

# Childhood Agricultural Injuries (U.S.)

## 2020 Fact Sheet



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

**60%** Of household youth were *not* working when they were injured in agriculture.

### Population at Risk

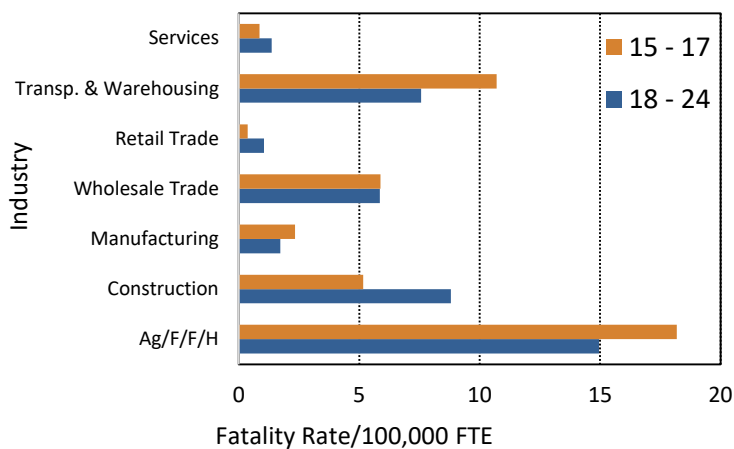
Farms	<ul style="list-style-type: none"> <li>In 2018, there were approximately 2.03 million farms in the United States.<sup>1</sup></li> </ul>
Children	<ul style="list-style-type: none"> <li>About 893,000 youth lived on farms in 2014 and more than half (51%) worked on their farm.<sup>2</sup></li> <li>More than 265,600 non-resident youth were hired in agriculture in 2014.<sup>2</sup></li> <li>Approximately 23,883,000 youth visited farms in 2014.<sup>2</sup></li> </ul>

### Fatal Childhood Agricultural Injuries

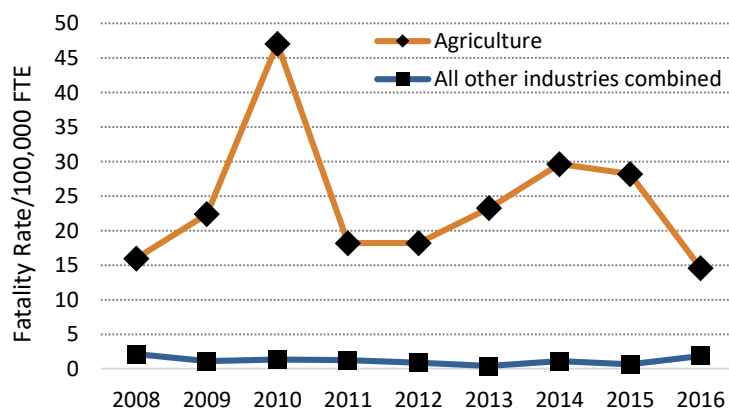
All Youth	<ul style="list-style-type: none"> <li>A child dies in an agriculture-related incident about every 3 days.*</li> <li>Of the leading sources of fatalities among all youth, 47% involved transportation (including tractors), 20% involved contact with machinery, and 13% involved violent contact with animals and other humans.<sup>3</sup></li> <li>Youth under age 16 have 12 times the risk of ATV injuries compared to adults.<sup>4</sup></li> </ul>
Working Youth	<ul style="list-style-type: none"> <li>From 2001 to 2015, 48% of all fatal injuries to young workers occurred in agriculture.<sup>5</sup></li> <li>Since 2009, youth worker fatalities in agriculture has exceeded all other industries combined.<sup>5</sup></li> <li>In 2016, young workers were 7.8 times more likely to be fatally injured in agriculture when compared to all other industries combined (14.57 per 100,000 FTE vs 1.87 per 100,000 FTE).<sup>5</sup></li> <li>Transportation incidents were the most common fatal event, with <b>tractors</b> and <b>ATV/UTVs</b> as the primary vehicle sources.<sup>5</sup></li> </ul>

### Fatality Rates for Young Workers Across Industries

Ages 15-24, 2011-2017



Ages 15-17, 2008-2016



Ag/F/F/H = agriculture, forestry, fishing, and hunting; FTE = full-time equivalent; Transp. = transportation; Ages 15-17 unless otherwise stated

**Source:** Fatal injury totals were generated by NIOSH researchers with restricted access to the Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI) microdata; additional information at [bls.gov/iif/oshcfoi1.htm](https://bls.gov/iif/oshcfoi1.htm)<sup>6</sup>

\* From reported 115 agriculture-related deaths annually from 1995 to 2000.<sup>3</sup>

\* From estimated 11,942 injuries in 2014.<sup>7</sup>

† Household youth are youth who live on a farm.

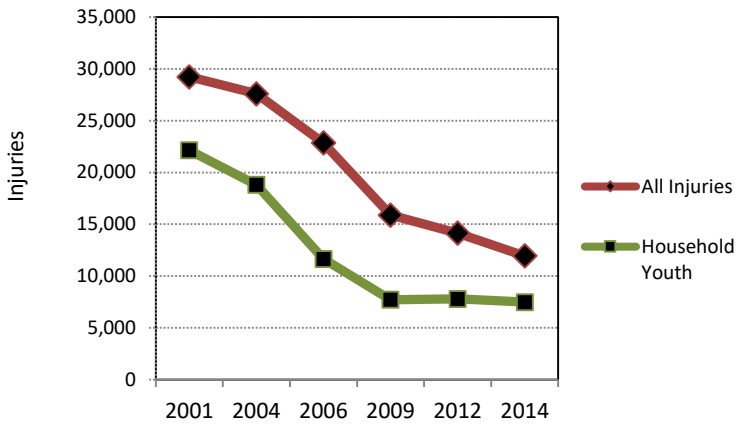
NOTE: There is no central repository of childhood agricultural injuries. This fact sheet draws from the best available data.

# Nonfatal Childhood Agricultural Injuries

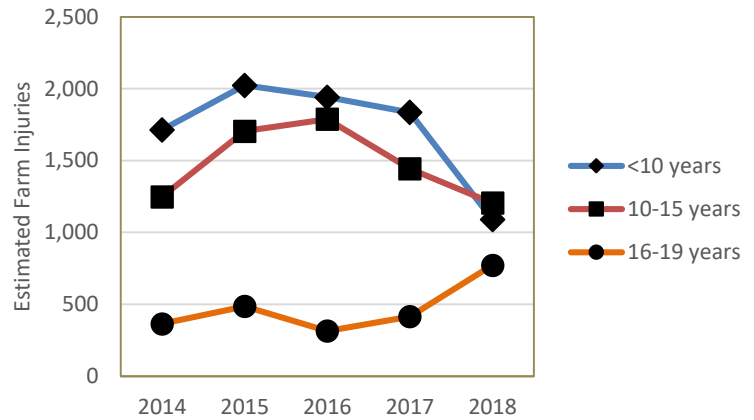
All Youth

- Every day about 33 children are injured in agriculture-related incidents.\*\*
- In 2014, an estimated 7,469 household<sup>†</sup> youth were injured on a farm and 60% of them were not working when the injury occurred.<sup>7</sup>
- An estimated 738 hired youth were injured on farms in 2014.<sup>7</sup>
- Approximately 3,735 visiting youth were injured on farms in 2014.<sup>7</sup>
- Vehicles were the leading source of injury for household working youth, including ATVs.<sup>7</sup>
- Animals were the leading source of injury for both household non-working youth and visitors.<sup>7</sup>

## Nonfatal Injuries – All Youth



## Household Youth<sup>†</sup> Injuries by Age



**Note:** Data from the Childhood Agricultural Injury Survey (CAIS) do not include injuries to contract laborers. Data are also from United States Consumer Product Safety Commission National Electronic Injury Surveillance (NEISS), 2018.

## References

1. USDA, NASS publications: Farms and Land in Farms, 2018 Summary, April 2019. Available at: <https://downloads.usda.library.cornell.edu/usda-esmis/files/5712m6524/j098zk725/9z903749k/fnlo0419.pdf>
2. Childhood Agricultural Injury Survey (CAIS) Results. Available at: <https://www.cdc.gov/niosh/topics/childag/cais/demotables.html>
3. Perritt KR, Hendricks K, Goldcamp E. (2017). Young worker injury deaths: a historical summary of surveillance and investigative findings. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. <https://www.cdc.gov/niosh/docs/2017-168/pdfs/2017-168.pdf>
4. Rodgers GB, Adler P. Risk factors for all terrain vehicle injuries: a national case control study. Am. J. Epidemiol. 2001;153, 1112–1118. PMID: 11390331
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6. Guerin, Rebecca J, PhD; Castillo, Dawn, MPH; Hendricks, Kitty J, MA; Howard, John, MD JD; Piacentino, John, MD MPH; et al. American Journal of Public Health; Washington Vol. 110, Iss. 1, (Jan 2020): 69-71. DOI:10.2105/AJPH.2019.305393
7. NIOSH (2016). Analyses of the 2014 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.
8. Leigh JP, Du J, McCurdy SA. An estimate of the U.S. government's undercount of nonfatal occupational injuries and illnesses in agriculture. Ann Epidemiol. 2014;24(4):254–259. doi:10.1016/j.annepidem.2014.01.006

There may be over 4 times more injuries than are reported. As many as 88% of agricultural injuries and illnesses are not captured by traditional surveillance methods.<sup>8</sup>



Visit [CultivateSafety.org](https://CultivateSafety.org) for information and resources to prevent child agricultural injuries.



Visit [AgInjuryNews.org](https://AgInjuryNews.org) to monitor and explore the latest injury reports, news stories, and trends.

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