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## Fact Sheet on Autism Employment

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The bullet points below are repeated further down with more elaboration and citations. Click on the links to jump to the elaboration for each.

- We don't know how many adults in the U.S. have autism. ([click here for more](#))
  - There is a rising Great Wave of young adults with autism graduating from high school. ([click here for more](#))
- We don't know the unemployment rate of adults with autism in the U.S. ([click here for more](#))
  - The employment rate for people with disabilities is very low and is even lower for young adults with autism. ([click here for more](#))
- There are 10,500 vocational rehabilitation (VR) counselors nationwide helping people with disabilities get jobs. ([click here for more](#))
  - In the past, vocational rehabilitation services for people with autism have had mixed success. ([click here for more](#))
- The number of people with autism asking for vocational rehabilitation services is rising rapidly. ([click here for more](#))
- There is growing interest in improving vocational rehabilitation services to people with autism: 2 federally-funded research projects, a national conference, and a recent reference manual. ([click here for more](#))
- There are some remarkable new models emerging of employment for people with autism. ([click here for more](#))
- A few non-for-profit organizations have been working on the need to help adults with autism find employment for several decades. ([click here for more](#))
- A few members of the autism community have written books on autism employment. ([click here for more](#))

## Elaboration & Citations

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- We don't know how many adults in the U.S. have autism.
  - The CDC number most frequently quoted for Autism in the U.S. (1 in 110) is the prevalence rate for the autism diagnosis in 8-year-old children in 2006 (released in 2009).
    - This rate is an average of data from 11 sites across the U.S., with rates ranging from 1 in 84 in Missouri to 1 in 240 in Florida. There is no established explanation for this variation, although some of it may be caused by different ways the data was collected in different states.
    - Researchers do not know how the CDC 2006 rate compares to previous generations who now compose the adult population. CDC data only goes back to 2002.
      - <http://www.cdc.gov/ncbddd/autism/index.html>
    - **Language Usage: "Prevalence" vs. "Incidence".** "Prevalence" is the number of cases of a disorder in the population in a given time. "Incidence" is the number of new cases occurring in a given time.
  - There is no information on how many people have Asperger's Syndrome compared to Classic Autism.
    - Many people identify two groups among people with autism – those with Asperger's Syndrome (and/or "high functioning autism") and those with "classic autism" (or "low functioning autism"). We don't know the relative proportions of these groups to each other in the U.S. The best estimate is that people with Asperger's / high functioning autism represent fewer than half of people with autism spectrum disorders and perhaps 25% or less. Most statistics do not separate the two groups.
      - Fombonne, E. (2003) Epidemiological Surveys of Autism and Other Pervasive Developmental Disorders: An Update, Journal of Autism and Developmental Disorders, Vol. 33, No. 4, August 2003.
  - The most frequently quoted figure for the number of people with autism in the U.S. is an estimate from the Autism Society of America - between 1 and 1.5 million people with autism in the U.S. This figure is based on multiplying the total U.S. population by the CDC prevalence rate for 8-year-olds. That assumes there has been no increase in autism over the last 40+ years.
    - <http://www.autism-society.org/about-autism/facts-and-statistics.html>

- The dramatic, widely-reported increase in autism over the last two decades is based on the increased prevalence of the diagnosis among school children since the early 1990s as documented through U.S. Department of Education data.
  - Fombonne, E. (2005) Epidemiology of autistic disorder and other pervasive developmental disorders, *Journal of Clinical Psychiatry*, 205:66.
  - **Language Usage: "Prevalence of the Autism Diagnosis" vs. "Prevalence of Autism"**. For autism, there is an important distinction to make between the prevalence of the diagnosis (how many children doctors have identified with autism) and the prevalence of the disorder (how many actually have it).
- Researchers disagree about whether this is an increase in the prevalence of the DIAGNOSIS (how many children have been identified with autism), the prevalence of the DISORDER (how many actually have it), or some combination of both.
  - Although the disorder itself has not changed over time, the official diagnosis has changed every 10 -20 years, becoming progressively "wider" (encompassing new individuals who would have not been included before). With more people aware of autism, more children and adults are coming to doctors for evaluation. With a broader diagnosis, more of those children and adults will now meet the definition. So the prevalence of the diagnosis might go up and down independently of the prevalence of the disorder. This does not mean the prevalence of the disorder is holding steady – it could be going up dramatically as well. Researchers disagree on how these two interact. Some researchers believe there has been no increase in the disorder, only in the diagnosis. Others believe that when you statistically extract the effect of the increase in diagnosis, there is still an underlying increase in the disorder.
    - The last change in the autism diagnosis happened in 1994. A new change is about to happen, probably in 2013.
    - Hertz-Picciotto, I., & Delwiche, L. (2009) The Rise in Autism and the Role of Age at Diagnosis, *Epidemiolog*, Volume 20(1), January 2009, pp. 84-90. (Note – a study of California incidence rates, not national).
    - Treffert, D. (2010) Autistic Disorder: 52 Years Later: Some Common Sense Conclusions, Wisconsin Medical Society website, [http://www.wisconsinmedicalsociety.org/savant\\_syndrome/savant\\_articles/autistic\\_disorder](http://www.wisconsinmedicalsociety.org/savant_syndrome/savant_articles/autistic_disorder), retrieved 8/31/2011.

- A 2011 study of adult autism in Britain concluded there has not been a significant increase or decrease in the prevalence of autism in that country during the last few decades (the prevalence was consistent across all generations). A 2009 study of children in California suggests there may have been an increase among children independent of the diagnostic changes.
  - Brugha T, et al (2011) Epidemiology of autism spectrum disorders in adults in the community in England, Arch Gen Psychiatry 2011; 68: 459-466.
  - Hertz-Picciotto, I., & Delwiche, L. (2009) The Rise in Autism and the Role of Age at Diagnosis, Epidemiolog, Volume 20(1), January 2009, pp. 84-90.
- Whether the increase in diagnosis represents a significant increase in actual prevalence or not, autism is not new and there is a significant "hidden" adult population with autism in the U.S.
  - In the past, people with autism (by current criteria) have often been given a different diagnosis, such as mental retardation, and either housed in institutions and residential facilities, or sent out on their own to live as "odd" individuals in the general community. Thus, adults with autism often live hidden from the awareness of the general public.
  - In the past decade, many functional, independent adults have realized that what they have always considered oddness and differences in themselves are actually features of undiagnosed Asperger's Syndrome or high functioning autism.
    - <http://www.unstrange.com/essay.html>
    - <http://photoninthedarkness.com/?p=158>
- There is a rising Great Wave of young adults with autism graduating from high school
  - The demographic bulge of children with the autism diagnosis, which has gotten so much media attention over the past decade, is beginning to enter adulthood and apply for social services.
    - [http://statedata.info/datanotes/datanote.php?article\\_id=300](http://statedata.info/datanotes/datanote.php?article_id=300)
  - Even if the increase in prevalence is only diagnostic, the increased attention and school support for these children has led to a generation that is more visible and empowered than previous generations.
- We don't know the unemployment rate of adults with autism in the U.S.
  - Without any data on how many adults have autism and where they are living, there is no way to survey them and determine an employment rate. There has

been some research following employment experiences of young adults with autism graduating from high school over the last few years (see NLTS2 below), but researchers do not know how that reflects the status and experience of older adults.

- The employment rate for people with disabilities is very low and is even lower for people with autism.
  - In 2010, the proportion of people with disabilities aged 16 - 65 who were working was less than one half that of people without a disability aged 16 - 65 (29% vs. 64%) (U.S. Bureau of Labor Statistics).
    - <http://www.bls.gov/news.release/disabl.a.htm>
  - In 2009, the percent of young adults with autism who had a job was nearly half that of all young adults with disabilities (33% vs. 59%).
    - **NLTS2 Data:** In 2009, the U.S. Department of Education's National Longitudinal Transition Study (NLTS2) surveyed 11,000 young adults with disabilities ages 16 – 25 to document their living situations. The information below is drawn from tables generated online using this data.
      - <http://www.nlts2.org/index.html>
    - The proportion of young adults with autism who had a job was comparable to that for young adults with deaf-blindness or with multiple disabilities, and far below the proportion of those with blindness, learning disabilities, or traumatic brain injuries.
    - On average, young adults with autism with a job earned 86% as much per hour as all young adults with disabilities with a job (\$8.90/hour vs. \$10.40/hour).
    - Nearly half of employed young adults with autism earned less than \$7.25 an hour, twice the rate for all employed young adults with disabilities (44% vs. 22%).
    - Nearly half of employed young adults with autism worked less than 20 hours a week, four times the rate for all employed young adults with disabilities (42% vs. 11%).
    - Average hours worked per week by young adults with autism was 36% lower than that for all young adults with disabilities (23.2 hrs. vs. 35.8 hrs.).
    - The proportion of employed young adults with autism who were working full time (35 hours or more per week) was one third that for all young adults with disabilities who had a job (26% vs. 71%).
    - The proportion of employed young adults with autism who worked in a sheltered workshop environment (only working with other people with disabilities) was seven times that for all employed young adults with disabilities (34% vs. 5%).

- There are 10,500 vocational rehabilitation (VR) counselors nationwide helping people with disabilities get jobs ([Rehabilitation Services Administration](#)).
  - State Vocational Rehabilitation Agencies are in the business of saving money by helping people with disabilities get career-oriented jobs and live independently in their communities.
  - The system has been in place since just after WW I.
  - People with disabilities who work and live independently need fewer social services and financial support from the government.
  - Every state in the U.S. has at least one vocational rehabilitation agency (some have separate agencies for people with blindness or for Native Americans). Nearly every city of any size has at least one vocational rehabilitation office with trained vocational rehabilitation counselors on staff.
  - The Rehabilitation Services Administration (RSA) in Washington, part of the U.S. Department of Education, monitors and advises the state vocational rehabilitation agencies.  
(<http://www2.ed.gov/about/offices/list/osers/rsa/index.html> )
  - These state agencies are primarily funded by state governments, with some matching funds from the Rehabilitation Services Administration (RSA) and collaborations with other agencies such as SSA.
  - [A listing of all State Vocational Rehabilitation Agencies and their contact information is available here](#)
- Each year, state vocational rehabilitation agencies help more than 200,000 people with disabilities find and keep jobs: jobs which are career-oriented, integrated in the local community, and pay a competitive wage. (RSA data).
- Each state vocational rehabilitation agency calculates a Return On Investment (ROI) for dollars spent on clients compared to federal and state taxes paid by clients once they are working. These ROI calculations generally range between \$5 and \$10 return within ten years for every 1\$ spent on vocational rehabilitation services. (RSA is actively working on calculating a national average).
  - [The Social Security Administration has made similar calculations](#) about its own financial support of vocational rehabilitation vs. savings on its disability services costs. Their figure is \$7 returned for every \$1 spent.

- In the past, vocational rehabilitation (VR) services for people with autism have had mixed success.
  - Between 2000 & 2006, people with autism who received VR services were more likely to become employed than VR clients with other disabilities, but those jobs were of lower quality (far lower hourly wages, far fewer hours per week).
    - Cimera, R.E., and Cowan, R. J. (2009) [The Costs of Services and Employment Outcomes Achieved by Adults with Autism in the US](#), Autism May 2009, vol. 13 no. 3, 285-302.
    - Smith, F. & Lugas, J. (2010) [Vocational Rehabilitation \(VR\) Employment Outcomes for Transition-age Youth with Autism, and Other Disabilities](#). DataNote Series, Data Note XXVI. Boston, MA: Institute for Community Inclusion.
  - In 2006, on average, VR spent more per person on people with autism than on people with other disabilities, but this was declining.
    - Costs per person for clients with autism were \$2,992, compared to \$2,336 for other VR clients in 2006.
    - Costs per person for clients with autism actually declined 9% over a 4 year period. During the same time, costs per person for other VR clients rose 3%. This may mean counselors were becoming more familiar with effective strategies.
      - Cimera, R. & Cowan, R. (2009) [The costs of services and employment outcomes achieved by adults with autism in the US](#), Autism May 2009, vol. 13 no. 3, 285-302.
- The number of people with autism asking for vocational rehabilitation services is rising rapidly.
  - From 2003 – 2008, the number increased nearly than 300%
    - Smith, F. & Lugas, J.,(2010) [Vocational Rehabilitation \(VR\) Employment Outcomes for Transition-age Youth with Autism, and Other Disabilities](#). DataNote Series, Data Note XXVI. Boston, MA: Institute for Community Inclusion.
    - Unpublished analysis of RSA data by University of Missouri Disability Policy & Studies and the Institute for Community Inclusion's State Data.
- There is growing interest in improving vocational rehabilitation services to people with autism: 2 federally-funded research projects, a national conference, and a recent reference manual.
  - **Autism Works National Conference** – an annual conference in St. Louis, MO, each March, focusing on informing the disability employment community and the autism community about the latest developments and trends in autism employment. "Building

better careers for adults with autism". [Information and resources are available on Facebook.](#)

- **2 national research projects on autism and vocational rehabilitation.** In 2008, the National Institute on Disability and Rehabilitation Research (NIDRR) funded two, five-year research projects on "Vocational Rehabilitation Service Models for Individuals with Autism Spectrum Disorders".
    - [VCU ASD Career Links](#) at Virginia Commonwealth University, researching several facets of school-to-work transition techniques for young adults with autism.
    - [Vocational Rehabilitation Service Models for Autism Spectrum Disorders](#) at SEDL (South East Development Laboratory) in Austin, TX. Reviewing research literature, collecting nominations for identification of "Effective Program Models", and initial piloting of identified school-to-work techniques.
  - ***Adult Autism & Employment: A guide for rehabilitation professionals***, by Dr. Scott Standifer, Disability Policy & Studies office, University of Missouri, 2009. This is a reference guide of practical advice for employment service providers on the unique features and accommodation needs of adults with autism and the impact of those features and needs in the workplace. [It is available online for free download at this address.](#)
  - **Journal of Vocational Rehabilitation** special edition in spring, 2010, devoted to adult autism and employment (vol. 32, pp. 89-100).
  - Several state vocational rehabilitation agencies, including [Missouri's Division of Vocational Rehabilitation](#), have designated statewide autism service coordinators and are participating in trainings on employment service accommodations for adults with autism. A growing number of sub-contractors of the state vocational rehabilitation agencies have begun programs tailored to adults with autism.
- There are some remarkable new models emerging of employment for people with autism.
    - These are projects in which people with autism are working in their communities, side by side with neurotypical co-workers, for competitive wages, with no permanent job coaching.
    - [Walgreens Disability Inclusion Program](#): In 2007, Walgreens opened a new regional distribution center in Anderson, SC, expressly programmed to include a large percentage of employees with disabilities, especially autism. Nearly 40% the workforce of the Anderson distribution center has a disability, and the project has worked so well financially that a second distribution center using the same model opened in Windsor, Connecticut in 2009. Similar programs are underway in 18 other Walgreens distribution centers across the country. Walgreens is now extending the Disability Inclusion Program into its retail stores as well.

- Contact [Deb Russell, Manager of Outreach and Employee Services, via Wallgreens Media Office](#)
- [TIAA-CREF: Fruits of Employment](#): For several years, investment firm TIAA-CREF has been purchasing farms around the world as a way to diversify its investment portfolio. Under the guidance of Heather Davis, two of those farms, both on the U.S. Pacific Coast, are developing innovative employment projects for adults with autism aimed at integrating these adults in the traditional farm workforce of the agricultural industry. [An article on the project is available here.](#)
  - Contact [Heather Davis, Head of Global Private Markets, via TIAA-CREF Media Office](#) (888 200-4062)
- [Roses for Autism](#) - In 2009, historic Pinchbeck Rose Farm was about to go out of business due to staffing issues and overseas competition. A local man with a son with autism realized that the common features of people with autism make a good match for the staffing needs of commercial rose production. Roses for Autism was the result, resurrecting Pinchbeck Rose Farm and forging a new path for autism employment.
  - Contact [Joan Volpe, Roses for Autism / Ability Beyond Disability](#)
- [Aspiritech](#) – People with high functioning autism or Asperger's disorder are often quite good with computer system. Aspiritech is a Chicago-based company which contracts to do software testing for software development companies. Aspiritech hires only people with high-functioning autism or Asperger's and trains them to do software testing. When a software developer, such as a smart-phone app developer, finishes creating a new program, he or she can be almost certain there are errors in how all the parts interact. These are often subtle errors which can only be found by "running it through its paces" with intensity and focus. The staff at Aspiritech are trained to do that and document exactly the tests they ran and any issues they discovered. The business model is based on a group in Denmark called Specialisterne. Groups in Belgium, the UK, Israel, and Japan are also using this model.
  - Contact [Brenda or Moshe Weitzberg, Aspiritech](#)
- A few non-for-profit organizations have been working on the need to help adults with autism find employment for several decades.
  - Most of them work closely with local autism advocacy agencies, state vocational rehabilitation agencies, and state developmental disability agencies.
    - [The Jay Nolan Community Services](#), Mission Hills, California; Rebecca Burkhardt, director of employment, Jeff Strully, Executive Director.
    - [Autism Services Association](#), Wellesley Hills, Massachusetts; Joel Smith, Executive Director.

- [The Cove Center](#), Providence, Rhode Island; Mike Smith, Director of Vocational Services.
  - [Bittersweet Farms](#), Whitehouse, Ohio; Julie Horns, Development and Marketing; Vicki Obee-Hilty, Executive Director.
- A few members of the autism community have written books on autism employment.
    - These are mostly for individuals with autism, their families, special education teachers, and "school transition specialists". They frequently do not discuss the public vocational rehabilitation system in much detail. There is quite a number of these books, but three of the more prominent ones are:
      - *Developing talents: Careers for individuals with Asperger syndrome and high-functioning autism*, by Temple Grandin, and Kate Duffy, Autism Asperger Publishing Company, 2004.
        - Contact [Kate Duffy, DevelopingTalents.com](#)
      - *Autism & the Transition to Adulthood: Success Beyond the Classroom*. By Paul Wehman, Marcia Datlow Smith, and Carol Schall, Paul H Brookes Publishing Company, 2008.
        - Contact [Paul Wehman, WorkSupport.com, Virginia Commonwealth University](#)
      - *Preparing for Life: The Complete Guide for Transitioning to Adulthood for Those with Autism and Asperger's Syndrome*, by Jed Baker, Future Horizons Publishing, 2006.
        - Contact [Jed Baker, JedBaker.com](#)

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Prepared in conjunction with the [Autism Works National Conference on autism and employment](#), March 6 & 7, 2012, in St. Louis, MO.

The Autism Works national conference is presented by:

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Integrated Behavioral Systems