7. Centers for Disease Control and Prevention. Adult Blood Lead Epidemiology and Surveillance-United States, 2008-2009. MMWR 2011; 26 (25), 841-845.
8. Georgia Adult Blood Lead Epidemiology and Surveillance (ABLES) Program.
9. Mayo Clinic. Occupational Asthma, June 2014.
10. Georgia Behavioral Risk Factor Surveillance System (BRFSS), 2011-2013.
11. Georgia BRFSS Asthma Call-Back Survey (ACBS), 2012-2013.

