

Autism Birth Prevalence in California, Birth Years 1987-2013

This report summarizes Autism prevalence in children born in California from 1987 to 2013 and who were diagnosed and/or received services for autism in California. We identified autism from California Department of Developmental Services (DDS) databases for children in the system as of February 2018. The denominator includes live births to California resident mothers from 1987 to 2013. Liveborn children who died within the first year of life were excluded as not at risk of being diagnosed with autism. DDS coordinates services for children with disabilities leading to substantial handicap, including autism (<https://www.dds.ca.gov>). We link DDS data to birth certificate data to estimate the frequency of autism in the state. Prior publications indicate about 75% of children with autism are represented in the DDS system (Windham et al. 2011).

The estimated prevalence of autism statewide has increased from 1.1 to 11.0 cases per 1,000 births during birth years 1987 to 2013, or from under 600 cases per year to almost 5,400 (see Figure 1 and Appendix). This represents an average increase in autism prevalence of 0.4 per 1,000 births, or 9.3%, per year. Autism prevalence rates vary by sex, as is commonly seen in other places (Baio et al. 2018). Among California males born in 2013, 17.0 per 1,000 have autism, compared to 4.6 per 1,000 of their female counterparts (Figure 2 and Appendix). Autism prevalence in males has been about 4.5 times higher than that of females throughout the time period. This shows that the increase in autism has remained similar by sex.

We focus on the prevalence through birth year 2013, because this represents children who are at least 4-5 years old at the time of the linkage to DDS data in February 2018. New clients or diagnoses will still arise throughout childhood and adolescence. Therefore, we expect these annual autism prevalence rates will increase slightly, especially for more recent birth years, as children age. California autism prevalence may be under-estimated for a number of other reasons, including individuals moving out of the state before getting an autism diagnosis or enrolling in DDS services or parents not seeking DDS services.

References and Resources

Please see other resources about Autism on this website

Baio J, Wiggins L, Christensen DL, et al. [Prevalence of Autism Spectrum Disorder among children aged 8 years—Autism and Developmental Disabilities Monitoring network, 11 sites, United States, 2014](#). MMWR 2018;67(6).

**Notes:* Prevalence in 8 year olds born in 2006 was 16.8/1000 across the sites. This monitoring program uses different methods of obtaining and counting cases of autism than we did in our report. CDC funds this program, which involves reviewing medical and educational records to identify children that meet the criteria for having autism, whether or not they are diagnosed medically.

Windham, G.C., Anderson, M.C., Croen, L.A. et al. [Birth prevalence of autism spectrum disorders in the San Francisco Bay Area by demographic and ascertainment source characteristic](#). J Autism and Dev Disorders (2011) 41: 1362.

* *Notes:* Reports information on prevalence of autism in the San Francisco Bay Area for births in 1994 and 1996, by obtaining cases from multiple sources in addition to DDS.

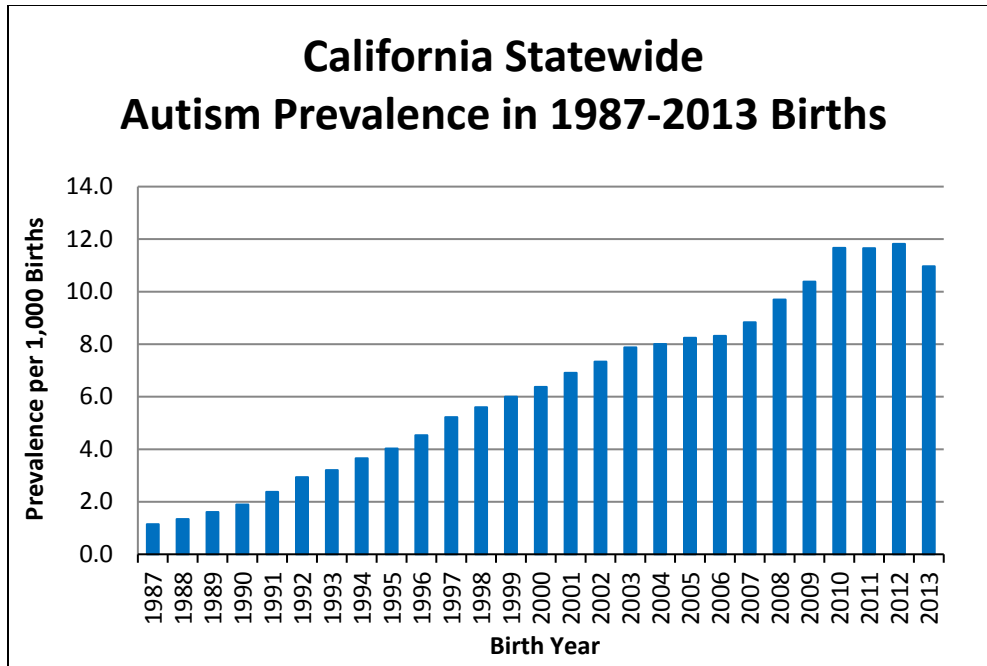


Figure 1. California Autism Prevalence per 1,000 births, years of birth 1987 to 2013.
Autism cases were identified from Department of Developmental Services (DDS) data as of February, 2018. Denominators include live births to California resident mothers by birth year, using Vital Statistics data, excluding infant deaths.

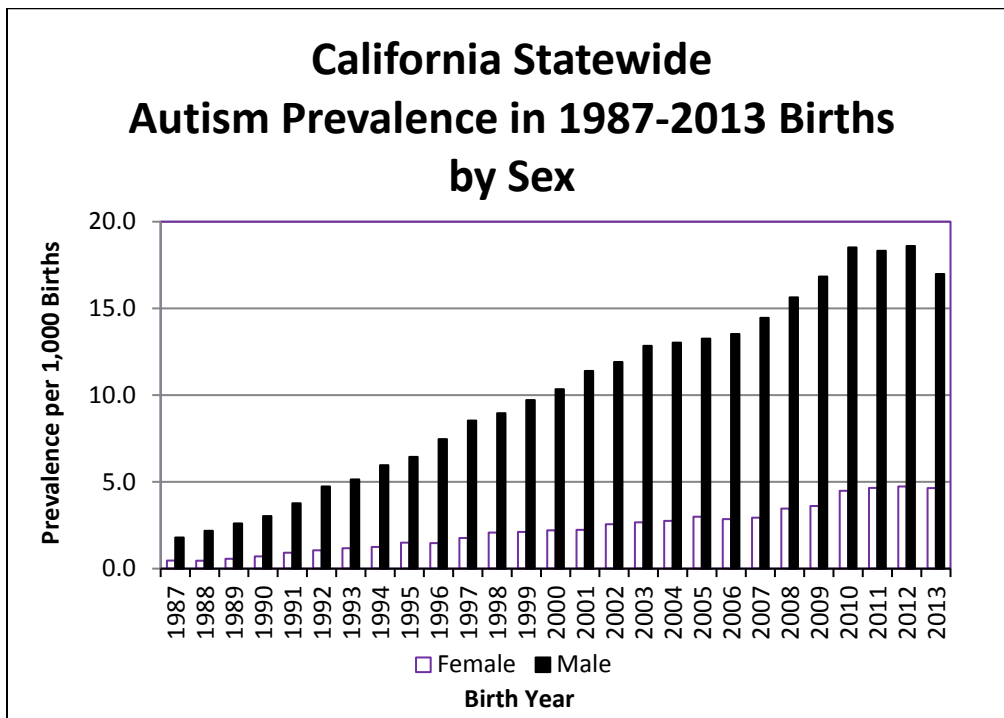


Figure 2. California Autism Prevalence per 1,000 births by sex, years of birth 1987 to 2013
Autism cases were identified from Department of Developmental Services (DDS) data as of February, 2018. Denominators included live births to California resident mothers by birth year, using Vital Statistics data, excluding infant deaths.

Prepared by the CA (former) Center for Autism and Development Disabilities Research and Epidemiology (CADDRE), within EHIB, CDPH. Please contact Dr. Gayle Windham for more information.

California Autism Prevalence (per 1,000 Live Births)¹
1987-2013
DDS Data as of 02/2018

| Birth Year | Total Cases | Number of Live Births | Total Prevalence | Female | Male |
|------------|-------------|-----------------------|------------------|--------|------|
| 1987 | 574 | 500,429 | 1.1 | 0.5 | 1.8 |
| 1988 | 709 | 529,711 | 1.3 | 0.5 | 2.2 |
| 1989 | 912 | 566,260 | 1.6 | 0.6 | 2.6 |
| 1990 | 1,152 | 608,716 | 1.9 | 0.7 | 3.0 |
| 1991 | 1,440 | 606,352 | 2.4 | 0.9 | 3.8 |
| 1992 | 1,758 | 598,188 | 2.9 | 1.1 | 4.7 |
| 1993 | 1,865 | 581,882 | 3.2 | 1.2 | 5.1 |
| 1994 | 2,064 | 564,475 | 3.7 | 1.3 | 6.0 |
| 1995 | 2,212 | 549,052 | 4.0 | 1.5 | 6.4 |
| 1996 | 2,434 | 536,757 | 4.5 | 1.5 | 7.5 |
| 1997 | 2,728 | 522,436 | 5.2 | 1.8 | 8.5 |
| 1998 | 2,925 | 522,638 | 5.6 | 2.1 | 9.0 |
| 1999 | 3,098 | 516,469 | 6.0 | 2.1 | 9.7 |
| 2000 | 3,376 | 529,703 | 6.4 | 2.2 | 10.3 |
| 2001 | 3,634 | 525,850 | 6.9 | 2.2 | 11.4 |
| 2002 | 3,870 | 527,376 | 7.3 | 2.6 | 11.9 |
| 2003 | 4,245 | 539,049 | 7.9 | 2.7 | 12.8 |
| 2004 | 4,345 | 542,919 | 8.0 | 2.8 | 13.0 |
| 2005 | 4,510 | 547,215 | 8.2 | 3.0 | 13.3 |
| 2006 | 4,664 | 560,658 | 8.3 | 2.9 | 13.5 |
| 2007 | 4,976 | 563,249 | 8.8 | 2.9 | 14.5 |
| 2008 | 5,324 | 548,825 | 9.7 | 3.5 | 15.6 |
| 2009 | 5,454 | 525,341 | 10.4 | 3.6 | 16.8 |
| 2010 | 5,916 | 507,073 | 11.7 | 4.5 | 18.5 |
| 2011 | 5,820 | 499,326 | 11.7 | 4.7 | 18.3 |
| 2012 | 5,911 | 500,020 | 11.8 | 4.7 | 18.6 |
| 2013 | 5,386 | 491,134 | 11.0 | 4.6 | 17.0 |

Appendix. California Autism Prevalence per 1,000 births, total and by sex, years of birth 1987 to 2013

¹Autism cases were identified from Department of Developmental Services (DDS) data as of February, 2018. The denominator of live births to California resident mothers, further excludes infant deaths. Note: Later years show lower prevalence likely due to less case identification among these younger (more recently born) groups.

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