

# 2012 Fact Sheet

## Childhood Agricultural Injuries in the U. S.

Population at Risk				
Farms	■ In 2011, there were approximately 2.2 million farms in the United States.¹			
Children	■ More than 1.03 million youth lived on farms in 2009. <sup>2</sup>			
	■ More than half of all household youth performed work on the farm in 2009. <sup>2</sup>			
	■ An additional 230,387 youth were hired to do agricultural work in 2009. <sup>2</sup>			
Industry	■ The National Safety Council's 2011 edition of <i>Injury Facts</i> ranks agriculture as our nation's most			
·	dangerous industry with 25.4 deaths per 100,000 adult workers. <sup>3</sup>			

## **Toll of Childhood Agricultural Injuries**

D	e	a	tl	h	S

- Agriculture has the second highest fatality rate among youth workers at 21.3 per 100,000 full-time equivalents compared to 3.6 per 100,000 across all industries.<sup>4</sup>
  - Between 1995 and 2000, there where 695 total farm-related youth fatalities fatalities per 100,000 youth).
  - Of the leading sources of fatal injuries to youth, 25% percent involved machinery, 17% involved motor vehicles (includes ATVs), and 16% were due to drowning.<sup>5</sup>

There is no central database on childhood agricultural injuries. This fact sheet draws from the best available data.

#### Nonfatal Injuries

- In 2009, an estimated 2,585 household youth were injured while performing farm work. <sup>2</sup>
- In 2009, approximately 4,111 injuries (26%) occurred to children under 10 years of age living on farms.<sup>2</sup>
- Nearly 80% of injured children were not actively working when the injury occurred.<sup>6</sup>
- Transportation events (32%) were the most common injury event among household youth in 2009.

#### Injury Rate

■ In 2009, youth living on livestock operations had a higher rate of injury (8.1 injuries/1,000 youth) compared to their counterparts on crop operations (6.6 injuries/1,000 youth). <sup>6</sup>

#### Injury Trend

• Over the eleven years from 1998 to 2009, the rate of childhood agricultural injuries per 1,000 farms (includes youth who live on, visit, and are hired to work on farms) declined by 57% (from 16.6 to 7.2). The rate of injuries per 1,000 household youth (those living on farms) declined by 60% (from 18.8 to 7.5) during that same period. <sup>2</sup>

## Childhood Agricultural Injury Estimates of Youth Farm Injuries <sup>2</sup>

			Farm	Farm	Injuries/1000
	Farm Injuries	Injuries/1000	Household	Household	Household
Year	Youth < 20	Farms	Youth < 20	Youth Injuries	Youth
1998	37,774	16.6	1,460,000	27,321	18.8
2001	29,277	13.5	1,350,000	22,144	16.4
2004	27,591	13.1	1,256,989	18,801	15.0
2006	22,894	11.0	1,120,000	11,654	10.4
2009	15,876	7.2	1,040,221	7,715	7.5

## **Minority Operated Farms**

Popul	lation
at	Risk

- In 2008, an estimated 37,433 youth were living on 86,834 racial minority (excluding Hispanic) operated farms. <sup>7</sup>
- An estimated 26,184 youth were living on 53,897 Hispanic operated farms.<sup>8</sup>

#### Injuries/ Fatalities

- During 2008, there were 516 agricultural injuries to youth under 20 years of age on a racial minority (excluding Hispanic) operated farm.<sup>7</sup>
- An additional 257 agricultural injuries occurred to youth on a Hispanic operated farm in 2008.
- Between 1995 and 2002, there were 81 deaths that occurred on a racial minority operated farm. 9
- An additional 77 fatalities occurred on a Hispanic operated farm between 1995 and 2002. 10





#### **Economic Data**

Nonfatal Injuries | • Youth agricultural injuries cost society an estimated \$1 billion per year (in 2005 dollars)<sup>11</sup>

Fatalities Youth agricultural deaths cost society an estimated \$420 million per year (2005 dollars)<sup>11</sup>

### 2012 Blueprint for Protecting Children in Agriculture

Lee BC, Gallager SS, Liebman AK, Miller ME and Marlenga B (Eds.) (2012). Blueprint for Protecting Children in Agriculture: The 2012 National Action Plan. Marshfield, WI: Marshfield Clinic. http://www.marshfieldclinic.org/blueprint

Gallagher SS, Keifer MC, Lee BC, Liebman AK, Marlenga B, Miller ME, guest editors. Journal of Agromedicine special issue: Protecting Children in Agriculture. 2012;17(2):83-260. <a href="http://www.marshfieldclinic.org/JAM">http://www.marshfieldclinic.org/JAM</a>

## **Prevention Strategies and Resources**



Tractor Safety



ATV Safety



Creating Safe Play
Areas on Farms



Integrating Safety into Agritourism



North American
Guidelines for Children's
Agricultural Tasks



afety Guidelines for Hired Adolescent Workers

#### References

- 1. USDA, NASS publications: Farms, Land in Farms, and Livestock Operations 2011 Summary, February 2012. Available at: http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1259.
- 2. USDA. 2012. Agricultural Safety: 2009 Injuries to Youth on Farms (Revised report pending). http://www.nass.usda.gov
- 3. National Safety Council (2011). Injury Facts 2011 Edition. Available by contacting National Safety Council at 1-800-621-7619 or <a href="https://www.nsc.org">www.nsc.org</a>.
- 4. Occupational Injuries and Deaths Among Younger Workers-United States, 1998-2007. *Journal of the American Medical Association*, 304 (1). 33-35 (2010).
- 5. Goldcamp M, Hendricks KJ, Meyers JR. Farm Fatalities to youth 1995-2000: A comparison by age groups. *Journal of Safety Research*. 2004; 35(2): 151-157.
- 6. NIOSH (2012). Analyses of the 2009 Childhood Agricultural Injury Survey (CAIS). Morgantown WV: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, Division of Safety Research. Unpublished.
- 7. USDA, NASS publication: Agricultural Safety: 2008 Injuries to Youth on Racial Minority-Operated Farms. Available at: <a href="http://usda01.library.cornell.edu/usda/current/RMYInjury/RMYInjury-08-05-2010.pdf">http://usda01.library.cornell.edu/usda/current/RMYInjury/RMYInjury-08-05-2010.pdf</a>.
- 8. USDA, NASS publication: Agricultural Safety: 2008 Injuries to Youth on Hispanic-Operated Farms. Available at: http://usda01.library.cornell.edu/usda/current/HYInjury/HYInjury-08-05-2010.pdf.
- 9. National Institute for Occupational Health and Safety (2007) *Injuries to Youth on Racial Minority Operated Farms-2003*. Available at: <a href="http://www.cdc.gov/niosh/docs/2007-163/">http://www.cdc.gov/niosh/docs/2007-163/</a>.
- 10. National Institute for Occupational Health and Safety (2007) *Injuries to Youth on Hispanic Operated Farms-2003*. Available at: http://www.cdc.gov/niosh/docs/2007-162/.
- 11. Zaloshnja E, Miller TR, Lawerence B. Incidence and Cost of Injury Among Youths in Agricultural Settings, United States, 2001-2006 *Pediatrics*. 2012;129(4): 728-734.



For more information contact:

National Children's Center for Rural and Agricultural Health and Safety

Phone: 800-662-6900

Email: nccrahs@mcrf.mfldclin.edu

Website: <a href="http://marshfieldclinic.org/nccrahs/">http://marshfieldclinic.org/nccrahs/</a> Updated April 2012