



Healthy Delawareans with Disabilities 2010 Project

Delaware Health Status Report for Persons with Disabilities



prepared for

Division of Developmental Disabilities Services
Delaware Health and Social Services

by the

Center for Disabilities Studies
University of Delaware
Newark, Delaware 19716

June 2007



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Many thanks to all members of the Advisory Panel who served from 2005-2007. Without their support and input the Healthy Delawareans with Disabilities 2010 Project could not have been as successful.

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Some Facts about Delaware



Delaware, the “First State,” is the second smallest state in the United States with a total area of 1,982 square miles. The current Delaware population is estimated at 843,524, which makes it the seventh least populated state, including the District of Columbia.¹ Located on the Eastern Seaboard of the United States, Delaware has shores on the Atlantic Ocean and Delaware Bay. Delaware also borders New Jersey, Pennsylvania, and Maryland. The state motto is “Liberty and Independence.”

Delaware is a diverse state. The median age is 37.9 years and 51.5% of the population is

female. Delaware’s racial-ethnic composition is 73.6% Caucasian, 19.9% African American, and 6.1% Hispanic/Latino. Almost 15% of the population five years of age and older has one or more disabilities.²

Delaware consists of three counties: New Castle, Kent, and Sussex. Most of the population of the state lives in New Castle County (73.9%), while 14.7% live in Kent County and 11.3% live in Sussex County. The state capital, Dover, is located in Kent County. Also located in Kent County is Dover Air Force Base, a major logistical anchor for the U.S. Air Force and the Armed Services Mortuary Service. Sussex County is known for its agriculture and broiler-chicken industry, as well as its beautiful Atlantic coast beaches.

Delaware is known for its historic waterfront, the duPont family mansions, beaches, fishing, chicken farming, and favorable tax laws.





Executive Summary

This report presents information about the health, wellness, disabilities, secondary health conditions, and lifestyles of adults with disabilities in Delaware. Information from 339 adults with physical, sensory, cognitive and learning disabilities, and mental health conditions was collected from May to December 2006. The sample of participants was collected through service enrollment lists, referrals, and outreach to community organizations and provides insight into the well-being of adults with disabilities in Delaware.

Demographic Information

Of the 339 participants who answered the survey, more than one-third (36.0%) had a physical disability. The second most represented group in the sample was persons with cognitive and learning disabilities (24.2%), followed by those with visual impairments (19.8%). Almost eleven percent (10.9%) of the sample had a hearing impairment and just over nine percent (9.1%) reported having a mental health condition.

A majority of respondents lived in New Castle County (70.2%). Nineteen percent of the respondents lived in Kent County and 10.7% of the respondents lived in Sussex County. A majority of the respondents were female (52.4%) and the average age of the participants was 48 years. Just over 68% of the sample were Caucasian while 22.6% reported their race as African American and 4.5% reported their ethnicity as Hispanic/Latino.

Of the 339 respondents of the survey, more than 40% reported completing high school. Twenty percent (20.2%) stated they had not completed high school and almost 17.0% reported graduating from college. Only 34.2% of the respondents reported they were employed. Another 15.5% reported that they were unemployed and 27.4% reported they were unable to work. A majority (54.7%) reported that their annual income was less than \$15,000 and 67.1% reported that their annual incomes were less than \$25,000.

General Health and Secondary Health Conditions

When asked about their overall health, a majority of the survey respondents reported that their health was “fair” or “poor.” Individuals with mental health conditions reported the highest level of “fair” and “poor” health perception (80.6%).

Just over 47% of the respondents reported having high cholesterol and just over 45% reported having high blood pressure. These rates are greater than for the

general Delaware population. Almost 40% of the sample reported having arthritis; again, this is a higher rate than for the general Delaware population. Respondents with physical disabilities and vision impairments were the most likely to report having arthritis. Finally, just under 21% of all respondents reported having diabetes.

Lifestyle and Preventative Health Care

Almost all of the respondents (97.0%) reported having a primary health care provider and 91.4% reported receiving regular check-ups from the provider. However, a significant number of respondents acknowledged challenges to obtaining health care. These included lack of transportation to health care services (16.5%), difficulty accessing buildings where health care was provided (11.3%), the cost of health care services (10.8%), being able to access health care equipment (9.2%) and health care services not being available (6.0%).

The respondents were asked questions about preventative health care. A majority of men over 39 years of age (57.5%) reported having had a prostate-specific antigen (PSA) test and almost 70% reported having had a digital rectal exam sometime during their lives. Just over 81% of the women reported having had a mammogram and almost 90% reported having had a clinical breast examination and just over 91% of the women reported having had at least one pap exam. Of all participants age 50 or older, 62.0% reported having had a colonoscopy or a sigmoidoscopy to screen for colon cancer.

When reporting on their diet and exercise habits, 38.9% of the respondents stated that they ate the Centers for Disease Control and Prevention (CDC) recommended daily servings of fruits and vegetables. Just under 21% percent of the respondents reported participating in recommended levels of daily physical activity. The large majority of respondents (72.3%) reported being overweight or obese. Those individuals with physical impairments (57.9%) and hearing impairments (54.5%) were the most likely to not participate in recommended levels of physical activity.

Nineteen percent (19.0%) of the survey respondents reported that they were current smokers. This is similar to the percentage of smokers in the overall Delaware population. During the past year, almost half (47.8%) of those respondents who reported being smokers tried to quit at least for one day. Persons with mental health conditions were the group of respondents most likely to smoke (45.2%).

Just over 32% of the respondents reporting having had an alcoholic drink during



the past 30 days. This percentage is substantially lower than for the general population of Delaware who report having had an alcoholic drink during the past 30 days (57.0%). Of the sub-groups in the sample for this survey, the percentage reporting having had an alcoholic drink within the past 30 months varied widely. Persons with hearing impairments and vision impairments (55.6% and 44.3% respectively) had the highest reported percentage of having had an alcoholic drink during the past 30 days. Persons with mental health conditions and cognitive disabilities (29.6% and 15.4% respectively) had the lowest reported percentages.

Over half of the respondents (52.5%) answered questions about their sexual activity. Of those answering, 37.6% reported that they had engaged in sexual activity within the past year. Almost 32% of those answering the questions reported having had at least one new sexual partner within the past year. Approximately 58% of those who reported being sexually active had participated in oral sex and 83.1% of those reporting being sexually active engaged in sexual intercourse during the past year. Persons with mental health conditions and hearing impairments were the most likely to report being engaged in sexual activities (52.6% and 52.9% respectively) and persons with cognitive disabilities were the least likely to report having engaged in sexual activities during the past year (26.2%). Of all of the respondents reporting they were sexually active, only 32.7% reported using a condom during their last sexual encounter. Of those who did use a condom, 20.0% reported that they used a condom to prevent pregnancy, 20.0% reported that they used a condom to avoid sexually transmitted diseases, and 60.0% reported they used a condom for both reasons. Almost 74.0% of those respondents who reported being sexually active stated that they thought condoms were either “effective” or “somewhat effective” at protecting against HIV.

Respondents were also asked about being victims of sexual assault. Of all the women answering the question, 30.8% reported having been sexually assaulted and 27.0% reported having experienced an attempted sexual assault. Of all the men answering the question, 7.7% reported having been sexually assaulted and 11.3% reported having experienced an attempted sexual assault. Men and women with mental health conditions had the highest rates of reported sexual assault.

Those reporting sexual assaults or attempted sexual assaults identified a wide variety of perpetrators. These included acquaintances, neighbors or other non-relatives (22.4%), former significant others (19.0%), and strangers (17.2%).

Wellness

The respondents were asked about their satisfaction with their lives. A large ma-

majority of the respondents indicated they were “very satisfied” or “satisfied” with their lives (80.4%). Almost 20% indicated that they were “dissatisfied” or “very dissatisfied” with their lives. Individuals with mental health conditions reported the highest percentage of being “dissatisfied” or “very dissatisfied” with their lives (32.3%).

When asked about receiving necessary supports and services, 70.0% of the respondents stated that they “always” or “usually” received the social and emotional supports they needed. A small percentage of respondents (5.6%) reported “rarely” or “never” receiving the social and emotional supports they needed. The groups most likely to report they “rarely” or “never” received the supports they needed were individuals with hearing impairments (10.8%) and individuals with mental health conditions (9.7%).

A majority of the respondents (56.8%) reported that they either “constantly” or “at least once a day” think about their disabilities. Just over 18% of the respondents reported “never” thinking about their disabilities. When asked about how they were treated by others at work, 80.5% of the respondents stated they were treated “the same as” or “better than others” and 81.0% reported they were treated “the same as” or “better than others” when seeking health care. Almost nine percent of the respondents felt they were treated “worse than others” at work and when seeking health care. Individuals with mental health conditions reported feeling they were treated “worse than others” at work (33.3%) and when seeking health care (16.7%).

Care Needs

Over 63% of respondents reported they needed help with routine tasks such as household chores and shopping and 28.4% reported they needed help with personal care activities such as eating, bathing, and dressing. Individuals with visual impairments had the highest percentage of needing help with routine tasks and persons with physical disabilities had the highest percentage of needing assistance with personal care activities. The types of personal care support reported by the survey respondents included assistance with self care (36.1%), assistance with moving around (19.6%), assistance with learning and remembering (18.0%), and assistance with seeing and hearing (16.5%).

Almost 57% of the survey respondents indicated that they needed to use special equipment because of their disabilities. Persons with hearing impairments (81.1%), with physical impairments (79.3%) and vision impairments (67.2%) were more likely to report needing to use special equipment than were persons with cognitive disabilities (18.5%) and persons with mental health conditions (16.1%).



Caregiver Needs

The survey respondents were asked if they had assistance from a caregiver and what their relationship was to the caregiver, if they had one. Of those respondents who had one or more caregivers, the majority of respondents identified their caregivers as family members (61.4%) such as parents, adult children, and/or siblings. Thirty-one percent of the caregivers working with respondents were paid professional staff. Other relatives and friends comprised 7.6% of the caregivers of the respondents.

As part of the Healthy Delawareans with Disabilities 2010 survey, if caregivers were present during the interview, they were asked a number of questions about their roles and responsibilities. Sixty-six (66) caregivers were present during the interviews and agreed to respond to questions. Of those 66 caregivers, 39.4% indicated that caregiving responsibilities did not leave enough time for themselves. Over 22% reported that their caregiving responsibilities were a financial burden for them and 12.1% reported that caregiving was a stressful activity for them. Some caregivers also reported that their responsibilities made it difficult to address their own family needs (9.1%), that caregiving interfered with their primary work responsibilities (7.6%), that it affected their family relationships (6.1%), and that it aggravated their own health conditions (3.0%).

Recommendations

The Healthy Delawareans with Disabilities 2010 Project Advisory Panel reviewed the results of this survey. This report offers fourteen recommendations that address both health promotion and health awareness for persons with disabilities.

These recommendations need to be coordinated across health care service providers, human service providers, advocacy agencies, and direct service providers who work with persons with disabilities. These recommendations need to be implemented with the consultation of persons with disabilities and their families.

1. **Develop a five-year health and wellness plan for adults with disabilities in collaboration with the Governor's Commission on Community-Based Alternatives for Individuals with Disabilities and the HDWD 2010 Advisory Panel.**
2. **Review health and wellness education, awareness, and prevention materials available from state agencies, health providers, hospitals, and other health care sources and ensure that the materials are available in formats that are accessible to all persons with disabilities.**

3. Educate physicians and other health care providers about the importance of addressing secondary health conditions with persons with disabilities, preventing secondary health conditions, and monitoring persons with disabilities who are at risk for or have secondary health conditions.
4. Create a grant program for health care facilities to ensure physical and information accessibility of services for all persons with disabilities.
5. Develop and implement a pilot program to make dental care services available to all individuals with disabilities.
6. Support the general health care prevention initiatives of the Division of Public Health and work with the Division to ensure that disability specific information is included in prevention education materials.
7. Provide education and grant funding for local recreation and parks offices and private fitness centers to ensure that all recreation and fitness programs are accessible to persons with disabilities.
8. Develop and implement disability-specific prevention education programs to address risky health behaviors, including smoking, drinking, and unprotected sex.
9. Develop and implement health prevention education programs for direct support professionals and family caregivers.
10. Develop and implement disability specific health education programs to address health concerns specific to a disability group.
11. Develop a mandatory certification and credentialing process for direct support professionals.
12. Support the effective implementation of respite care programs for families of persons with disabilities.
13. Develop and implement a systematic data collection and analysis process, such as the State's Behavioral Risk Factor Surveillance System (BRFSS), to identify the comprehensive health and prevention needs of persons with disabilities.
14. Support the effective implementation of the Delaware Medicaid Buy-In program.



Introduction



The Healthy Delawareans with Disabilities (HDWD) 2010 project is a health and wellness program that focuses on the health of people with disabilities in Delaware. The project is based on the Healthy People 2010 Initiative, a national 10-year plan that sets health objectives to help federal, state, local, private, and community agencies and organizations in their efforts to promote health and wellness. The HDWD 2010 activities completed include:

- reviewing state, administrative, and general data on health and disability;
- interviewing adults with disabilities and families of children with special health care needs about their health, wellness, secondary health conditions, and lifestyles;
- developing an Advisory Panel from state, community, and advocacy organizations to act as a statewide health and disability resource;
- promoting disability-focused health programs, including a smoking cessation program and a fitness program for adults with disabilities (in collaboration with the *Yes You Can™* program);
- providing training for professionals on early detection of autism (*First Signs, Inc.*);
- supporting the local Amputee Support Group; and
- developing a website with useful health and disability information for Delawareans [<http://www.hdwd2010.com>].

HDWD 2010 is coordinated and managed by the Division of Developmental Disabilities Services (DDDS), Delaware Health and Social Services (DHSS).

The Center for Disabilities Studies (CDS) and the Center for Applied Demography and Survey Research (CADSR), both at the University of Delaware, worked with DDDS on HDWD 2010. CDS trained and supervised interviewers for the adult and childhood surveys, recruited participants for the interviews, entered survey data, and wrote reports.

CADSR analyzed information from the adult survey and wrote a detailed technical report about the collected data (for a copy of the report visit www.hdwd2010.com).

CADSR also analyzed several years of data from Delaware's Behavioral Risk Factor Surveillance System (BRFSS) survey (called a retrospective analysis) and also wrote a detailed report about this work (for a copy of the report visit www.hdwd2010.com).

Find Out More

www.hdwd2010.com

www.dhss.delaware.gov/ddds/

www.dhss.delaware.gov/dhss/

www.udel.edu/cds

www.cadsr.udel.edu



HDWD 2010 was funded by the Centers for Disease Control and Prevention (CDC), National Center on Birth Defects and Developmental Disabilities (NCBDDD) as a cooperative agreement.

Purpose of the Healthy Delawareans with Disabilities 2010 Project

The purpose of HDWD 2010 is to address the issues highlighted in Chapter 6 “Disability and Secondary Conditions” of the Healthy People 2010 Initiative. Delaware is one of 16 states to receive federal funds to address this focus area.

Mission of the Healthy Delawareans with Disabilities 2010 Project

The mission of HDWD 2010 is to improve the lives of Delawareans with disabilities by emphasizing health promotion and wellness. HDWD 2010 activities promote this mission by:

- increasing knowledge about factors that affect the health and wellness of people with disabilities and contribute to illnesses and secondary health conditions;
- producing disability specific health promotion and awareness programs; and
- providing technical assistance to interested partners.

Healthy Delawareans with Disabilities 2010 Project Goals

The two main goals of the national *Healthy People 2010 Initiative* are to increase quality and years of healthy life and to eliminate health disparities among sub-groups of people. The HDWD project has five goals:

- 1) To increase statewide knowledge about factors that affect the health and wellness of people with disabilities and that contribute to illnesses and secondary health conditions.
- 2) To develop a statewide Advisory Panel to promote health and wellness for people with disabilities.
- 3) To develop the Advisory Panel into a statewide resource for technical assistance on issues of health and wellness for people with disabilities.
- 4) To produce a report on the health and wellness of people with disabilities.
- 5) To develop several health and wellness programs for people with disabilities.



Methodology



Reason for Survey

The Healthy Delawareans with Disabilities (HDWD) 2010 project sought to learn more about health, wellness, secondary health conditions, and lifestyles of adults with disabilities in Delaware. One method to collect information about health conditions is to examine data from the Behavioral Risk Factor Surveillance System (BRFSS). Each state in the U.S. systematically conducts the Centers for Disease Control and Prevention's Behavior Risk Factor Surveillance System (BRFSS) survey to track health conditions and risk behaviors in the state's general population. While the BRFSS is a widely used population-based tracking system, it does not include adults who cannot participate in a phone survey or who live in institutions such as mental health or health care facilities. This means there is no information about health conditions and risk behaviors for significant portions of the population of persons with disabilities in Delaware. This also means that the BRFSS may underrepresent adults with hearing impairments, cognitive or learning disabilities, and mental health conditions due to the difficulty of collecting information through telephone interviews from these groups.

Upon review of previously collected BRFSS data, the HDWD 2010 project, in coordination with the Department of Public Health (DPH) and the Center for Applied Demography and Survey Research (CADSR), added two disability related questions to the BRFSS survey for fiscal year 2006. The 16.0% of BRFSS participants who were identified as having a disability were also asked about their primary impairment or health condition. The majority reported they had a physical disability. Adults with sensory impairments, such as difficulties seeing or hearing, and adults with mental health conditions were also represented. However, no adults with cognitive disabilities were represented in the survey. This analysis indicated that the BRFSS survey does not reach the full range of adults with disabilities in Delaware. In order to obtain more detailed information about health, wellness, secondary health conditions and lifestyle of adults with disabilities, the HDWD 2010 survey was created to address topics that were of interest to Delaware.

Preparation for Study

To increase knowledge about factors that affect health and wellness of people with disabilities and to learn about a wider variety of people in this group, the HDWD 2010 project developed a survey to collect this information for Delawareans with disabilities. The survey was based on some of the BRFSS survey questions with additions and modifications suggested by stakeholder groups and the HDWD 2010 Advisory Panel.



The HDWD 2010 adult survey was designed for use with adults with all types of disabilities including individuals with cognitive disabilities and mental health conditions. In addition, adults with disabilities who live in residential facilities and group homes were also included.

Survey Participants

Individuals who identified themselves as having a physical disability, cognitive or learning disability, sensory impairment, or mental health condition and were 18 years or older could participate in the survey. The survey sample was recruited through service enrollment lists, referrals, health fairs, and outreach to community organizations in Delaware.

The original goal for data collection was 900 respondents, three hundred from the groups of adults with physical, cognitive, and sensory disabilities. Once data collection began, it became apparent to the HDWD 2010 Advisory Panel that persons with mental health conditions also needed to be included in the data collection.

As with most survey research with targeted populations, challenges occurred identifying and collecting data. Through the diligent efforts of advocacy groups, disability specific support groups, independent living centers and the efforts of many other organizations, a total of 540 adults with disabilities were identified and 339 individuals interviewed (37.6% of the expected 900 respondents).

Data Collection

To collect information about Delawareans with disabilities, the *Adult Survey on Health, Disabilities, and Quality of Life* was developed. The survey was based on the Centers for Disease Control and Prevention's Behavior Risk Factor Surveillance System (BRFSS) survey.

The survey was developed by the Management Team of the HDWD 2010 project and approved by the HDWD 2010 Advisory Panel. The Human Subject Review Board of Delaware Health and Social Services (DHSS) reviewed the survey and granted permission to conduct the survey with adult Delawareans with disabilities. The approval notice from the Human Subjects Review Board was received on September 27, 2005.

In December of 2005, Delaware community members with an interest in disabili-

ties and some experience within social services were trained to conduct the adult survey in-person or by telephone.

Participants for the survey were recruited through state service enrollment lists, referrals, and outreach to community organizations. Staff of state agencies reviewed their registries and called individuals (or their residential facility or legal guardian) to ask permission to send their contact information to the Center for Disabilities Studies (CDS). If individuals agreed, this information was sent to CDS. Additional participants recruited through community outreach activities completed sign-up sheets. Contact information for potential participants was entered into a password protected Microsoft ACCESS database. A total of 540 adults with disabilities were recruited and 339 participants completed the survey (62.8%).

HDWD's Adult Survey posed 134 questions about:

- general health status and secondary health conditions;
 - access and barriers to health care;
 - preventative health care;
- nutrition, physical activity, and obesity;
 - social and emotional health;
 - cigarette smoking and alcohol consumption;
 - sexual activity;
- frequency of sexual assault; and
 - caregiving.

Trained interviewers scheduled and conducted in person or telephone surveys with participants. Interviewers collected information between May and December of 2006. Interviews lasted from 30 to 90 minutes and were held at a location chosen by the participants or by phone. Participants were sent \$15.00 for their participation after they completed the interview.

Data Analysis

Data from completed surveys were entered into a computer database by CDS staff. CDS sent the final database to the Center for Applied Demography and Survey Research (CADSR). CADSR then analyzed the data and wrote the technical report (for a copy of the report visit www.hdwd2010.com).

The data was analyzed between January and March of 2007. CADSR used the Statistical Package for the Social Sciences (SPSS 14.0) to analyze the data. Basic descriptive statistics were calculated. The technical report by CADSR about the findings from the adult survey was completed in March 2007. The final report was completed in June 2007 by CDS.

Challenges and Strengths

Due to the challenges of collecting information about persons with disabilities, there are a number of limitations to the information presented in this report. First, the individuals who responded to these interviews were not selected randomly.



They were recruited from service delivery lists or through advertisements and outreach. While this does not diminish the importance of their responses in any way, it does introduce the risk of bias to the sample. A second caution about the data reported here is that it may not be representative of all adults with disabilities in the state because of the recruitment process.

While caution should be taken when interpreting the information in this report, this is one of the first times that a comprehensive group of adults with disabilities in Delaware has been asked about their health, wellness and health care access experiences. One of the strengths of the data collected for this survey is the representation of various subgroups of adults with disabilities such as those with intellectual disabilities, mental health conditions, and adults living in residential facilities, who have not been included in other population-based health surveys, such as the BRFSS.

In this report, findings summarizing knowledge about health, wellness, secondary health conditions, and lifestyles of Delawareans with disabilities from the *Adult Survey on Health, Disabilities, and Quality of Life* are presented. In addition, other sources were used to illustrate findings or to provide a context for findings.



Health, Wellness & Lifestyle Findings



Demographic Information

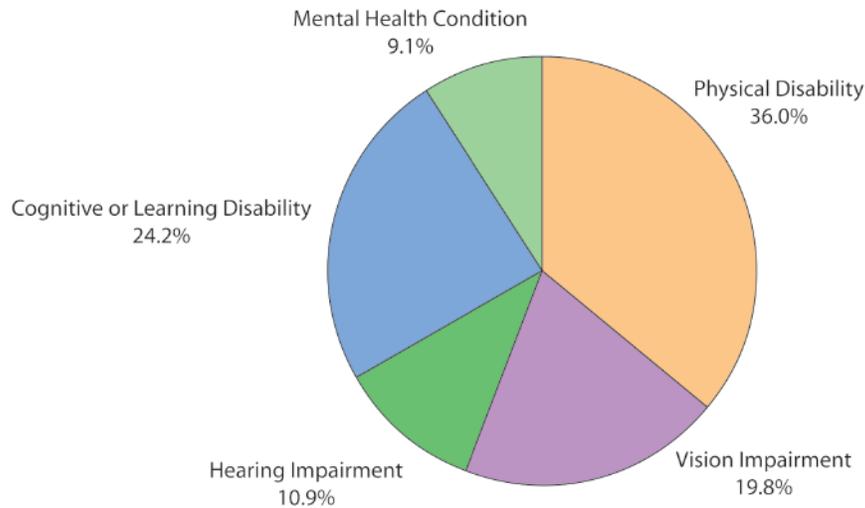
Disability Status

Respondents were asked to identify the primary health condition or disability they consider to be their most significant disability or health condition.

The 339 participants reported five types of disabilities. More than one-third of individuals (36.0%) reported a physical disability, followed by individuals with cognitive or learning disabilities (24.2%). Almost 20% reported having a vision impairment and 10.9% reported having a hearing impairment. Individuals with mental health conditions* represented 9.1% of the sample (see Figure 1).

In comparison to the individuals responding to the BRFSS surveys and indicating they have a disability, the HDWD 2010 adult survey has a smaller percentage of participants with physical disabilities and greater representation of individuals with sensory disorders. The rate of individuals with mental health conditions was approximately the same. The HDWD 2010 adult survey had over 24% respondents with cognitive and learning disabilities. The BRFSS survey had no respondents with cognitive or learning disabilities. See Figure 2 for the distribution of disability types of the respondents of the BRFSS surveys.

Figure 1. Primary disability of the Healthy Delawareans with Disabilities 2010 Project Health Risks Survey sample

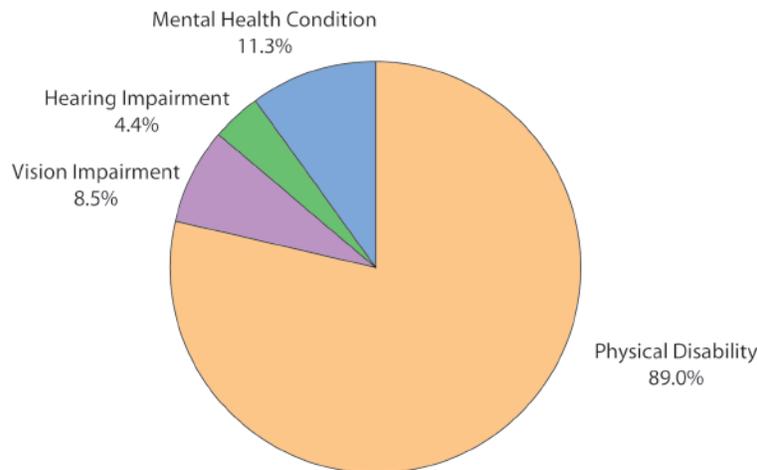


Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

*In this report, the definition "mental health conditions" will encompass all survey participants that reported in the HDWD 2010 survey that they have "depression, anxiety, or emotional impairment."



Figure 2. Primary disability as reported by respondents in the BRFSS sample who disclosed that they had a disability



Source: Retrospective Analysis of Delaware Data from the Behavioral Risk Factor Surveillance System, Center for Applied Demography & Survey Research, University of Delaware⁴

County, Gender, Race/Ethnicity, and Age

Interviewers asked the HDWD 2010 survey participants demographic questions, such as their county of residence, their race/ethnicity, and their age. Survey participants were from all three Delaware counties. Most of the survey participants were from New Castle County (70.2%), followed by Kent County (19.0%) and Sussex County (10.7%). These numbers approximate the population distribution of Delaware.

A majority of survey participants were female (52.4%), which also approximates Delaware's population's distribution. The mix of men and women in the various disability groups was similar. The one exception was respondents with vision impairments where 62.7% of the respondents were women.

The largest racial/ethnic group in the survey was Caucasian (68.2%), followed by African American/Black (22.6%) and Hispanic/Latino (4.5%). These numbers are similar to Delaware's overall population.

The average age of the survey participants was approximately 48 years. The average age of respondents with vision impairments was 56 years. Participants with cognitive or learning disabilities were youngest; on average they were 38 years old. Table 1 illustrates the findings regarding county residence, gender, race/ethnicity, and age.

Table I. Demographic characteristics of survey respondents, by primary disability

| | Hearing Impairment (%) | Vision Impairment (%) | Physical Disability (%) | Mental Health Condition (%) | Cognitive or Learning Disability (%) | Total (%) |
|-------------------------------|------------------------------|-----------------------------|-------------------------------|--------------------------------------|---|--------------|
| County (n=337) | | | | | | |
| Kent | 27.0 | 14.9 | 20.8 | 12.9 | 18.5 | 19.0 |
| New Castle | 64.9 | 67.2 | 68.3 | 74.2 | 76.5 | 70.2 |
| Sussex | 8.1 | 17.9 | 10.8 | 12.9 | 4.9 | 10.7 |
| Gender (n=338) | | | | | | |
| Male | 48.6 | 37.3 | 45.1 | 48.4 | 59.3 | 47.6 |
| Female | 51.4 | 62.7 | 54.9 | 51.6 | 40.7 | 52.4 |
| Race/Ethnicity (n=337) | | | | | | |
| Caucasian/White | 64.9 | 68.7 | 62.0 | 77.4 | 75.3 | 68.2 |
| Black/African American | 27.0 | 25.4 | 24.0 | 19.4 | 17.3 | 22.6 |
| Other Non-White* | 5.4 | 1.5 | 5.8 | -- | 7.4 | 4.7 |
| Hispanic/Latino | 2.7 | 4.5 | 8.3 | 3.2 | -- | 4.5 |
| Age (n=339) | | | | | | |
| 18 - 24 | 13.5 | 3.0 | 8.2 | 16.1 | 24.4 | 12.4 |
| 25 - 34 | -- | 7.5 | 6.6 | 19.4 | 14.6 | 9.1 |
| 35 - 44 | 21.6 | 11.9 | 18.9 | 22.6 | 24.4 | 19.5 |
| 45 - 54 | 32.4 | 22.4 | 25.4 | 16.1 | 28.0 | 25.4 |
| 55 - 64 | 13.5 | 22.4 | 25.4 | 12.9 | 6.1 | 17.7 |
| 65 and Older | 18.9 | 32.8 | 15.6 | 12.9 | 2.4 | 15.9 |
| Average Age (in Years) | 50.1 | 56.4 | 50.4 | 42.5 | 38.2 | 47.9 |

*All other non-White (including multi-racial)

Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Education, Employment, and Income

HDWD 2010 survey participants were asked about their level of education attainment. About twenty percent (20.2%) of participants reported having earned less than a high school diploma and more than 40% listed high school as their highest level of education (40.8%). Overall, 16.6% of participants graduated from college.



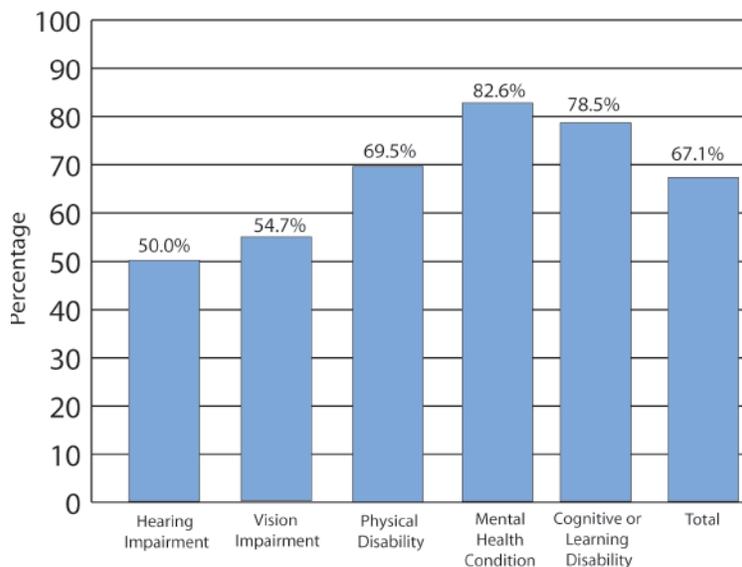
Individuals with hearing impairments reported having earned the highest percentage of college degrees (24.3%) followed by adults with vision impairments (22.7%). Delawareans with cognitive or learning disabilities were the group least likely to have graduated from college (8.1%).

HDWD 2010 survey participants were also asked about their employment status. Only 34.2% of participants said they were employed. A large minority reported they were either unemployed (15.5%) or were unable to work (27.4%). Individuals with mental health conditions reported the highest unemployment rate (29.0%). Individuals with hearing impairments reported the highest employment rate (48.6%), followed by individuals with cognitive or learning disabilities (46.9%).

Participants in the HDWD survey showed a relatively low educational level (61% reported a high school diploma or less), a majority were unemployed or unable to work, and more than half of the participants earned less than \$15,000 a year.

Survey participants also reported on their annual income. More than half (54.7%) of participants reported earning less than \$15,000 a year. This number was highest for people with mental health conditions (78.3%), followed by people with cognitive disabilities or learning disabilities (71.4%). Figure 3 illustrates the percentage of respondents with yearly household incomes of less than \$25,000 for each disability group.

Figure 3. Percent of survey respondents reporting annual household income less than \$25,000, by primary disability



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

General Health and Secondary Health Conditions

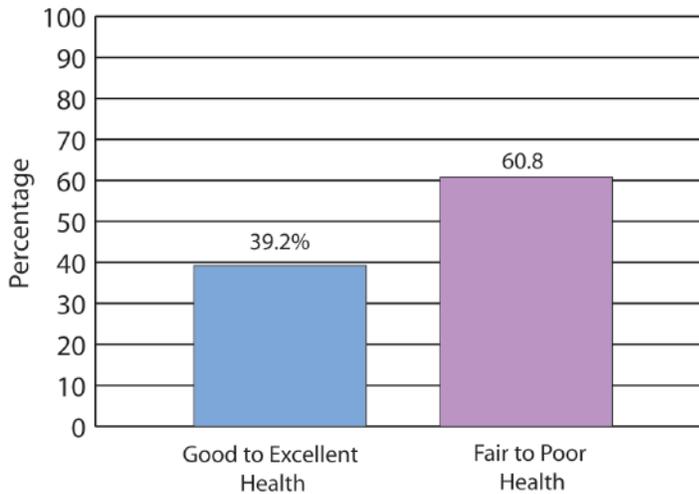
Health Status

A majority of survey participants felt that their general health was “fair” to “poor” and almost 47% could not participate in their usual activities in the last month because of poor health.

Respondents were also asked about their health. Almost 40% said their health was “good” to “excellent,” while more than 60% felt their health was “fair” to “poor” (see Figure 4). In the general Delaware population, only 13.0% described their health as “fair” to “poor.”⁵ Individuals with mental health conditions (80.6%) and individuals with physical disabilities (73.8%) were more likely to say their health was “fair” to “poor” than individuals in any other group (see Figure 5).

For 46.4% of respondents, poor health prevented them from going about their usual activities during the 30 days prior to the interview. Again, respondents with physical disabilities and mental health conditions were the most likely to say that their condition affected their usual activities (64.8% and 61.3% respectively).

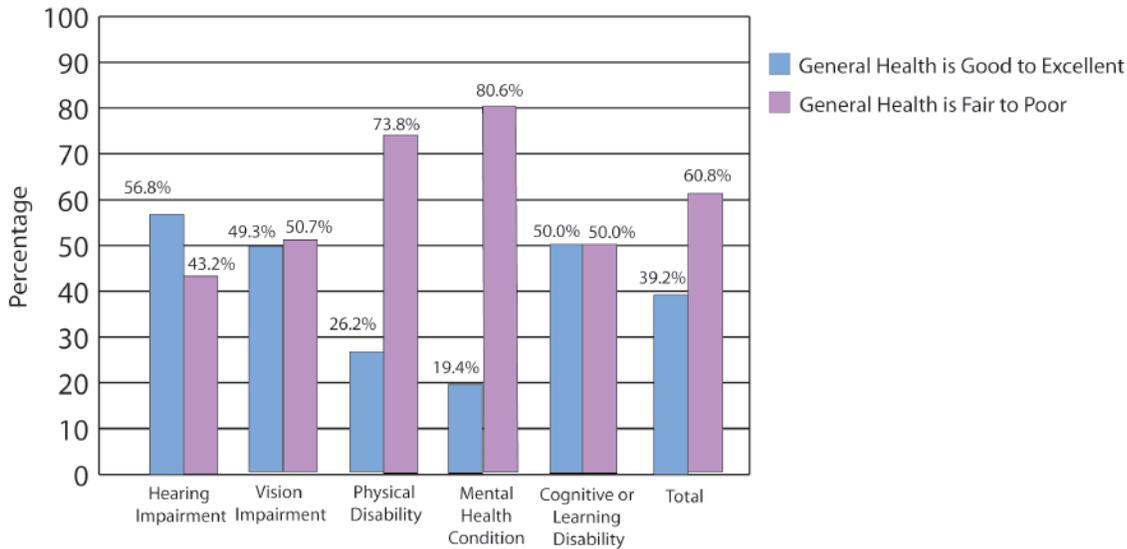
Figure 4. Perceived health status of survey respondents



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³



Figure 5. Self-reported health status of survey respondents, by primary disability



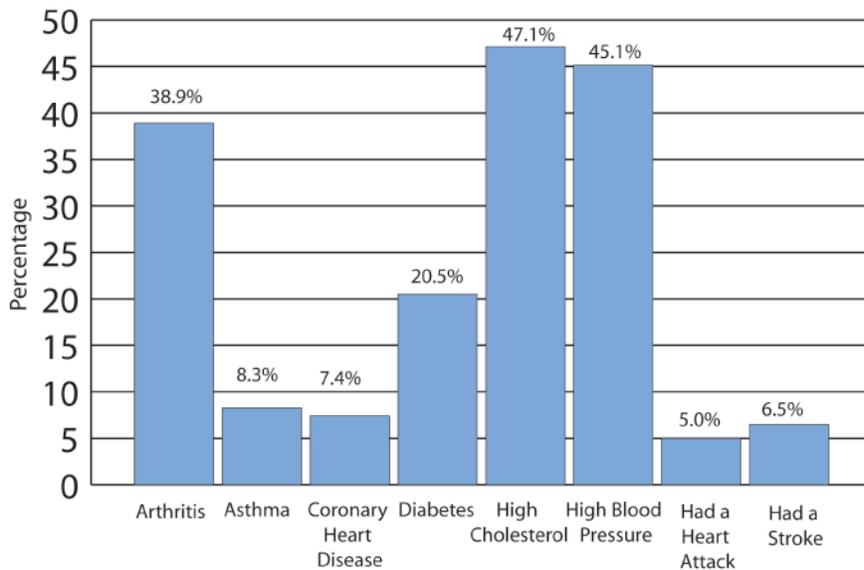
Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Secondary Health Conditions

Survey participants were asked about a variety of secondary health conditions. Secondary health conditions are physical, mental, or social disorders that can be prevented. They can occur as a direct or indirect result of a primary disability or health condition. Secondary health conditions reported in this survey include high cholesterol, high blood pressure, heart conditions, diabetes, asthma, and arthritis (see Figure 6).

High blood pressure, high cholesterol, arthritis, and diabetes were significant health issues and were more prominent among the survey participants than among the general Delaware population.

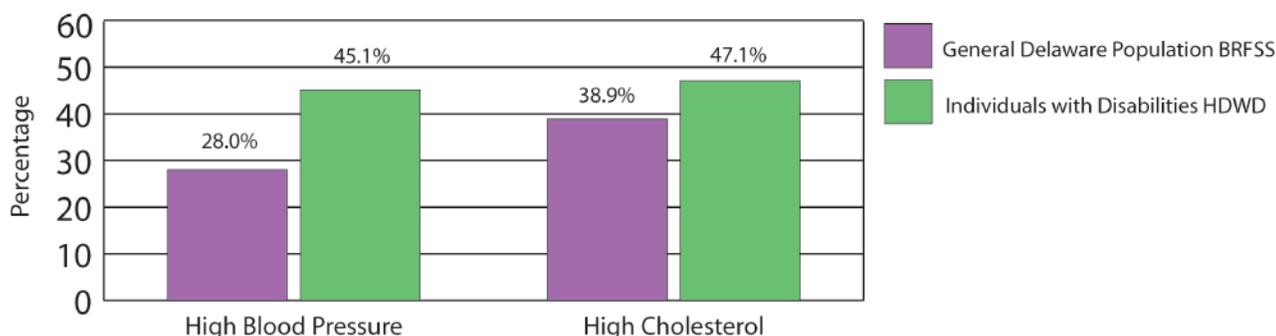
Figure 6. Secondary health conditions of survey respondents



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

According to the American Heart Association, nearly one in three U.S. adults has high blood pressure.⁶ Also, 36.6 million Americans have cholesterol levels of 240mg/dL, which is considered high cholesterol. Both conditions increase the risk for heart disease and stroke. In this survey, 47.1% of participants reported having high cholesterol and 45.1% reported having high blood pressure. In contrast to individuals with disabilities, only 28.0% of the general Delaware population reported high blood pressure and only 38.9% stated that they have high cholesterol (see Figure 7).

Figure 7. Comparison of percent of high cholesterol and high blood pressure rates in the general Delaware population and Delawareans who participated in the HDWD survey

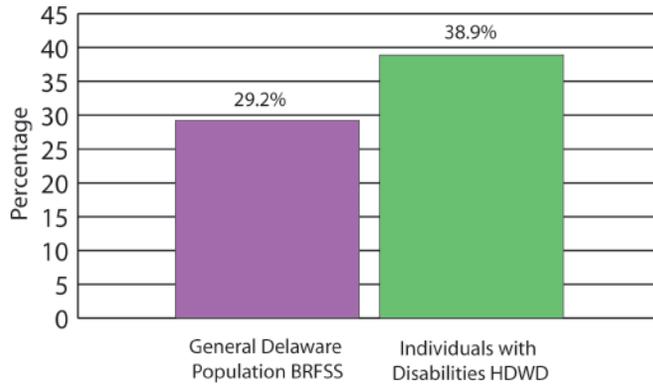


Sources: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware;³ Centers for Disease Control and Prevention, Delaware BRFSS Data 2005⁵

Problems with high cholesterol and high blood pressure were most prominent among respondents with vision impairments, the group with the oldest average age of any of the respondent groups. Individuals with cognitive and learning disabilities, the group with the youngest reported age of disability specific groups, reported the lowest rates of high cholesterol and high blood pressure.

Survey participants were also asked if they had arthritis. According to the BRFSS 2005, 29.2% of the overall Delaware adult population has arthritis.⁵ Of all HDWD 2010 respondents 38.9% reported that they have arthritis. Individuals with physical disabilities were most likely to report they have arthritis followed by individuals with vision impairments. People with cognitive or learning disabilities were least likely to report having arthritis. Because the group of individuals with vision impairments is the oldest age group in the survey and individuals with cognitive or learning disabilities is the youngest, the larger number of individuals reporting arthritis may describe age rather than disability status. Figure 8 illustrates the arthritis rates for the general Delaware population (BRFSS data) and for people with disabilities.

Figure 8. Comparison of percent of arthritis rates in the general Delaware population and Delawareans who participated in the HDWD survey

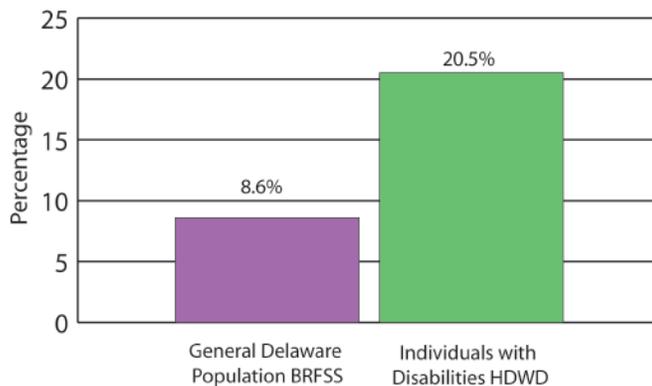


Sources: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware;³ Centers for Disease Control and Prevention, Delaware BRFSS Data 2005⁵

Diabetes is another common secondary health condition. Of the HDWD 2010 survey participants 20.5% of participants reported they have diabetes. The 2005 BRFSS data indicated that 8.6% of the Delaware population has diabetes (Figure 9). Of the individuals who reported they have diabetes, a majority (68.7%) indicated they check their blood sugar levels at least once a day. However, the groups of individuals with hearing impairments (50.0%) and vision impairments (47.8%) are less likely to check their levels daily than individuals in other disability groups.

HDWD 2010 survey participants were also asked if they have ever had or currently have asthma. Among the survey respondents, 8.3% reported that their doctor or health care provider told them they have asthma. This is similar to the 8.5% reported level of asthma for the general Delaware population from the BRFSS 2005 survey.⁵

Figure 9. Comparison of percent of diabetes rates in the general Delaware population and Delawareans who participated in the HDWD survey



Sources: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware;³ Centers for Disease Control and Prevention, Delaware BRFSS Data 2005⁵

HDWD 2010 survey respondents were also asked if they have heart disease or if they ever had a heart attack or stroke. Of the sample for this survey, 7.4% reported having had coronary heart disease, 5.0% reported having had a heart attack in their lifetime, and 6.5% reported having had a stroke.

Lifestyle and Preventative Health Care

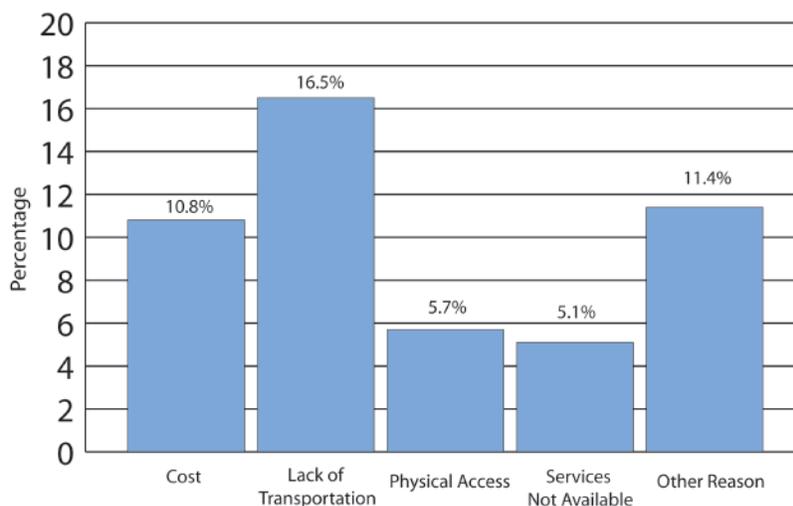
The HDWD 2010 survey also collected information about the lifestyles and health care issues of individuals with disabilities. Survey questions asked about access to health care providers and services, barriers experienced in accessing care, exercise habits, drinking, smoking, and sexual behaviors.

Preventative Health Care and Access to Care

Almost all survey participants (97.0%) reported that they have a personal doctor or health care provider. Most (91.4%) also said that they had a routine checkup within the past year. Despite such a high number of participants having providers and receiving check-ups, participants also experienced challenges with services. Barriers that prevented individuals from visiting a health care provider included lack of transportation (16.5%), which was particularly true for individuals with mental health conditions, and cost of services (10.8%) (see Figure 10).

While most survey participants reported that they have access to health care providers and receive regular check-ups, some experienced challenges in accessing care, such as lack of transportation, cost of services, and inaccessible buildings and equipment.

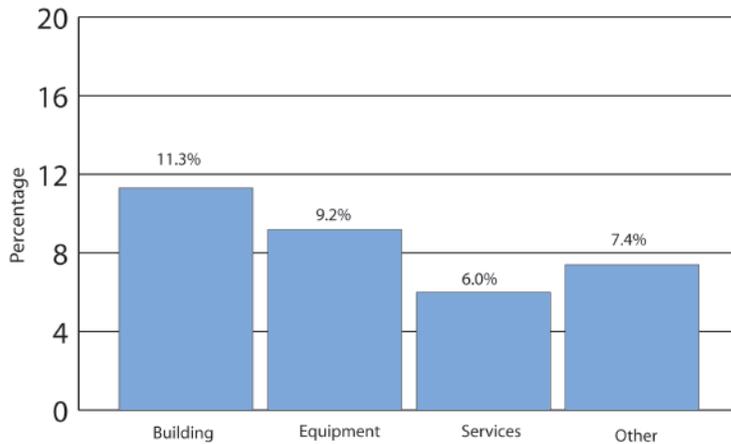
Figure 10. Barriers encountered by survey respondents when trying to see a doctor or other health care provider in the past year



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Access to buildings (11.3%) and equipment (9.2%), which was particularly true for individuals with physical disabilities, and the availability of services that were needed (6.0%), which was mostly reported by individuals with hearing impairments, also hindered visiting health care providers (see Figure 11).

Figure 11. Types of challenges encountered among survey respondents when seeking health care in the past year

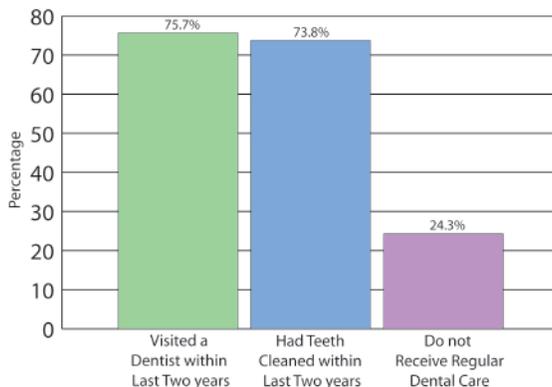


Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Participants were also asked about preventative dental visits. Participants were asked if and when they had last seen a dentist. A large majority (75.7%) said they had seen a dentist within the past two years, and 73.8% reported having had their teeth cleaned by a dentist or dental hygienist. These rates are similar to those from the 2004 BRFSS survey, in which 77.2% of the general Delaware population said that they had visited the dentist or dental clinic within the past year for any reason.⁷ Despite these promising findings, there were still almost a quarter (24.3%) of individuals with disabilities who reported not receiving regular dental care (see Figure 12).

Almost a quarter of survey respondents do not receive regular dental care.

Figure 12. Preventative dental care of survey respondents



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Preventative Men's and Women's Health

For prevention and early detection of some illnesses, it is important to conduct medical screenings, tests and exams on a regular basis. For men, the Prostate-Specific Antigen (PSA) test and the digital rectal exam are recommended to screen for prostate cancer. For women, clinical breast exams and mammograms are recommended to screen for breast cancer and the pap test (also called pap smear) is recommended to screen for cervical cancer. For both women and men over the age of 50 years, a colonoscopy or sigmoidoscopy is recommended to screen for colon cancer.

Recommendations about when and if men should have a PSA test or digital rectal exam vary; however, according to the National Cancer Institute (NCI), Medicare provides coverage for annual exams for men 50 years and older.⁸ In this survey, men age 39 and older were asked if they ever had a PSA test and digital rectal exam and when it occurred. More than half (57.5%) reported they had a PSA test and 69.7% said they had a digital rectal exam at some point in their lifetime (see Table 2). For most men, the PSA test (77.0%) and digital rectal exam (59.7%) were conducted within the past year.

Despite many women and men reporting that they receive preventative health care, more awareness about the importance of regular check-ups, such as Prostate-Specific Antigen (PSA) tests, pap smears, breast exams, and colonoscopies, is needed.

It is recommended by the American Cancer Society that women age 20 and older have clinical breast exams at least every three years and women age 40 and older every year.⁹ The U.S. Department of Health and Human Services (DHHS),¹⁰ the National Cancer Institute (NCI),¹¹ and the American Medical Association (AMA)¹² recommend screening mammograms every year for women age 40 and older. If there is a history of breast cancer in the family, clinical breast exams and mammograms may be recommended more frequently. In the HDWD 2010 survey, 81.1% of all women said that they have had a mammogram at some point in their lifetime and 89.8% reported that they have had at least one clinical breast exam in their lifetime (see Table 2). The groups least likely to have had a mammogram were women with mental health conditions (62.5%) and women with cognitive or learning disabilities (62.5%). While these numbers show that a large majority of women receive regular gynecological check-ups, they also illustrate that over 10% of women across disability groups have not received this preventative care.

Table 2. Preventative health care among survey respondents

| | Hearing Impairment (%) | Vision Impairment (%) | Physical Disability (%) | Mental Health Condition (%) | Cognitive or Learning Disability (%) | Total (%) |
|--|------------------------------|-----------------------------|-------------------------------|--------------------------------------|---|--------------|
| Men's Health* | | | | | | |
| Ever had a PSA Test (n=107) | 60.0 | 78.9 | 59.5 | 60.0 | 36.0 | 57.5 |
| Within Past Year | 88.9 | 86.7 | 68.2 | 66.7 | 77.8 | 77.0 |
| Within the Past 2 Years | -- | 6.7 | 22.7 | 16.7 | -- | 11.5 |
| Within Past 5 Years | 11.1 | -- | 4.5 | -- | 22.2 | 6.6 |
| 5 or More Years Ago | -- | 6.7 | 4.5 | 16.7 | -- | 4.9 |
| Ever had a Digital Rectal Exam (n=109) | 60.0 | 80.0 | 73.7 | 80.0 | 57.7 | 69.7 |
| Within Past Year | 77.8 | 56.3 | 58.3 | 44.4 | 64.3 | 59.7 |
| Within the Past 2 Years | 11.1 | 37.5 | 25.0 | 33.3 | 7.1 | 23.6 |
| Within Past 5 Years | 11.1 | -- | 16.7 | 11.1 | 7.1 | 9.7 |
| 5 or More Years Ago | -- | 6.3 | -- | 11.1 | 21.4 | 6.9 |
| Diagnosed with Prostate Cancer (n=113) | 6.7 | 5.3 | 2.4 | -- | 3.6 | 3.5 |
| Women's Health | | | | | | |
| Ever had a Mammogram (n=175) | 73.7 | 90.5 | 90.9 | 62.5 | 62.5 | 81.1 |
| Ever had a Clinical Breast Exam (n=175) | 94.7 | 90.5 | 90.9 | 93.8 | 81.8 | 89.8 |
| Ever had a Pap Test (n=152) | 100 | 95.2 | 89.4 | 93.8 | 84.8 | 91.4 |
| Within Past Year | 77.8 | 65.8 | 61.4 | 73.3 | 83.3 | 69.1 |
| Within the Past 2 Years | 16.7 | 10.5 | 17.5 | 6.7 | 8.3 | 13.2 |
| Within Past 5 Years | 5.6 | 13.2 | 8.8 | 20.0 | 4.2 | 9.9 |
| 5 or More Years Ago | -- | 10.5 | 12.3 | -- | 4.2 | 7.9 |

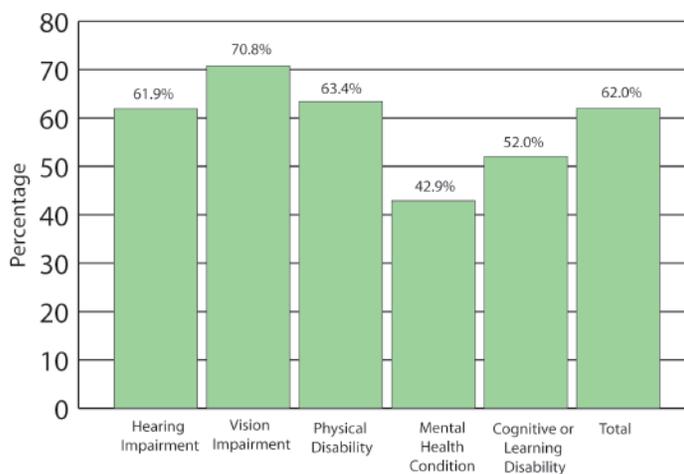
*Asked only of male survey respondents > 39 years old

Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

The U.S. Department of Health and Human Services recommends that women age 21 years and older have regular pap tests.¹³ Women respondents were asked if they have ever had a pap test and when it occurred. Of all women who answered this question, 91.4% reported that they have had a pap test at some point in their lifetime and 82.3% stated that they have had it within the past two years (see Table 2). For 17.8% of all women, the last pap test occurred five years ago or longer and almost 9% reported that they have never had a pap test.

Men and women who were 50 years and older were asked if they have ever had a colonoscopy or sigmoidoscopy to screen for colon cancer. Sixty-two percent (62.0%) of all men and women over 50 years in the HDWD 2010 survey reported they have had this test done at some point during their lifetime, 61.6% within the past two years (see Figure 13). In the 2004 Delaware BRFSS survey, 62.0% of the general Delaware population of men and women 50 years and older reported that they have had a colonoscopy or sigmoidoscopy done to screen for colon cancer.⁷ Almost 40% of both the general population and adults with disabilities reported that they do not receive colonoscopies as part of their preventative health care.

Figure 13. Percent of survey respondents who have ever had a sigmoidoscopy or colonoscopy



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Diet and Exercise Habits

Diet and exercise influence the overall health of individuals. The Centers for Disease Control and Prevention (CDC) recommend that people eat five servings of fruits and vegetables a day and that individuals participate in moderate-intensity activities such as a brisk walk for at least 30 minutes a day, five times a week, or participate in vigorous-intensity activities such as running on a treadmill or stair walking for at least 30 minutes a day, three days per week.

Respondents of the HDWD 2010 survey were asked about the amount of vegetables and fruits they eat per day and their exercising habits. Only 38.9% of respondents reported that they eat the recommended amount of fruits and vegetables. Also, 49.7% of survey participants stated that they engage in little to no physical activity on a regular basis and only 20.8% reported that they engage in sufficient physical activity. The groups least likely to participate in physical activities were individuals with physical disabilities (57.9%) and individuals with hearing impairments (54.5%).

Many of the HDWD 2010 participants (72.3%) reported they are overweight or obese. Individuals with vision impairments were most likely to report being overweight or obese (81.0%), followed by individuals with mental health conditions (77.4%), and people with hearing impairments (72.3%). When examining obesity alone, participants who have mental health conditions were most likely to be obese (48.4%) followed by individuals who have a cognitive or learning disability.

Though a majority of respondents reported that they are overweight or obese, only 38.3% reported that they have received advice from their doctors about their weight and only 53.7% stated that they are currently trying to lose weight. (See Table 3 for a summary of eating, physical activity, and weight characteristics of the HDWD 2010 respondents.)

Almost 50% of survey respondents do not engage in any type of physical activity.

At the same time, most participants are obese or overweight.

The majority of individuals with disabilities who participated in the HDWD survey do not eat enough fruits and vegetables.

Table 3. Eating habits, physical activity levels, and weight issues of survey respondents, by primary disability

| | Hearing Impairment (%) | Vision Impairment (%) | Physical Disability (%) | Mental Health Condition (%) | Cognitive or Learning Disability (%) | Total (%) |
|--|------------------------|-----------------------|-------------------------|-----------------------------|--------------------------------------|-----------|
| Weight Status* (n=328) | | | | | | |
| Neither Overweight nor Obese | 27.8 | 19.0 | 31.9 | 22.6 | 30.4 | 27.7 |
| Overweight | 41.7 | 42.9 | 26.1 | 29.0 | 25.3 | 31.1 |
| Obese | 30.6 | 38.1 | 42.0 | 48.4 | 44.3 | 41.2 |
| Received advice from Doctor about Weight (n=339) | | | | | | |
| | 27.0 | 34.3 | 37.7 | 35.5 | 48.8 | 38.3 |
| Physical Activity (n=312) | | | | | | |
| Meets CDC Recommendations for Physical Activity | 18.2 | 22.6 | 14.0 | 14.8 | 32.9 | 20.8 |
| Insufficient Activity to meet CDC Recommendations for Physical Activity | 27.3 | 25.8 | 28.1 | 48.1 | 28.9 | 29.5 |
| No physical activity | 54.5 | 51.6 | 57.9 | 37.0 | 38.2 | 49.7 |
| Weight Control | | | | | | |
| Currently Trying to Lose Weight (n=337) | 51.4 | 55.2 | 49.6 | 64.5 | 55.6 | 53.7 |
| Trying to Maintain Current Weight (n=338) | 70.3 | 86.6 | 66.9 | 83.9 | 70.7 | 73.7 |
| Changed Diet to Try to Lose or Maintain Current Weight (n=339) | 56.8 | 67.2 | 49.2 | 67.7 | 59.8 | 57.8 |
| Engaging in Physical Activity or Exercise to lower or keep from gaining weight (n=337) | 39.9 | 34.3 | 29.8 | 54.8 | 53.7 | 39.8 |
| Consumes the Recommended Daily Allowance of Fruits and Vegetables per Day** | 34.3 | 45.2 | 33.3 | 30.0 | 48.6 | 38.9 |

*Weight status is measured by the Body Mass Index (BMI); Formula: weight (lb) / [height (in)]² x 703

** >= 5 servings of fruits and vegetables per day

Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Smoking and Drinking Habits

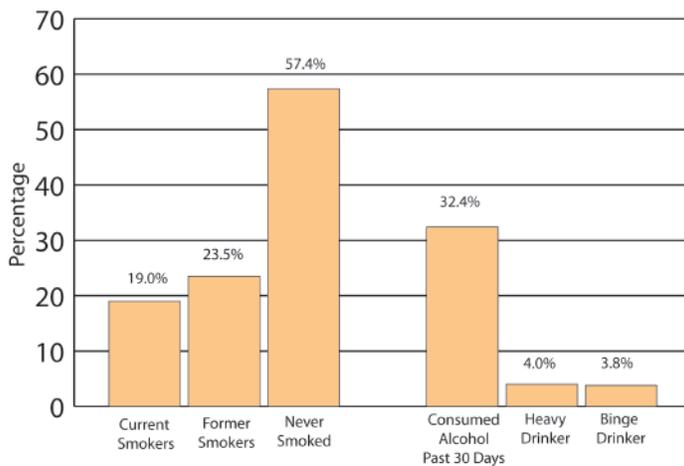
Smoking is associated with many health risks and may negatively affect a person’s health. Between 1997 and 2001, cigarette smoking caused 438,000 deaths each year and, on average, smoking reduced life expectancy by approximately 14 years.¹⁴ Most deaths of smokers occurred from lung cancer, chronic obstructive pulmonary disease, and heart disease.

Delaware 2005 BRFSS information found that 20.6% of the general Delaware population reported being smokers⁵, similar to the findings among Delawareans with disabilities. In the HDWD 2010 survey, 19.0% of all participants reported that they are smokers and 23.5% reported that they were former smokers (see Figure 14). Fifty-seven percent (57.4%) stated that they never smoked in their lifetime. Of all respondents who smoked, 47.8% reported that they tried to stop smoking for one or more days during the last year. Individuals with mental health conditions (45.2%), followed by individuals with hearing impairments (21.6%), were most likely to report that they were current smokers. Individuals with cognitive or learning disabilities (11.1%) and with vision impairments (12.1%) were least likely to report that they smoked.

Of all survey participants, 19% are current smokers though almost 49% of all smokers tried to quit smoking within the last year.

Drinking was less prominent in the survey sample than in the general Delaware population; however, drinking rates varied considerably for different disability groups.

Figure 14. Smoking status and alcohol consumption among survey respondents



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

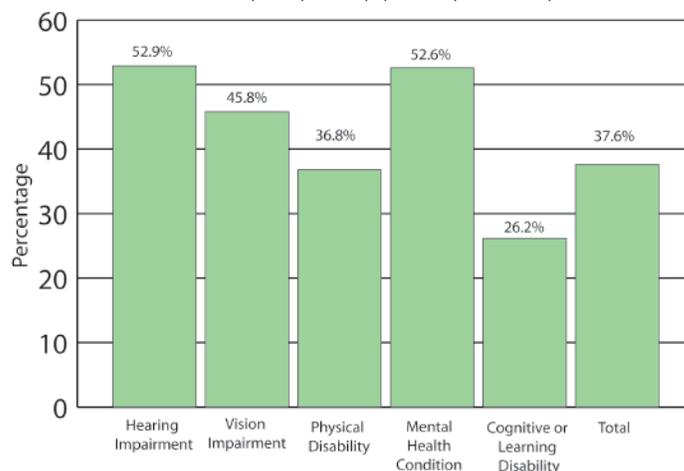
Delaware 2005 BRFSS data indicated that 57.0% of adults in the general Delaware population have had at least one alcoholic drink within the last 30 days.⁵ The percentage of individuals with disabilities in the HDWD 2010 survey reporting they had had at least one drink within the past 30 days was much smaller (32.4%) (see Figure 14). The percentages varied considerably among disability groups. Respondents with hearing (55.6%) and vision impairments (44.3%) were much more likely to report that they consumed at least one alcoholic drink in the past 30 days than individuals with mental health conditions (29.6%) and individuals with cognitive or learning disabilities (15.4%). Of all the adults who reported that they do drink occasionally, 3.8% reported that they binge drink (five or more alcoholic drinks on any one occasion). Binge drinking was much more prominent among individuals with hearing impairments (15.2%) than any other disability group.

Sexual Activity

Respondents of the HDWD 2010 survey were asked about their sexual activity. A total of 178 respondents (52.5% of the total sample) answered questions about their sexual history and activities. Of those 178, 37.6% reported that they had engaged in sexual activities in the past year, and 31.8% reported that they had at least one new partner within the past year. Approximately 58% of the respondents engaged in oral sex and 83.1% engaged in sexual intercourse. Individuals with mental health conditions (52.6%) and individuals with hearing impairments (52.9%) were most likely to report that they had engaged in sexual activities and individuals with cognitive or learning disabilities (26.2%) were least likely to report that they had engaged in sexual activities in the past year (see Figure 15).

Of all survey respondents who answered questions about their sexuality, 58% participated in oral sex and 83% had sexual intercourse. Only 33% used a condom during sexual activities.

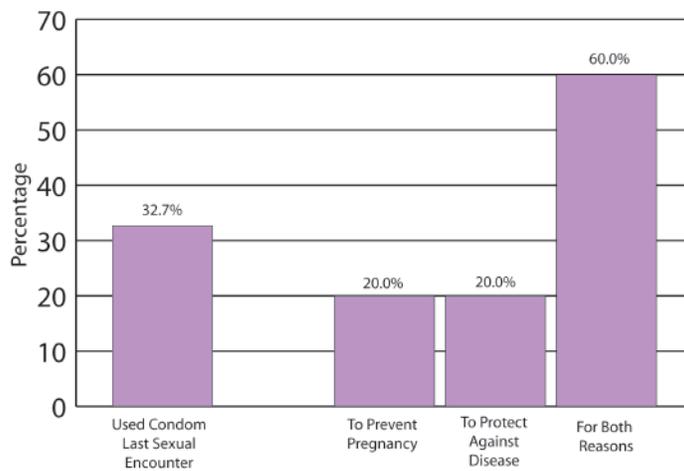
Figure 15. Percent of survey respondents who engaged in sexual activity in the past year, by primary disability



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Only 32.7% of respondents who reported being sexually active stated that they used a condom during their last sexual activity. Participants were asked why they used a condom or other protective device during their last sexual encounter. Twenty percent (20.0%) reported using condoms to prevent pregnancy, 20.0% to protect against diseases, and 60.0% reported both reasons (see Figure 16).

Figure 16. Percent of survey respondents who used a condom during their last sexual encounter and the reason(s) why



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Though only 32.7% of the sexually active HDWD 2010 respondents reported that they used a condom during sexual activities, 73.9% thought that condoms were “very effective” or “somewhat effective” in protecting against HIV.

HDWD 2010 survey participants were asked if they had ever been treated for sexually transmitted diseases. Of all respondents, 13.6% reported that they were treated for a sexually transmitted disease or infection within the past five years.

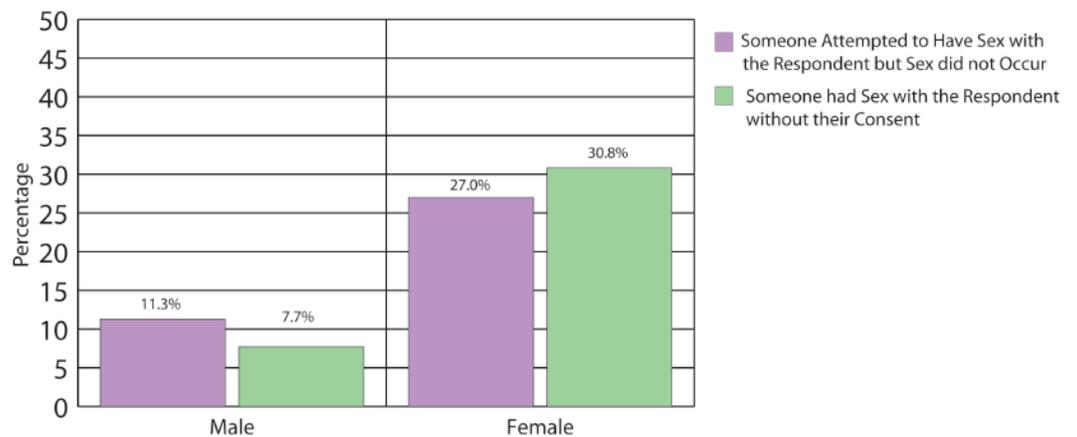
Sexual Assault

HDWD 2010 survey participants were asked if they were ever sexually assaulted or if someone ever attempted to sexually assault them. Of all male respondents, 11.3% reported that someone had attempted to sexually assault them, and 7.7% reported that someone had sex with them without their consent. Of all female respondents, 27.0% reported that someone had attempted to sexually assault them, and 30.8% reported that someone had sex with them without their consent (see Figure 17). These are much higher

30.8% of women reported that they were sexually assaulted and almost 8% of men reported that they were sexually assaulted.

percentages than for women in the general population. In the Delaware 2005 BRFSS survey, women age 18 years and older were asked if anyone had sex with them without their consent in their lifetime. Just fewer than twelve percent (11.8%) reported that someone had sex with them without their consent.¹⁵

Figure 17. Percent of survey respondents who have been a victim of sexual assault or attempted sexual assault in their lifetime, by gender



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

When examining sexual assault by primary disability category, respondents with mental health conditions were twice as likely to report that they had been sexually assaulted (41.4%) than any of the other disability groups (see Figure 18).

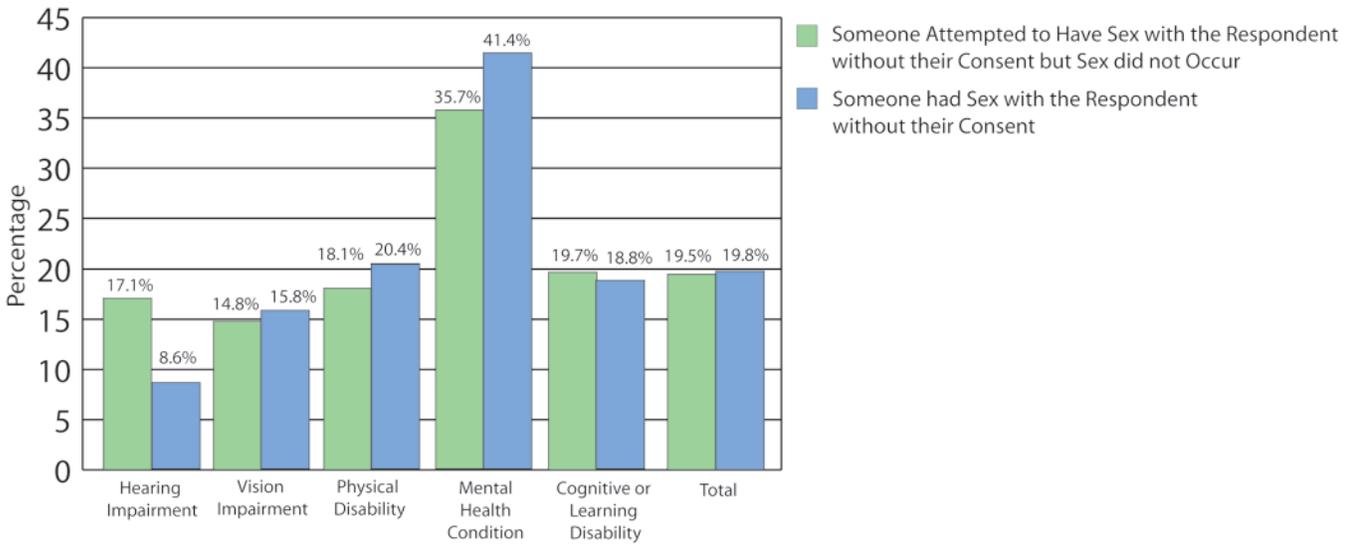
Most likely sexual perpetrators were acquaintances and neighbors followed by former significant others and complete strangers.

Individuals with hearing impairments were the least likely to report that they had been sexually assaulted (8.6%). Individuals with mental health conditions also were most likely to report that someone had attempted to sexually assault them (35.7%). Individuals with vision impairments were least likely to report that someone had tried to sexually assault them (14.8%).

Survey participants who reported attempted sexual assault and sexual assault identified a wide variety of perpetrators. Perpetrators included acquaintances, neighbors or other non-relatives (22.4%), former significant others (19.0%), and complete strangers (17.2%) (see Figure 19).

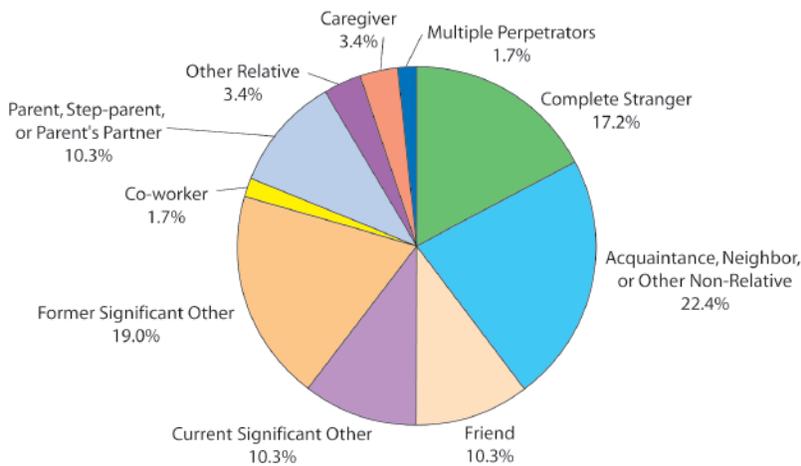


Figure 18. Percent of survey respondents who have been a victim of sexual assault or attempted sexual assault in their lifetime, by primary disability



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Figure 19. Relationship of perpetrator to survey respondent reporting that someone had sex or attempted to have sex with them without their consent in the past year



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

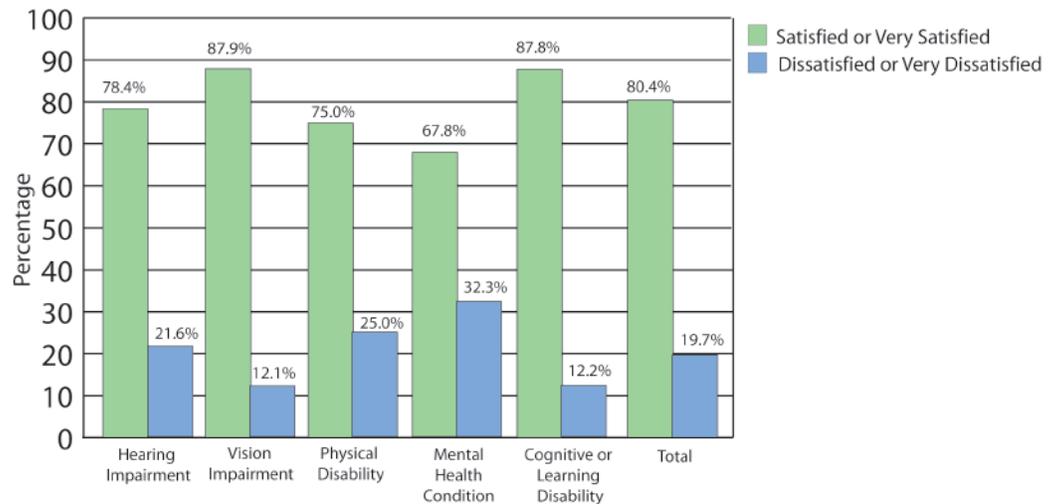
Wellness

Satisfaction with Life and Social-Emotional Wellbeing

The HDWD 2010 participants were asked questions about their satisfaction with their lives and the quality of their lives as individuals with disabilities. Survey participants were asked about their general life satisfaction; satisfaction with the social and emotional support they receive; how often they felt sad, anxious, and restless; and how often they were full of energy within a 30-day period.

The majority of survey respondents stated that they were “very satisfied” or “satisfied” with their lives (80.4%), but almost 20% reported that they were either “dissatisfied” or “very dissatisfied” with their lives (see Figure 20). Individuals with mental health conditions (32.3%) were most dissatisfied with their lives. Individuals with vision impairments (87.9%) and cognitive or learning disabilities (87.8%) were most satisfied with their lives.

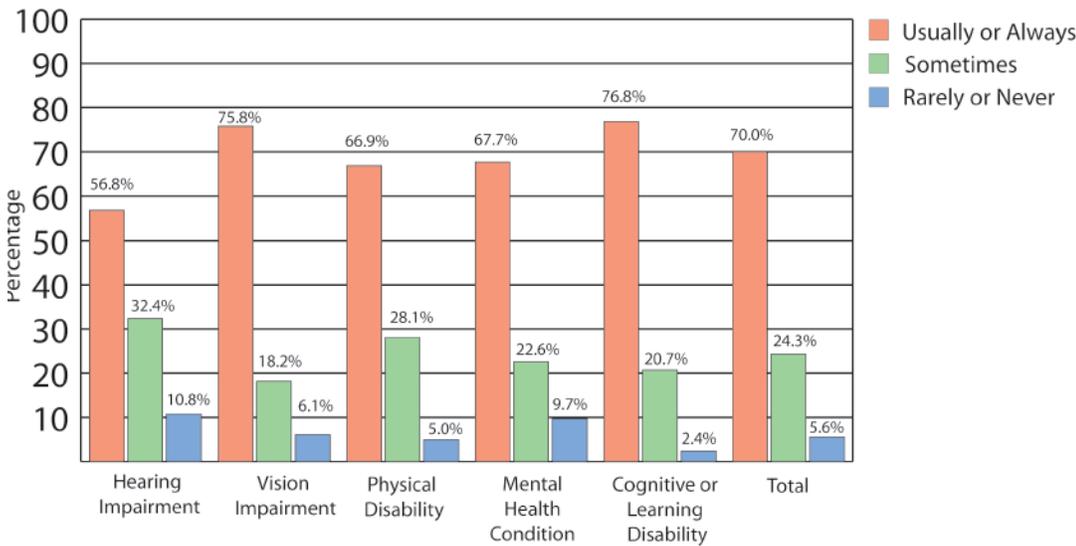
Figure 20. Life satisfaction among survey respondents, by primary disability



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

When asked about participants' social and emotional supports, such as having friends or relatives that provide support, 70.0% reported that they always or usually received the support they need, and 24.3% reported that they sometimes received the support they need (see Figure 21). A small percentage (5.6%) reported that they rarely or never received the social and emotional support they need. The groups that were most likely to report that they rarely or never received the supports they need were individuals with hearing impairments (10.8%) and individuals with mental health conditions (9.7%).

Figure 21. Frequency of social and emotional support received by survey respondents



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

On average, survey respondents felt healthy and full of energy on 16.3 days within a 30-day period. Respondents reported feeling sad or depressed on 6.7 days, worried and anxious on 8.2 days, and reported not getting enough rest or sleep on 9.6 days within a 30-day period. Individuals with mental health conditions and individuals with physical disabilities reported the highest occasions of feeling sad or depressed, worried or anxious, and not getting enough rest or sleep (see Table 4). People with cognitive or learning disabilities reported the highest number of days of feeling healthy and full of energy (22.3 days).

Table 4. Overall mood during the past 30 days among survey respondents

| | Hearing Impairment | Vision Impairment | Physical Disability | Mental Health Condition | Cognitive or Learning Disability | Total |
|--|--------------------|-------------------|---------------------|-------------------------|----------------------------------|-------|
| Average Number of Days felt Sad, Blue or Depressed (n=310) | 6.8 | 5.3 | 7.4 | 12.1 | 4.4 | 6.7 |
| Average Number of Days felt Worried, Tense, or Anxious (n=314) | 6.1 | 7.7 | 9.8 | 10.9 | 6.0 | 8.2 |
| Average Number of Days did not get Enough Rest or Sleep (n=320) | 9.3 | 7.9 | 11.3 | 11.9 | 7.3 | 9.6 |
| Average Number of Days felt Healthy and Full of Energy (n=312) | 19.6 | 15.8 | 12.6 | 12.4 | 22.3 | 16.3 |

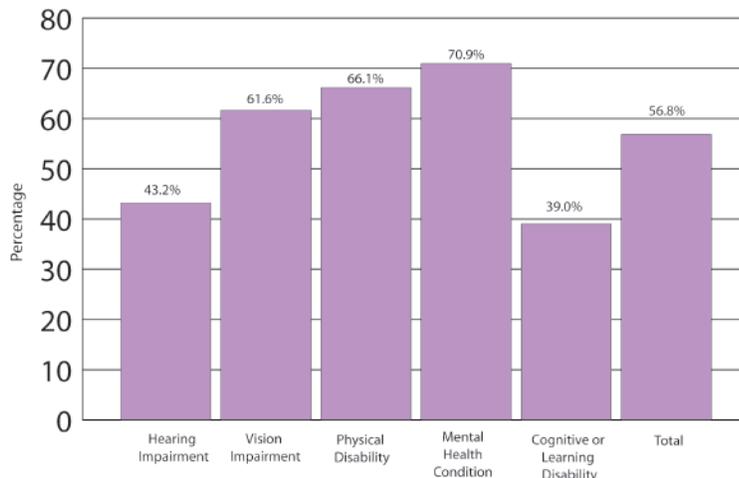
Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Thinking About Disability

Almost 57% of survey respondents think either constantly or at least once a day about their disability.

Survey respondents were asked if and how often they think about their disabilities (see Figure 22). A large number of participants reported that they think either constantly (30.8%) or at least once a day (26.0%) about their disabilities. Only 18.4% reported that they never think about their disabilities. The group that thinks the most about their disability (constantly or at least once a day) is individuals with mental health conditions (70.9%).

Figure 22. Percent of survey respondents who think about their disability at least once a day, by primary disability



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Perceptions About How One Was Treated by Others

HDWD 2010 survey participants were asked how they felt others at work or at health care providers treated them because of their disability. Of all respondents, 80.5% stated that they were treated the same as others or better than others at work, and 81.0% felt that this was also true when seeking health care (see Table 5). On the other hand, 8.5% of participants felt that they were treated worse at work and when seeking health care. Individuals with mental health conditions were most likely to feel that they were treated worse than others at work (33.3%) or when seeking health care (16.7%).

Table 5. Survey respondents' perceptions of how they were treated at work or when seeking health care

| | Hearing Impairment (%) | Vision Impairment (%) | Physical Disability (%) | Mental Health Condition (%) | Cognitive or Learning Disability (%) | Total (%) |
|---|------------------------------|-----------------------------|-------------------------------|--------------------------------------|---|--------------|
| At Work (n=118) | | | | | | |
| Worse than Others | 12.5 | -- | 12.5 | 33.3 | 2.6 | 8.5 |
| The Same as Others | 81.3 | 78.3 | 53.1 | 33.3 | 55.3 | 61.0 |
| Better than Others | 6.3 | 13.0 | 18.8 | 11.1 | 31.6 | 19.5 |
| Worse than Some/ Better than Others | -- | 8.7 | 15.6 | 22.2 | 10.5 | 11.0 |
| When seeking Health care (n=321) | | | | | | |
| Worse than Others | 12.1 | 6.2 | 7.0 | 16.7 | 6.4 | 8.1 |
| The Same as Others | 66.7 | 58.5 | 58.3 | 50.0 | 48.7 | 56.1 |
| Better than Others | 18.2 | 30.8 | 22.6 | 13.3 | 30.8 | 24.9 |
| Worse than Some/ Better than Others | 3.0 | 4.6 | 12.2 | 20.0 | 14.1 | 10.9 |

Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Survey participants were also asked if they experienced any physical symptoms such as a headache, upset stomach, or pounding heart, or if they became emotionally upset as a result of how they were treated. In general, survey respondents reported that they experienced more emotional upsets than physical symptoms in response to the way they were treated. Sixty-one percent (61%) of participants reported that they had experienced emotional upset as a result of how others treated them and 40.4% said that they had experienced physical symptoms as a result of how others had treated them. However, the overall numbers of being physically or emotionally upset constantly or at least once a day were low (see Table 6).

Table 6. Frequency in which survey respondents experienced physical symptoms or emotional upset as a result of how they were treated in the past year

| | Hearing Impairment (%) | Vision Impairment (%) | Physical Disability (%) | Mental Health Condition (%) | Cognitive or Learning Disability (%) | Total (%) |
|--|------------------------|-----------------------|-------------------------|-----------------------------|--------------------------------------|-----------|
| Physical Symptoms (e.g., headache, stomachache) | | | | | | |
| Constantly | 5.7 | 3.3 | 1.8 | 3.4 | -- | 2.3 |
| At Least Once per Day | 2.9 | 1.6 | 7.1 | 6.9 | 5.6 | 5.2 |
| At Least Once per Month | 11.4 | 18.0 | 21.2 | 31.0 | 27.8 | 21.9 |
| At Least Once per Year | 2.9 | 8.2 | 11.5 | 27.6 | 9.7 | 11.0 |
| Never | 77.1 | 68.9 | 58.4 | 31.0 | 56.9 | 59.7 |
| Emotional Upset | | | | | | |
| Constantly | 6.1 | 3.3 | 6.0 | 6.9 | 1.3 | 4.4 |
| At Least Once per Day | -- | 3.3 | 9.4 | 6.9 | 8.0 | 6.7 |
| At Least Once per Month | 30.3 | 27.9 | 32.5 | 44.8 | 37.3 | 33.7 |
| At Least Once per Year | 18.2 | 14.8 | 20.5 | 20.7 | 8.0 | 16.2 |
| Never | 45.5 | 50.8 | 31.6 | 20.7 | 45.3 | 39.0 |

Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Care Needs

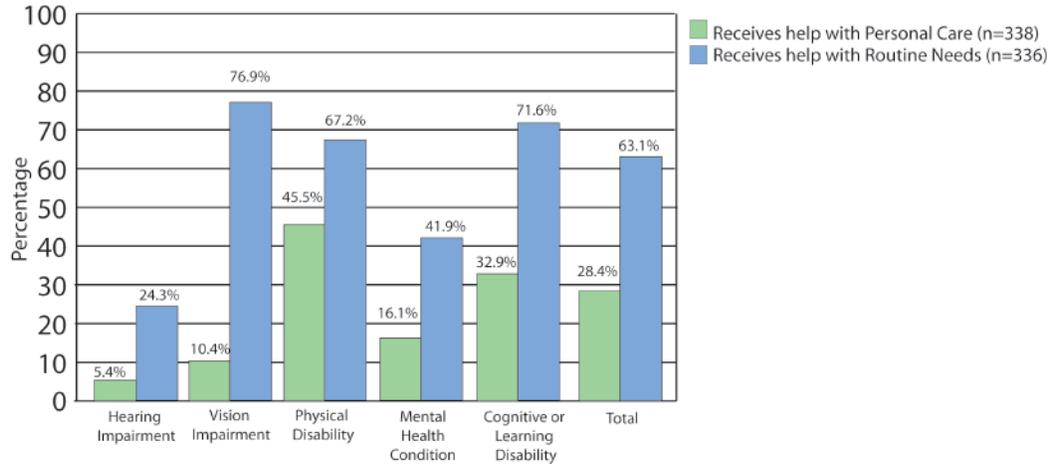
Care Needs

Almost thirty percent (28%) of participants need assistance with eating, bathing, and dressing and 63% receive assistance with routine tasks, such as household chores and shopping.

Many individuals with disabilities need help with their personal care such as eating, bathing, and dressing, or routine care such as household chores, shopping, and other necessary business (see Figure 23). Over twenty-eight percent (28.4%) of the HDWD 2010 sample received assistance with personal care and 63.1% received assistance with routine care. Individuals with physical disabilities were most likely to report that they receive help with personal care (45.5%) followed by people with cognitive or learning disabilities (32.9%). Three of the disability groups reported relatively high numbers of receiving help with routine care; 76.9% of individuals with vision impairments, 71.6% of individuals with cognitive or learning disabilities, and 67.2% of individuals with physical disabilities.



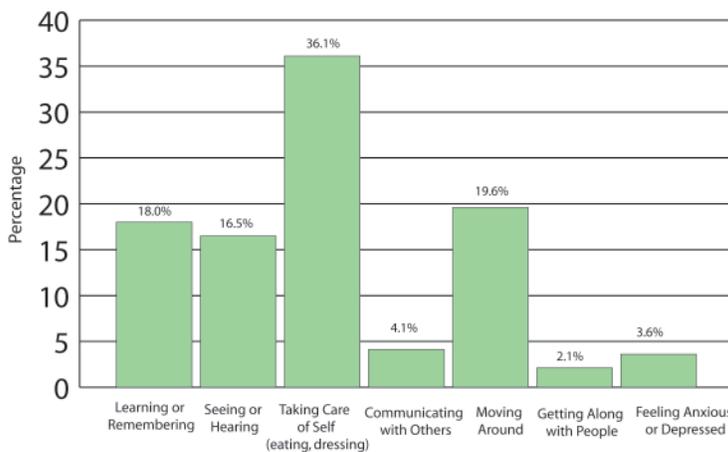
Figure 23. Percent of survey respondents who received help with personal and routine care, by primary disability



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

HDWD 2010 survey respondents were also asked about the specific tasks, activities, or skills for which they needed help (Figure 24). Respondents reported that they needed the most help with self-care, such as eating and dressing (36.1%), followed by moving around (19.6%), learning and remembering (18.0%), and seeing and hearing (16.5%). Other needs that survey respondents identified were communicating with others, feeling anxious or depressed, and getting along with others.

Figure 24. Survey respondents' perceptions of what they need the most help with



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

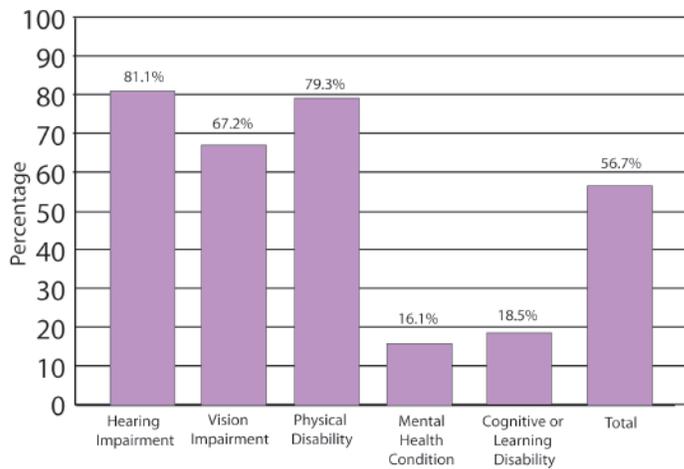
Equipment

According to the Delaware 2005 BRFSS survey, 6.1% of the general population in Delaware needs some form of equipment or device due to a health problem.⁵ In the BRFSS retrospective analysis, it was found that 5.7% of Delaware’s adult population needs to use special equipment as a result of one or more health problems.⁴ When examining different subgroups of the population, the retrospective analysis found that 26.0% of all adults who said that their activities were limited due to a health problem also needed special equipment.

Almost 57% of participants need special equipment to help them with their disability.

In the HDWD 2010 survey, 56.7% of respondents reported that they needed special equipment due to an impairment (see Figure 25). Individuals with hearing impairments (81.1%), individuals with physical disabilities (79.3%), and individuals with vision impairments (67.2%) were much more likely to report that they required special equipment due to their disability than individuals with cognitive or learning disabilities (18.5%) and individuals with mental health conditions (16.1%).

Figure 25. Current requirements for the use of special equipment, by primary disability



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

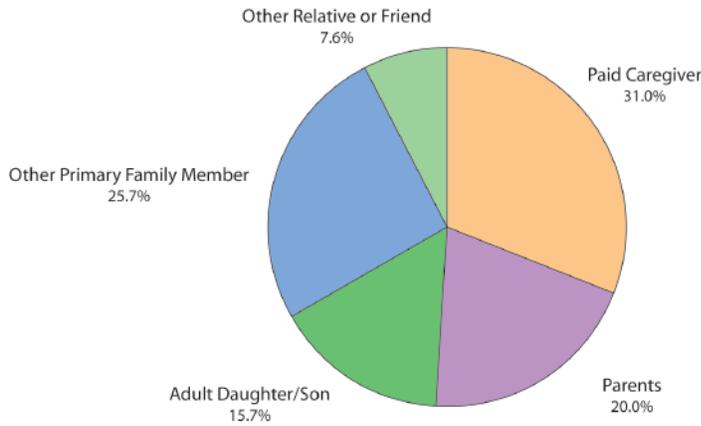
Caregiver Needs

Caregiver Demographics

Many individuals with disabilities rely on someone to assist and support them with personal and routine care needs. Caregivers range from family members, friends, and neighbors to professionals. The HDWD 2010 survey found that the majority of the caregivers supporting respondents of this survey were family members such as parents, adult children, and other primary family members (61.4%), followed by paid professional caregivers (31.0%), and other relatives or friends (7.6%). Figure 26 illustrates who the caregivers are and how they are divided by subgroups of family members and paid professionals.

Most caregivers for individuals with disabilities who participated in this survey were family members followed by paid professional caregivers.

Figure 26. Relationship of person who assists survey respondent needing personal assistance



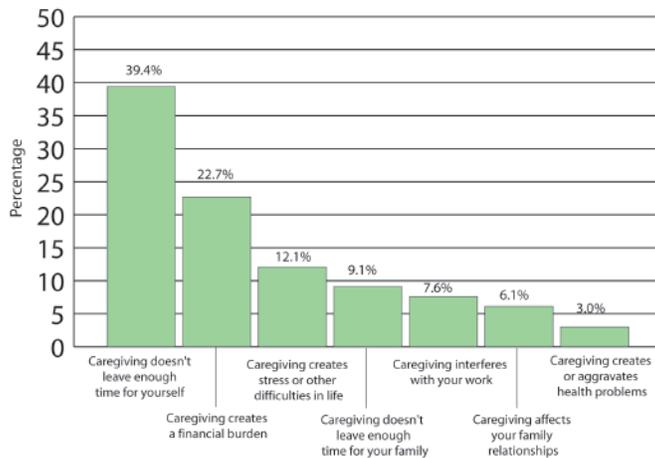
Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³

Caregiver Challenges

As part of the Health Delawareans with Disabilities 2010 survey, interviewers invited caregivers who were present at the time of the interview to answer questions about caregiving. A total of 66 caregivers agreed to answer questions about their caregiving activities. The challenge most often mentioned was that caregiving does not leave enough time for oneself (39.4%), followed by the financial burden that caregiving creates (22.7%). The stress that accompanies caregiving was mentioned by 12.1% of caregivers (see Figure 27).

Caregivers experience a lack of time for themselves, financial burden, and stress when providing care to individuals with disabilities.

Figure 27. Greatest difficulties reported by caregivers of survey respondents



Source: 2006 Healthy Delawareans with Disabilities 2010 Survey; Center for Applied Demography and Survey Research, University of Delaware³



Recommendations



The following recommendations are based on information collected for the HDWD 2010 survey. Despite the fact that this data is not population-based, this report indicates that significant disparities most likely exist in important areas of the health status of individuals with disabilities compared to the general population. This survey includes adults with a broader variety of disabilities than the annual BRFSS survey. For these reasons, this data and related information should be widely distributed to and studied by all public and private agencies and health care providers involved in the delivery of health care and preventative health services to Delawareans with disabilities. This consideration should include health care and human service organizations and providers who exclusively serve individuals with disabilities and those who serve both individuals with and without disabilities. The recommendations provided offer guidance and insight into helping adults with disabilities improve their ability to lead healthier lives.

Many of the recommendations can be accomplished within existing programs and resources available to the general public. The crafted recommendations need to be coordinated across health care service providers, human service providers, advocacy agencies, and direct service providers who work with persons with disabilities. These recommendations need to be implemented with the consultation of persons with disabilities and their families.

1. Develop a five year health and wellness plan for adults with disabilities in collaboration with the Governor's Commission on Community-Based Alternatives for Individuals with Disabilities and the HDWD 2010 Advisory Panel.
2. Review health and wellness education, awareness, and prevention materials available from state agencies, health providers, hospitals, and other health care sources and ensure that the materials are available in formats that are accessible to all persons with disabilities.
3. Educate physicians and other health care providers about the importance of addressing secondary health conditions with persons with disabilities, preventing secondary health conditions, and monitoring persons with disabilities who are at risk for or have secondary health conditions.
4. Create a grant program for health care facilities to ensure physical and information accessibility of services for all persons with disabilities.
5. Develop and implement a pilot program to make dental care services available to all individuals with disabilities.



6. Support the general health care prevention initiatives of the Division of Public Health and work with the Division to ensure that disability specific information is included in prevention education materials.
7. Provide education and grant funding for local recreation and parks offices and private fitness centers to ensure that all recreation and fitness programs are accessible to persons with disabilities.
8. Develop and implement disability specific prevention education programs to address risky health behaviors, including smoking, drinking, and unprotected sex.
9. Develop and implement health prevention education programs for direct support professionals and family caregivers.
10. Develop and implement disability specific health education programs to address health concerns specific to a disability group.
11. Develop a mandatory certification and credentialing process for direct support professionals.
12. Support the effective implementation of respite care programs for families of persons with disabilities.
13. Develop and implement a systematic data collection and analysis process, such as the State's Behavioral Risk Factor Surveillance System (BRFSS), to identify the comprehensive health and prevention needs of persons with disabilities.
14. Support the effective implementation of the Delaware Medicaid Buy-In program.



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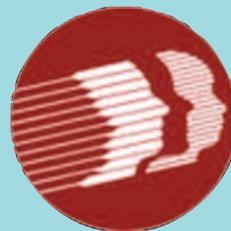
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