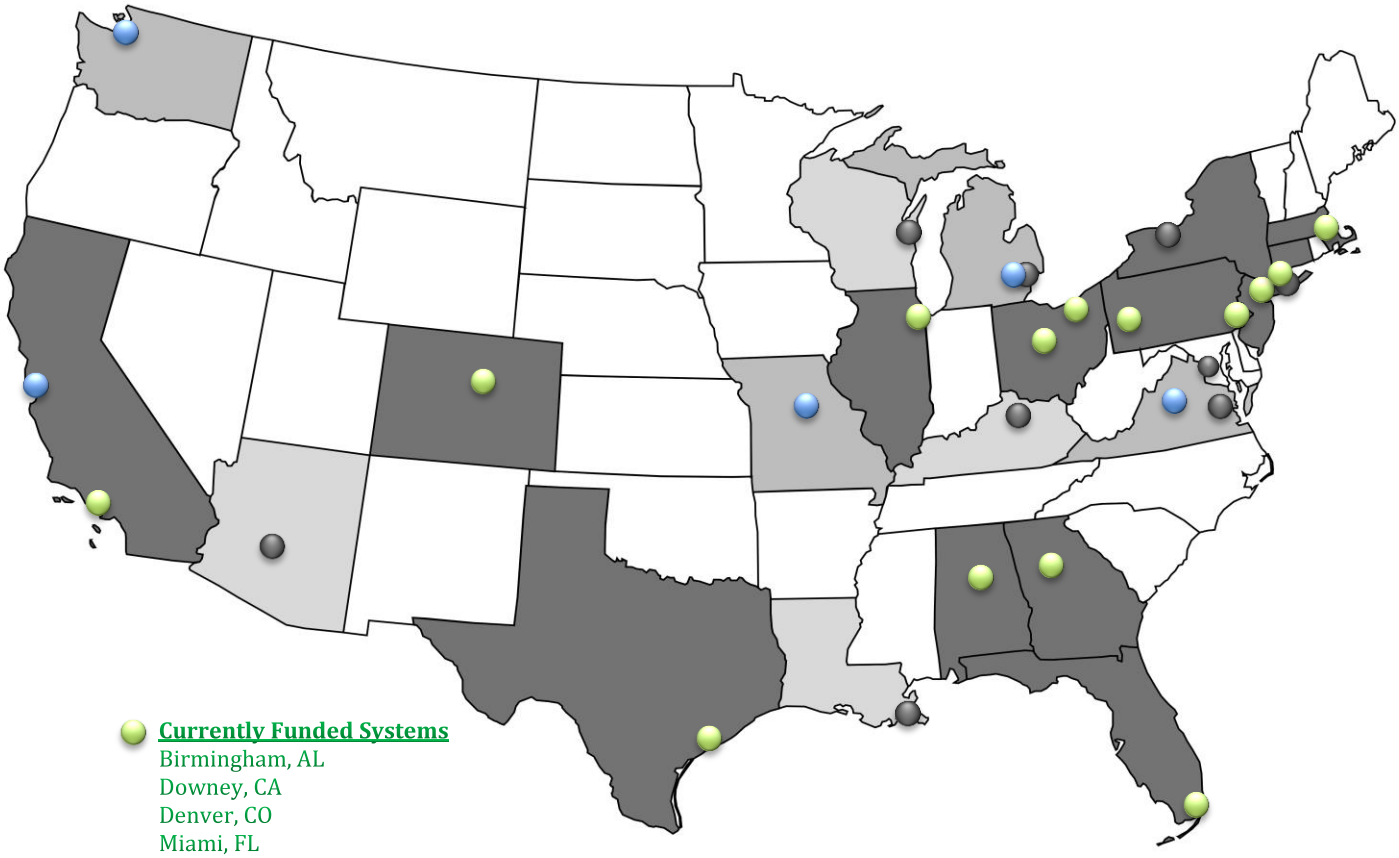
NSCISC National Spinal Cord Injury Statistical Center

Spinal Cord Injury Model Systems

2021 Annual Report – Complete Public Version



Currently Funded Systems
Birmingham, AL
Downey, CA
Denver, CO
Miami, FL
Atlanta, GA
Chicago, IL
Boston, MA and CT
West Orange, NJ
Mount Sinai, NY
Cleveland, OH
Columbus, OH
Philadelphia, PA
Pittsburgh, PA
Houston, TX

Form II Collection
San Jose, CA
Ann Arbor, M
Columbia, MO
Fishersville, VA
Seattle, WA

Previously Funded Systems
Phoenix, AZ
NRH, DC
Louisville, KY
New Orleans, LA
Detroit, MI
NYU, NY
Rochester, NY
Richmond, VA
Milwaukee, WI

1970–2020 50 SCIMS Spinal Cord Injury Model System Since 1970

NSCISC NATIONAL SPINAL CORD INJURY STATISTICAL CENTER

NATIONAL INSTITUTE ON DISABILITY, INDEPENDENT LIVING, AND REHABILITATION RESEARCH NIDILRR

THE 2021 ANNUAL STATISTICAL REPORT

COMPLETE PUBLIC VERSION

for the

SPINAL CORD INJURY MODEL SYSTEMS

This is a publication of the National Spinal Cord Injury Statistical Center, Birmingham, Alabama

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Part I

The National Spinal Cord Injury Statistical Center Activities

October 2016 – September 2021

The current grant cycle of the Spinal Cord Injury Model Systems (SCIMS) and the National Spinal Cord Injury Statistical Center (NSCISC) began on October 1, 2016 and ends on September 30, 2021. This report summarizes the activities pertaining to SCIMS data collection as well as database management and utilization that have occurred during the 5 year grant cycle. Data collection for the new cycle began September 1, 2021, 1 month before the end of the 2016 – 2021 grant cycle.

National SCI Statistical Center

In 1983, the University of Alabama at Birmingham's Department of Rehabilitation Medicine received federal grant funds to establish a national SCI data center. The UAB operation succeeded the National Spinal Cord Injury Data Research Center that served the Model SCI Care Systems Project between 1973 and 1981. Today, UAB's National Spinal Cord Injury Statistical Center (NSCISC) supervises and directs the collection, management and analysis of the world's largest spinal cord injury database. Organizationally, UAB's SCI Statistical Center is at the hub of a network of 14 federally-sponsored regional Spinal Cord Injury Model Systems located at major medical centers throughout the United States. In each of these settings, SCI Model System personnel collect and submit acute, rehabilitation and follow-up (viz. annual, long-term post-discharge) data on SCI patients who received care in the "System" following injury.

To assure comparability of data acquired by personnel in various centers, rigid scientific criteria have been established for the collection, management and analysis of information entered into the database. Moreover, the NSCISC staff has developed extensive quality control procedures that further enhance the reliability and validity of the database.

Model SCI Systems

Presently there are 14 systems and 5 follow-up centers sponsored by the National Institute on Disability and Rehabilitation Research, Office of Special Education and Rehabilitative Services, U.S. Department of Education:

Current Model Systems

- **Alabama**
  University of Alabama at Birmingham SCI Care System -- UAB Spain Rehabilitation Center
  Birmingham, AL (205) 934-3283
- **California**
  Southern California Spinal Cord Injury Model System -- Rancho Los Amigos National Rehabilitation Center, CA (562) 385-8111
- **Colorado**
  Rocky Mountain Regional SCI System -- Craig Hospital
  Englewood, CO (303) 789-8306
- **Florida**
  South Florida Spinal Cord Injury Model System -- University of Miami, Miami, FL (305) 243-4497
- **Georgia**
  Southeastern Regional Spinal Cord Injury Model System -- Shepherd Center, Inc.,
  Atlanta, GA (404) 352-2020
- **Illinois**
  Midwest Regional SCI Care System -- Shirley Ryan AbilityLab
  Chicago, IL (312) 238-2826
- **Massachusetts & Connecticut**
  Spaulding New England Regional Spinal Cord Injury Center -- Spaulding Rehabilitation Hospital, Boston, MA (617) 952-6174 and Gaylord Specialty Healthcare, Wallingford, CT (203) 679-3563
- **New Jersey**
  Northern New Jersey SCI System -- Kessler Institute for Rehabilitation and Kessler Foundation, West Orange, NJ (973) 324-3567
- **New York**
  Mount Sinai SCI Model System -- Department of Rehabilitation and Human Performance, Icahn School of Medicine at Mount Sinai

New York, NY (212) 241-3084

Ohio

- Northeast Ohio Regional Spinal Cord Injury System -- Case Western Reserve University Cleveland, OH (216) 778-8781
- Ohio Regional Spinal Cord Injury Model System -- Ohio State University, Wexner Medical Center, Columbus, Ohio (614) 366-3877

- **Pennsylvania**
  - Regional Spinal Cord Injury System of the Delaware Valley -- Thomas Jefferson University Hospital and Magee Rehabilitation Hospital
    Philadelphia, PA (215) 955-6579
  - University of Pittsburgh Model System on Spinal Cord Injury -- University of Pittsburgh
    Pittsburgh, PA (412) 232-7949

- **Texas**
  Texas Regional SCI System -- TIRR Memorial Hermann
  Houston, TX (713) 797-5972

Follow-up Centers

The following centers are former model systems and submit follow-up data.

- **California**
  Santa Clara Valley Medical Center, San Jose, CA (408) 885-4177

- **Michigan**
  University of Michigan, Ann Arbor, MI (734) 763-0971

- **Washington**
  Northwest Regional SCI System, University of Washington, Seattle, WA (800) 366-5643

- **Missouri**
  Columbia, Missouri (collected by NSCISC (205) 934-3283)

- **Virginia**
  Fishersville, Virginia (collected by NSCISC (205) 934-3283)

Former and Non-participating SCI Systems

Data from currently non-participating SCI systems (Phoenix, AZ; NRH, DC; Louisville, KY; New Orleans, LA; Detroit, MI; NYU, NY; Rochester, NY; Richmond, VA and Milwaukee) have been included.

For more information:

National Spinal Cord Injury Statistical Center
www.nscisc.uab.edu

Spinal Cord Injury Information Network
www.spinalcord.uab.edu

Model System Knowledge Translation Center - Spinal Cord Injury
www.MSKTC.org/sci

National Institute on Disability, Independent Living and Rehabilitation Research
https://www.acl.gov/programs/research-and-development

Publications

Publications by NSCISC investigators

In previous cycles, there were 126 peer-reviewed journal articles and 18 book chapters based in whole or in substantial part on the SCIMS database that were either authored or co-authored by NSCISC personnel. Citations for all of these articles and book chapters appear in previous reports and can be found at Database Publications.

Since the start of the current grant cycle, there have been 16 published peer-reviewed journal articles and 1 book chapter based in whole or substantial part on the SCIMS database authored or co-authored by NSCISC personnel. Citations for 15 of these articles appeared in previous reports. The citation for the latest publication is as follows:

1. Chen Y, Wen H, Griffin R, Roach MJ, Kelly ML. Linking individual data from the Spinal Cord Injury Model Systems center and local trauma registry: Development and validation of probabilistic matching algorithm. **Top Spinal Cord Inj Rehabil** 2020;26:221-231.

Publications by Non-NSCISC investigators

The NSCISC encourages the use of the database and is willing to provide any assistance necessary to those who conduct research using the SCIMS database. The NSCISC also appreciates being notified of any ongoing work and publications that involve the use of the NSCISC database. To the knowledge of the NSCISC, there have been 89 papers published using the SCIMS database with non-NSCISC authors prior to this cycle. Citations for all of these articles appear in previous reports and can be found at Database Publications.

Since the start of the current grant cycle, we are aware of 8 published peer-reviewed journal articles using the NSCISC database with non-NSCISC authors. Citations for each of these articles appear in previous reports.

NSCISC Web Site

The NSCISC public information web pages include Frequently Asked Questions, National SCI Database information, life expectancy calculator, intercultural resources, publications, and documents that are available free of charge to anyone in the world at any time via the internet. An analysis was done of the NSCISC domain using Google Analytics. Since May 2018, the NSCISC website averaged 1066 visits per month, 83% of which were first time visitors. The majority (82%) were from the Americas, 9% from Europe, 7% were from Asia, and the rest were from other continents.

In October 2020, there were roughly 3,700 links on the internet to one or more pages of the NSCISC web site. The number of links to the NSCISC site by other sites as well as the replication

of NSCISC data on other sites is a reflection of the value, usefulness, and clarity of the information offered by the NSCISC.

A Google search for “spinal cord injury” ranked UAB Spinal Cord Information Network website 15th in the list of top 20 websites among approximately 98 million results found. Other internet search engines such as Bing, list these UAB websites in the top 10-15 results when searching for keywords similar to “spinal cord injury statistics”. When using the narrower search for “national spinal cord injury statistics”, the NSCISC web site is number one and has related pages in the second and third results out of 8.3 million results listed by Google. Moreover, almost all of the top 20 “national spinal cord injury statistics” sites used data taken directly from the NSCISC website and for many of those sites the NSCISC statistical data were the only data provided.

Facts and Figures at a Glance reports demographic and high interest variables, such as cause of injury, occupational status, lifetime costs and life expectancy by categorical level of injury. The Journal of Spinal Cord Medicine publishes this report on a regular basis. The 2021 Facts and Figures is available in English and Spanish, along with historic Facts and Figures at a Glance, and have been archived on the NSCISC web site: Facts and Figures at a Glance.

Public versions of the NSCISC Annual Reports

The NSCISC edits Annual Statistical Reports for public use by removing the stratification of the data by SCIMS so that only aggregate information is published. Annual Reports for years 2020 – 2016, and end of cycle reports for 2011 and 2006, are available to the public on the NSCISC web site at NSCISC Reports.

Fact Sheets

The NSCISC is creating a set of informational fact sheets that summarize data and recent trends in spinal cord injury. The first of the set is entitled ‘Recent Trends in Causes of Spinal Cord Injuries’ and is posted for the public at https://www.nscisc.uab.edu/fact_sheets.aspx. This fact sheet is updated annually.

Quick Search Public Tools: Causes of SCI and Life Expectancy

To better serve NSCISC consumers, two new tools were made available for the public: Causes of SCI and Life Expectancy Calculator. ‘Causes of SCI’ is a quick search tool to find the leading causes of spinal cord injury over time. Consumers may sort the national database by type of report (full or condensed), multiple timeframes dating back to 1973, race/ethnicity, and gender. The total numbers represent injuries reported by 29 Spinal Cord Injury Model Systems and do not include causes of all injuries that occurred in the US. Life Expectancy is a quick search tool to provide an estimate for the life expectancy of a person with spinal cord injury who: is at least 2 years post-spinal cord injury, has access to good quality healthcare, is not on a ventilator and has not regained all normal feeling and movement, in which case life expectancy is considered the same as the general population.

Part II

Status of the National SCI Database: Tables 1-19

All data submitted to the NSCISC for this cycle by November 5, 2021 are included in this report. In brief, the Form I dataset includes baseline demographic and clinical information of persons who met eligibility criteria and the Form II dataset includes sociodemographic and outcome data of Form I participants obtained at follow-up. In 1987, the Registry dataset was created to store limited baseline information of persons who did not fully qualify for enrollment.

As of November 5, 2021, the National SCI Database contained information on 35,675 Form I participants and 129,132 Form II records successfully collected from 29,789 participants by phone, in person, by chart review, or by mailed survey. Records with no collected data (those deemed 'Lost to Follow-up') are not included in these tables. The combined total of Registry, Form I, and Form II records in the National SCI Database is 179,968 records. (***Table 1:*** **Total forms entered into the National SCI Database as of November 5, 2021*)***

Increase in the Number of Records: Tables 2 – 4

Table 2 reports the number of new records entered into the database since the last Annual Report on September 11, 2020. The number of Registry participants has increased by 421, the number of Form I records has increased by 943, and the number of Form II records has increased by 2,297 (excluding those deemed 'Lost to Follow-up').

Since the beginning of the 2016-2021 funding cycle, the number of Registry records has increased by 1,515, the number of Form I records has increased by 3,518, and the number of Form II records has increased by 12,156 (excluding those 'Lost to Follow-up') **(Table 3)**.

Table 4 presents the total number of Form I participants who were admitted to each System since October 2016 and the count and percentage of these participants who were admitted the day of or the day following the injury (classified as Day-1 Admissions). This information is provided because the reporting procedures implemented in November 1995 resulted in a substantial increase in the number of variables collected on participants who enter the System as Day-1 Admissions.

Nationally, 33.7% of participants admitted since October 2016 have been Day-1 Admissions. System percentages range from 83.2% to 0.0%.

Participants by Year of Injury and Year of Data Collection: Tables 5 – 9

The number of participants entered into the National SCI Database by both years of injury and System are depicted in **Tables 5 - 7**. These tables represent Registry, Form I, and Form I Day-1 admission records. Again, data for non-funded, non-Form II systems are included in 'Other.'

In December 1981, funding was suspended for the National SCI Data Research Center (NSCIDRC) in Phoenix, AZ. Its successor, the UAB-SCI Data Management Service, did not initiate formal operations until March 1, 1983. The decline in participants entered into the database in both 1981 and 1982 is undoubtedly the result of this interruption. The decline in participants enrolled in the National SCI Database since 1984 is the result of fewer Systems being funded by NIDILRR than in previous years.

Table 5 presents the number of Registry participants enrolled by System by year of injury. The data reflect the historical changes in the SCIMS program. In 1987, criteria for enrollment in the National SCI Database were changed by restricting eligibility to participants admitted to the System within 60 days of injury (the previous criterion was 1 year) and more narrowly defining System catchment areas. Because of this restriction, an additional Registry form was created to collect limited demographic data on those participants who no longer meet eligibility requirements for full data collection.

Variation in Form I participant enrollment is primarily due to three factors: number of funded Systems, eligibility criteria, and size of funded Systems (**Table 6**). The number of funded Systems changed in 1985, 1990, 2000, and 2006 (see chart immediately below) as a result of NIDDILR's competitive selection policy. Eligibility criteria were changed in 1987, restricting Form I enrollment, then in 2000, the eligibility criteria were changed to reflect pre-1987 requirements.

Years	1985-1990	1990-1995	1995-2000	2000-2006	2006-2011	2016-2021
# of Systems	13	13	18	16	14	14

'Date of Injury' and 'Date of Admission to System' data have been collected since 1973. **Table 7** reflects the Form I Day-1 admissions since then. New reporting procedures were implemented in 1995, leading to a substantial number of additional variables collected on participants who entered the System the day of or the day following their injury (Day-1 admissions).

Table 8 presents the total number of follow-up records in the database for each post-injury year, by System. Totals do not include the Form II records that are coded 'Lost to Follow-up.'
Table 9 presents the total number of follow-up records in the database for each post-injury year by calendar year of data collection. Prospective Form II follow-up data collection began in 1975, originally on a yearly basis. From 1996 through September 2000, Form II was collected in post-injury years 1, 2, 5, and 10 and every 5 years thereafter for all participants, except for a sample of 125 participants from each System for whom a reduced set of Form II data was collected every year. To further reduce the workload, beginning in October 2000, Form II data collection was no

longer required at year 2, with one exception: if a participant was still hospitalized for his/her initial hospital care during the first anniversary year, the year 2 (but not year 1) follow-up would be required. In addition, the collection of Form II data yearly from 125 participants per System was terminated. The decrease in the number of Form II records for off-years reflects such changes in the frequency of follow-up data collection. The date on which a record is first entered into the database has been documented since October 1986. Data reported to the database between 1975 and 1986 were thus combined as one group in the table.

Cause of Death: Table 10

All survival analyses in this report use the Collaborative SCI Survival Study database maintained at the NSCISC. This database contains considerably more patients than the National SCI Database contains and has much longer follow-up on individual patients through use of the Social Security Death Index (SSDI), Equifax Nationwide Death Search, on-line obituaries, and the National Death Index (NDI). The Collaborative SCI Survival Study database includes Form I and Registry participants as well as other patients who were treated at an SCI Model System but are not in the National SCI Database. The Collaborative SCI Survival Study database is also the database that was used to produce the chapter on long-term survival and causes of death that was included in the book Spinal Cord Injury: Clinical Outcomes from the Model Systems, published in 1995. Therefore, these data represent an update of the 1992 estimates provided in that book chapter as well as an update of the 2019 Annual Report.

Primary cause of death for the 17,481 deceased participants in the Collaborative SCI Survival Study database appears in **Table 10.** Only persons admitted to a System since 1973 and treated at a System within 1 year of injury were included in this analysis. The number of deaths with unknown causes is high because searches of the NDI for causes of death have only been conducted through 2017. As a result, there are still 3,119 (17.8%) persons whose primary cause of death is unknown, and these were not included in the calculation of any percentages.

In participants for whom cause of death is known, diseases of the respiratory system were the leading cause of death (65.1% of these were cases of pneumonia). The second leading cause of death was infectious and parasitic diseases. These were usually cases of septicemia (90.5%) and were usually associated with decubitus ulcers, urinary tract infections, or respiratory infections. Also included in this category were 86 cases of AIDS (5.0%). Cancer ranked third, followed by hypertensive and ischemic heart disease. Specific locations of cancer included lung (392 cases, 25.3%), followed by bladder (140 cases, 9.0%); colon/rectum (134 cases, 8.6%); prostate (84 cases, 5.4%); and liver (65 cases, 4.2%). Other heart disease ranked fifth; however, these cases were often unexplained heart attacks (36.6%, ICD10CM code I46.9) that usually do not represent a true underlying cause of death. Rather, such cases reflect the relatively poor quality of cause-of-death data and reporting practices on many death certificates of SCI patients. Hence, mortality from other heart disease is probably overestimated.

Unintentional injuries were the sixth leading cause of death, followed by diseases of the digestive system, cerebrovascular disease, suicide, and diseases of pulmonary circulation (91.7% of which were cases of pulmonary emboli). Pulmonary emboli usually occurred prior to first definitive discharge.

It should be noted that the categories of 'Unintentional injuries,' 'Suicides,' and 'Homicides' do not include any persons dying from multiple injuries sustained during the original accident. However, these categories do include persons involved in fatal events following discharge. If the 139 cases of subsequent trauma of uncertain nature were divided proportionately between the following three categories, then an additional 89 unintentional injuries, 39 suicides, and 11 homicides would have taken place.

Within the first year after injury, the top five leading causes of death were respiratory diseases (30.9%), other heart diseases (13.7%), infective and parasitic diseases (9.5%), pulmonary circulation diseases (8.8%), and hypertensive and ischemic heart diseases (6.7%). Among people who survived the first year after injury, respiratory diseases were the leading cause of death (19.9%), followed by infective and parasitic diseases (12.4%), cancer (11.8%), hypertensive and ischemic heart diseases (10.9%), and other heart diseases (7.4%).

Long-Term Survival: Tables 11 – 12

Table 11 presents cumulative survival for the Collaborative SCI Survival Study database. Only persons injured since 1973 and treated at a System within 1 year of injury were included in this analysis. Data from currently non-participating Systems are included in the national table. Individual tables for each of the currently funded and sub-contract funded Systems are located in **Table 12**.

Patients were considered 'Withdrawn Alive' if: 1) a follow-up form (Form II) for 2020 or later was submitted, indicating the patient was known to be alive, 2) the patient's follow-up was discontinued due to neurologic recovery or transfer to another System, or 3) searches performed in 2021 did not indicate a reported death. The proportion of patients who died in each post-injury year ranged from 4.48% in year 1 to 1.74% in years 5, 6, and 10. Annual death rates for those who survived the first post-injury year averaged 2.58% and increased over time as the population aged.

The cumulative 10-, 20-, 30-, and 40-year survival rates for patients with an SCI were 80.68%, 65.85%, 51.43%, and 37.20%, respectively. Median (50%) survival for the total sample is estimated to occur at 31 years after injury. However, because of the high proportion of losses to follow-up, as well as the known under-reporting of SCI fatalities occurring shortly after injury, this information should be interpreted with caution. It is likely some patients were lost to follow-up because they died. Therefore, these annual mortality rates may be underestimated.

Standardized Mortality Ratios: Tables 13A – 13B

Standardized mortality ratios (SMRs) for the Collaborative SCI Survival Study database by neurologic level of injury, ASIA Impairment Scale (AIS) grade, and current age appear in **Table 13A**. The AIS, is used to quantify the degree of residual neurologic function. All persons who were admitted within 1 year of injury to a System since 1973 and survived at least 24 hours after injury were included in this analysis. Comparable SMRs for persons who survive the first post-injury year appear in **Table 13B**. For each neurologic category and age group, the observed number of deaths was compared to an expected number of deaths based on observed length of follow-up and age-sex-race-specific mortality rates for the general U.S. population in 2002 using methods outlined in detail by Smart and Sanders [1]. The year 2002 was chosen because it was the mid-year of follow-up for the SCI population. All follow-up data through 2021 were used.

Differences in calculated SMR values between **Tables 13A and 13B** increase with increasing injury severity due to the much higher first-year mortality rates among more severely injured persons. The SMR is statistically significant for all neurologic groups in both 24-hour and 1-year survivors. Among 1-year survivors, those who are ventilator-dependent and less than 31 years of age have 50.00 times greater mortality than persons of the same age, sex, race, and length of follow-up who do not have an SCI, while persons who have an AIS D injury and are at least 61 years of age, regardless of injury level, have only 1.56 times greater mortality than their counterparts without an SCI.

Life Expectancy: Tables 14A – 14B

Life expectancies for SCI patients who survived at least 24 hours after injury, by age at injury (in 5-year intervals) and neurologic level and extent of lesion, appear in **Table 14A**. Comparable estimates for persons who survived the first post-injury year, by current age, appear in **Table 14B**. These life expectancy estimates were calculated based on applying the SMR values from **Tables 13A and 13B** to the life table for the U.S. general population in the year 2018.

Prior to 2016, life expectancy estimates contained in NSCISC annual reports were based on applying a constant SMR for each neurologic group to all ages. That was the method used by SCI researchers when the NSCISC began making these calculations. However, as sample sizes and lengths of follow-up increased, it became clear that the SMR decreased significantly as age increased. Therefore, this method (the use of a constant SMR with advancing age) typically results in an overestimation of life expectancy at younger ages and an underestimation of life expectancy at older ages, particularly for more severely impaired persons. As a result, more recent reports of life expectancy based on the SMR method use age-specific SMR values for each neurologic group, such as those appearing in **Tables 13A and 13B**. Until 2016, the NSCISC continued to report life expectancy estimates in its annual reports based on a single SMR for each neurologic group to maintain consistency and facilitate evaluation of trends over time. However, the NSCISC believes the benefits of comparability to recently published studies combined with enhanced precision of life expectancy estimates derived from using age-specific

SMRs now outweigh the benefits of maintaining consistency with previous methods of calculation. Therefore, since 2016, life expectancy estimates have been based on age-specific SMRs.

Most life expectancy estimates contained in this annual report are slightly lower than those contained in the 2020 annual report due to slightly higher age-sex-race-specific SMR values. This should not be interpreted to imply that life expectancies have changed as current estimates are well within the previous confidence limits. Readers interested in more precise estimates are referred to the NSCISC website life expectancy calculator that includes other risk factors such as sex, cause of injury and health insurance status; separates age, injury levels and AIS grades more precisely; and takes any historical trends in life expectancy into account by using the more flexible and statistically powerful method of person-year multiple logistic regression. Methods for estimating life expectancy that are used by the NSCISC website calculator are detailed in two articles by Strauss et al. [3] and DeVivo[4].

Life expectancies for persons with SCI remain substantially below normal, particularly for persons with tetraplegia and ventilator dependency. Moreover, although mortality rates during the first post-injury year have decreased steadily since the 1970s, annual mortality rates after the first post-injury year have not changed since the early 1980s. Therefore, although general population life expectancy is increasing, life expectancy for persons with SCI who have survived the first year after injury has remained relatively constant, and the gap in life expectancy between persons with SCI and the general population of comparable age, sex, and race, is increasing.

Values in these tables should be considered rough estimates of life expectancy of individual persons because the neurologic categories are rather broad. At a minimum, important prognostic factors that should be considered in determining an individual life expectancy include age, exact neurologic level of injury (particularly among persons with tetraplegia), AIS grade, length of survival that has already occurred after injury, and to a lesser extent, etiology of injury, gender, race, education, and access to care (availability of good insurance coverage or other financial resources)[2]. Significant co-morbidities (cancer, heart disease, diabetes, etc.) should also be considered when present[3].

Form II Follow-up Status: Tables 15-19

Table 15 describes the type of medical care being provided to the participant by System. Out of 197,380 records, 35.8% of participants came into a System for an appointment during the follow-up window (18 months). The variation between Systems in the category of 'System Appointments' was distinct, ranging from 15.9% to 57.7%. The coding category of 'Future Follow-up Not Required' is for those participants who achieve minimal deficit, defined as no significant motor, bladder or bowel, or neurologic impairment. For these participants, Form II follow-up is not required, but Systems may choose to continue interviews.

Table 16 categorizes the type of follow-up by participants grouped according to post-injury year. Including those 'Lost' due to break in funding, the percentage of eligible participants lost to follow-up ranged from 16.6% for post-injury year 1 participants to 62.8% for post-injury year 20 participants. Prior to coding a Form II as 'Lost,' the following minimal tracking activities are required: 1) SSDI, Genealogy, or other death search sites are checked for record of death; 2) System records are searched for recent activity and updated contact information; 3) at least two free internet searches and a fee-based search are conducted, if available; 4) viable phone numbers are called at least six times at different times of the day and week; and 5) a Form II Survey is mailed to a viable address.

Table 17 documents the reasons why follow-up data are not obtainable for those participants whose category of follow-up care is 'Lost.' This 'Reason for Lost' variable was added to the database in January 1998 with four categories, including the 'Other' category used to determine if expanded coding categories will be needed in the future. In 2007, the 'Refused/Withdrawn' code was separated into two codes to allow participants a choice to refuse this interview (and be contacted in the next cycle) or to withdraw from the study and not be contacted again unless re-consented. The 'Identity Unknown' code was included in 2009 to be used by Systems in identifying participants whose identity is no longer available due to the break in funding. To help specify the reason for 'Unable to Contact,' the following five codes were added to the database in October 2011: 1) 'Contact made but survey not completed,' 2) 'Attempted contact but language barrier prevented collection,' 3) 'Attempted contact but moved out of country,' 4) 'No contact - Apparently valid contact information,' and 5) 'No contact - No valid contact information.' The 'Identity unknown to NSCISC' code was also added in October 2011 for participants enrolled by de-funded Systems, whose identity may still be known at the enrolling System but is not available to the NSCISC for data collection.

Before October 2011, once a Form II was submitted as 'Lost,' future follow-up was still pursued but no additional Form II coded 'Lost' was required at next follow-up if that participant was still 'Lost.' This policy was changed in the 2016-2021 grant cycle. The submission of a Form II for previously lost participants is now required for the eligible anniversary year (1, 5, 10, 15, etc.) unless participants died, reached neurologic recovery, or withdrew consent, or their identifying information was lost. To fill gaps in the existing database, approximately 33,846 Form II records were inserted to reflect the 'Lost' status at the beginning of the 2011-2016 cycle, and the reason for lost was either coded as 'Break in funding' for unfunded Systems or 'Unknown' for funded Systems. This explains why a large percentage was reported as 'Unknown.'

Table 18 describes the current follow-up status of Form I participants by System. The status is in a hierarchical order. For example, 'Deceased' supersedes all other codes. Of the 35,675 Form I participants reported to the database since 1972, 34.1% were deceased, 6.9% reached neurologic recovery, 3.6% withdrew consent, and the identity of 2.9% was lost due to break in funding; 52.5% are still eligible for Form II follow-up.

Table 19 presents a System analysis of how interviews were conducted; this variable has been collected since 1996. Analysis was performed on required follow-up years only (1, 5, 10, etc.). Of the 50,788 records, 71.2% were conducted by phone, with percentages ranging by System from 35.8% to 89.5%. Self-administered (mailed) interviews were conducted 9.1% of the time, with percentages ranging by System from 0.6% to 27.4%. Of all interviews, 8.5% were conducted in person, with percentages ranging by System from 0.6% to 43.2%. Nationally, 8.0% of all interviews used a combination of the methods (i.e., in-person, by phone, and/or by mail/email/online), with percentages ranging by System from 0.0% to 39.0%.

Part III

Descriptive Analysis of the National SCI Database: Tables 20-215

Introduction

The tables presented in this report are based on a descriptive analysis of most of the variables in the National SCI Database. For most of the Form I variables, each System has been provided with tables reflecting its own participant population. The Form II variables, however, are primarily analyzed by anniversary year of follow-up and presented in a national aggregate format. The narrative for each of the following tables is restricted to analysis of national aggregate data and intersystem variability within the database.

Starting in 1995, revised Form II reporting procedures required submission of Form IIs for all participants in post-injury years 1, 2, 5, and 10, and every 5 years thereafter. Beginning in October 2000, Form II data collection was no longer required at year 2, with one exception: if a participant was still hospitalized for his/her initial hospital care during the first anniversary year, the year 2 (but not year 1) follow-up would be required. For this reason, there has been a significant decrease in the number of records in all the other post-injury years. Therefore, most of the Form II analyses are restricted only to post-injury years 1, 5, 10, 15, 20, 25, 30, 35, 40 and 45.

Lost and Unknown Categories

Since differential losses to follow-up may mask time trends within the data, participants who are lost to follow-up are not included in the tables depicting Form II data. The underlying assumption is that participants who are lost to follow-up will be distributed proportionately across categories in the same way as successfully followed participants.

Data classified as 'Unknown' represent those participants who are being followed but for whom that specific information is unavailable. Therefore, a high proportion of 'Unknown' entries indicate unusual data collection difficulties.

Cross-sectional versus Longitudinal Analysis

Changes in percentages or mean scores over post-injury years must be interpreted cautiously. This is a cross-sectional analysis, and the participants at post-injury year 30 are not the same as those at post-injury year 1, for example. Part of the increase or decrease in scores over time could be due to differential survival of persons with better health or care as well as due to differential loss to follow-up. A truly accurate assessment of changes over time will require a longitudinal approach and multivariate analysis.

Statistical Measures

Data of a categorical nature are presented as frequency and percentage. For continuous variables, the central tendency is measured by mean or median as appropriate. In some tables, the standard deviation (S.D.) is used to measure the dispersion about the population mean (i.e., how closely individual participant values cluster around the mean). If data are normally distributed, 95% of all observed values will fall within 1.96 S.D.s of the mean.

Age at Injury: Tables 20 – 22

The cumulative frequency distribution of age at injury is depicted in **Table 20**. Five participants were less than 1-year-old, while one was 99 years old. The most common age at injury was 19 years. Nearly a quarter (22.9%) of all injuries occurred between the ages of 17 and 22 years, nearly half (46.7%) of all injuries occurred between the ages of 16 and 30, and 12.5% of all injuries occurred at age 60 or older. Some descriptive statistics for the age at injury distribution are shown in **Table 21**. Mean (S.D.) age for all participants was 35.9 (17.3) years, with the mean age for participants in each System ranging from a low of 31.0 years to a high of 50.4 years.

Table 22 reflects a consistent trend toward older age at time of injury. The mean age at injury has increased from 28.7 years in 1972-1979 to 43.2 years in 2015-2021. This trend reflects in large part a similar trend in the average age of the U.S. population. However, underlying changes in age-specific SCI incidence rates, changing locations of Systems, and changing referral patterns to Systems may also be contributing to the trend toward older age at injury for persons in the database.

Sex: Table 23

The number of SCI participants by sex is shown in **Table 23**. Overall, 80.4% of all reported SCIs occurred among males. There was very little variability among Systems with regard to the composition of the participant populations by sex. Among Systems, the proportion of male participants ranged from a low of 72.1% to a high of 86.8%.

Race: Tables 24 – 28

The number of SCI participants by System and race is shown in **Table 24**. There was substantial variability among Systems: the proportion of Caucasian participants ranged from 33.7% to 90.6%, while the proportion of African Americans ranged from 4.1% to 39.2%. Across Systems, the highest proportion of Native American Indians was 3.4% and the highest proportion of participants of Asian descent was 6.2%. High percentages of unknowns (4.8%) in the 'Race' variable are due to a database conversion process that occurred in 1995. When the 'Hispanic Origin' variable was added, all persons coded 'Spanish' in the 'Race' variable were converted to 'Yes, Hispanic origin' in this variable, and their race was then changed to 'Unknown.' For those who were not coded 'Spanish' in this variable, the 'No' code was inserted and their original race code was retained.

It should not be inferred from these data that the incidence of SCI was higher among whites than non-whites. On the contrary, most participants are white because whites compose by far the largest segment of the U.S. population. In fact, other studies have demonstrated conclusively that the SCI incidence rate is highest among non-whites[5].

Overall, 10.0% of respondents endorsed 'Hispanic Origin' (**Table 25**). By System, the percentage ranged from 0.2% to 51.0% out of a total of 35,675 records.

Table 26 depicts Hispanic origin by race: 3.5% reported as Hispanic Caucasian and 0.4% reported as Hispanic African American out of a total of 35,675 records.

The trends over years in racial groups (**Table 27**) reveal an increase in the percentage of participants who identify as African American (from 14.2% in 1972-1979 to 25.5% in 2015-2021). Also, there has been a slight increase in the percentage of participants who identify as Asian/Pacific Islander (from 0.9% in 1972-1979 to 2.6% in 2015-2021), while the percentage of participants who identify as Caucasian has decreased (from 76.8% in the 1972-1979 to 64.6% in 2015-2021).

Analysis of the trends in participation by those of Hispanic origin by year of injury (**Table 28**) shows a 6.8% increase in Hispanic participation into the 1990s (6.0% in 1972-1979 to 12.8% in 1990-1994). The most current time frame, however, shows that participation by those of Hispanic origin decreased to 8.6% in 2005-2009 then increased to 13.9% in 2015-2021.

This trend is due in small part to trends in the U.S. general population. Periodic changes in the identities of participating Systems, changes in eligibility criteria for inclusion into the National SCI Database, and changes in referral patterns to Systems are also partly responsible for this racial trend. However, changes in underlying race-specific SCI incidence rates are also likely.

Ability to Speak and Understand English at Time of Injury: Table 29

This Form I variable documents the participant's self-report of his or her ability to speak and understand English. A similar variable, 'English as primary Language' was part of the National SCI Database from October 2000 to 2011. In 2011, the current version of the question was adopted; existing data were converted to either 'Not at all' or to 'Speaks English, but unknown ability.' Most participants speak at least some English (97.3%) and only 1.8% of participants report their ability to speak English as 'Not at all.'

Etiology: Tables 30 – 36

Table 30 ranks the national causes of injuries and then separates by sex. For males and females, the three leading causes of SCI were the same: auto accidents, falls, and gunshot wounds.

Among males, motorcycle accidents ranked fourth, followed by diving accidents. However, for females, medical/surgical complications ranked fourth and diving ranked fifth.

Significant sex-specific differences are evident in six etiologies: auto accidents (males 28.3%; females 45.9%); gunshot wounds (males 16.7%; females 9.3%); motorcycle accidents (males 7.1%; females 2.2%); diving accidents (males 6.5%; females 2.4%); hit by falling/flying objects (males 3.2%; females 0.8%) and medical/surgical complications (males 2.3%; females 5.3%).

It should be noted that the all-terrain vehicles/ all-terrain cycles (ATV/ATC) category was created in October 1986; before that time, injuries resulting from these vehicles were coded as either 'Motorcycle' or 'Other Vehicle.' While some Systems have converted pre-1986 data where possible, this conversion was not mandatory. Therefore, the number of injuries resulting from ATV/ATC accidents is most probably underreported.

The group etiology categories reported in **Tables 31 – 35** are as follows:

'Vehicular' includes: Automobiles (includes jeeps, trucks, dune buggies, and buses; Motorcycles (2-wheeled, motorized vehicles, including mopeds and motorized dirt bikes); Boats; Fixed-wing aircraft; Rotating-wing aircraft; Snowmobiles; Bicycles (includes tricycles and unicycles); ATV and ATC (includes both 3-wheeled and 4-wheeled vehicles); and Other vehicular, unclassified (includes tractors, bulldozers, go-carts, steamrollers, trains, road graders, forklifts).

'Violence' includes: Gunshot wounds; All other penetrating wounds (includes stabbing, impalement); Person-to-person contact (includes being hit with a blunt object, falls as a result of being pushed (as an act of violence); Explosions (includes bomb, grenade, dynamite, or gasoline).

'Sports' includes: Diving; Football; Trampoline; Snow skiing; Water skiing; Wrestling; Baseball/softball; Basketball/volleyball; Surfing (includes body surfing); Horseback riding; Gymnastics (includes all gymnastic activities other than trampoline); Rodeo (includes bronco/bull riding); Track and field (includes pole vault, high jump, etc.); Field sports (includes field hockey, lacrosse, soccer, and rugby); Hang gliding; Air sports (includes parachuting, para-sailing); Winter sports (includes sled, snow tube, toboggan, ice hockey, snow-boarding); Skateboarding; and Unclassified (includes auto racing, glider kite, slide, swimming, bungee jumping, scuba diving, roller-blading, jet-skiing, cheerleading, etc.).

'Falls' also includes jumping and being pushed accidentally (not as an act of violence).

'Medical/surgical Complication' is defined as "Impairment of spinal cord function resulting from adverse effects of medical, surgical or diagnostic procedures and treatment."

'Other' includes: Hit by falling/flying object (includes ditch cave in, avalanche, rockslide); Pedestrian (includes falling/jumping into the path of a vehicle); and all other unclassified injuries.

The percentage of injuries in each etiology group by System appears in **Table 31**. Overall, 'Vehicular' ranked first in the National SCI Database (41.8%) and first in ten Systems, where 'Falls' ranked first in four Systems (33.2%, 29.5%, 30.8% and 44.9%, respectively), and where 'Violence' ranked first (45.4%) in one System.

'Falls' ranked second nationally (23.2%) for seven Systems; 'Vehicular' ranked as the second most frequent etiology in five Systems (30.1%, 31.0%, 27.4%, 28.9% and 28.7%, respectively). 'Violence' ranked third nationally (17.0%) and second in two Systems (20.3% and 28.3%).

The percentage of injuries in each etiology group by age at injury is depicted in **Table 32**. Vehicular accidents were the predominant cause of SCI in participants up to 45 years of age. After age 45, falls were the leading cause of SCI. The percentage of SCIs resulting from sports and violence declined with advancing age, while the percentage resulting from falls and medical/surgical complications increased proportionately.

Table 33 depicts the percentage of injuries in each etiology group by sex. The percentage of injuries resulting from vehicular accidents, violence, and sports differed by sex. Females were more likely to be injured by a vehicular accident (females, 51.0%; males, 39.5%), but violence and sports were more likely the cause of male injuries (males, 18.4% and 11.1%, respectively; females, 11.2% and 5.7%, respectively).

Table 34 depicts the percentage of injuries in each etiology group by race. Vehicular accidents were the leading cause of injuries across all races except for African Americans, for whom violence was the leading cause.

Table 35 shows the percentage of injuries in each etiology group by Hispanic origin. Vehicular accidents and violence were the most common causes of injuries for those of Hispanic origin (35.9% and 30.6%, respectively), whereas, vehicular accidents accounted for 42.5% and violence accounted for only 15.4% of injuries among those of non-Hispanic origin.

Although vehicular accidents continue to be the leading cause of SCI (**Table 36**), the percentage declined from 46.9% in the 1970s to 37.5% during 2015-2021. The percentage of injuries due to falls has increased gradually and consistently since the 1970s, and falls currently account for 31.3% of all SCIs. Injuries due to acts of violence peaked in the 1990-1994 period (28.9%), and have since declined (15.2%, 2015-2021). Sports-related SCIs declined from 14.4% during the 1970s to 8.3% since 2015. Medical and surgical complications account for a small percentage of all injuries, but this percentage increased gradually from 1.2% in the 1970s to 3.6% during 2015-2021. These trends are mainly due to the aging of the U.S. population but are also in part due to changing locations of the Systems, changing referral patterns to these Systems, changes in underlying incidence rates, or a combination of these factors.

Work Relatedness: Table 37

This variable was added to the database in October 2000, and only records entered after January 1, 2001, are included in **Table 37**. Of the 15,175 available records, 9.4% had a work-related SCI. The percentage of participants at each System with a work-related SCI ranged from 5.6% to 13.4%.

Marital Status: Tables 38 - 40

Table 38 depicts marital status at injury by System. The code 'Living with significant other' was added to the database in October 2011. It is not surprising, given the young age at which most injuries occur, that half of the participants in the database were single/never married (50.3%) at the time of injury. Substantial intersystem variability was noted in the single/never married category, from 30.6% to 64.0%. While the percentage of divorced participants ranged from 5.1% to 16.2%.

Table 39 shows a steady increase across post-injury year categories in the percentage of participants who endorsed 'Married' (from 32.5% of post-injury year 1 participants to 47.8% of post-injury year 45 participants) or 'Divorced' (from 10.9% of post-injury year 1 participants to 23.6% of post-injury year 30 participants). The percentage of participants in the 'Single, never married' category ranged from 48.6% of those at post-injury year 1 to 20.8% of those at post-injury year 45.

Table 40 reflects all changes since the last Form II with a known marital status code (or since Form I if there is no Form II marital status). If a year 1 Form II has marital status, and the year 5 Form II is lost, then the year 10 Form II reflects any marital change since the year 1 Form II. Separations are ignored. Codes 'Divorced + Married,' 'Widowed + Married,' 'Divorced + Widowed + Married' may be in any order. Marital status was relatively stable over time. 'No Change' was reported for 92.4% of post-injury year 1 participants and for 83.2% of post-injury year 30 participants.

Level of Education: Tables 41 - 42

The highest level of formal education completed at time of injury by System appears in **Table 41**. More than 60% (excluding 'Other') of the participants were at least high school graduates at the time of injury, whereas more than 80% were at least 19 years of age at injury and would normally be expected to have completed high school. Approximately one tenth (7.9%) of participants had an eighth grade education or less, whereas only about 2% were less than 15 years of age at injury and would normally be expected to have an eighth grade education or less.

The proportion of participants with an eighth grade education or less ranged by System from 1.2% to 21.7%. Overall, 5.4% of the participants had an unknown level of education, suggesting some Systems are having substantial difficulty collecting this information.

In **Table 42**, level of education is shown to be higher in participants at later post-injury years than in those with more recent injuries. Overall, 70.5% of post-injury year 1 participants had

completed at least a high school education, compared with 93.7% of post-injury year 45 participants.

Occupational Status & Job Census Code: Tables 43 - 46

The Occupational Status tables review the primary occupational, educational or training status of the participant at the time of injury. Since these sub-categories are not mutually exclusive, the primary occupational, educational or training status is selected on the basis of the injured person's opinion.

Occupational status at the time of injury by system is shown in **Table 43**. Nationally, 58.2% of participants were reportedly working at the time of injury. Among Systems, this was the most common occupational status reported, ranging from 66.8% to 46.7%.

The national rankings for the other most commonly reported occupational status categories ranked in order as follows: 'Unemployed' (15.2%), 'Student' (14.0%), and 'Retired' (8.0%).

Table 44 shows an increase in the percentage of working respondents over the post-injury years, from 12.8% of post-injury year 1 participants to 33.3% of post-injury year 25 participants, then declining in later years to 24.5% for post-injury year 45 participants. Other categories with an increase across post-injury year are 'Retired' and 'Other,' whereas the percentage reporting 'Unemployed' decreased over the post-injury years (from 53.3% of post-injury year 1 participants to 20.6% of post-injury year 40 participants).

Job Census Code **Tables 45 and 46** reflect data entered into the database since January 1, 2001. At injury, over one third of respondents (38.6%) reported 'Not Working' and ranges across centers from 26.8% to 53.0%. The second most reported category was 'Precision, production, craft and repair,' at 8.5%. There was very little variability across Systems for other types of work. **Table 46** shows Job Census Code by post-injury year. 'Not Working' was reported by 82.4% of respondents at post-injury year 1 then decreased to 65.4% for post-injury year 25 participants. The percentage of participants in the 'Management, business and financial' category increased over the post-injury years (from 3.9% of post-injury year 1 participants to 9.5% of post-injury year 40 participants).

Veteran Status & VA Health Care Services Used: Tables 47 - 48

Veteran status analysis includes Form I records entered after January 1, 2001. This variable documents whether or not the participant is a veteran of the U.S. military forces (i.e., Air Force, Army, Coast Guard, Marine Corp or Navy). **Table 47** shows only 8.0% of Form I participants are veterans.

Table 48 identifies the participants' use of Veteran Administration (VA) health care services since last follow-up. VA services data have been collected since October 31, 2000. A small percentage

of participants used VA services for health care, ranging from 4.1% of post-injury year 1 participants to 4.9% of post-injury year 40 participants.

Primary Payer: Tables 49 - 50

Table 49 documents the participants' primary payer of medical costs during inpatient stay. This care includes hospitalization, outpatient medical and rehabilitation services, vocational rehabilitation, education, training, equipment, medications and supplies, attendant care and custodial care but does not include income maintenance (unemployment payments). 'Primary' is defined as the organization that pays first. 'Private Insurance' ranked first during the period of initial hospitalization, providing support for about half (49.7%) of the participants. Medicaid provided support for more than one fourth (27.0%) of the participants during this same period.

Primary payers by post-injury year appear in **Table 50. '**Private Insurance' ranked first among participants at post-injury years 1 and 5 (44.1% and 32.0%, respectively). However, the proportion of participants receiving Medicare benefits increased substantially across post-injury years, from 9.0% of post-injury year 1 participants to 62.8% of post-injury year 45 participants. The proportion of participants receiving Medicaid support decreased steadily through all post-injury years.

The high number of records coded as 'Unknown/missing' and therefore excluded in Tables 49 and 50 is a result of the historical changes in data collection. Sponsors of care data were collected from 1973 to September 2006, with up to five entries for sponsors. Beginning in 1987, coding position #1 (position #1 is the first of five entries) was designated for the primary payer with no order for the following 4 positions. For records prior to 1987 that had more than one entry, all codes were moved down one position, and the 'Unknown' code was inserted in coding position #1. In 2006, the 'Sponsor of care' variables were retired. In October 2011, a single primary payer variable was added back to the database and 'Primary Sponsor of Care' was converted to 'Primary Payer.'

Family Household Income Level at Time of Injury: Table 51

Table 51 categorizes the income level of the family members living in the same household as the participant by Systems. The incomes of all family members 15 years old and over, related to the respondent by birth, marriage, or adoption, and living in the household were included. Overall, about one quarter (22.5%) of participants endorsed income of less than $25,000, with System variability ranging from 10.8% to 72.6%. About one fifth (22.8%) of participants had income of $75,000 or more, ranging from 5.4% to 37.2%. Participant responses of 'Decline to answer' or 'Participant doesn't know' constituted 17.3%, making the total unknown rate of response above 20%.

Family Income: Table 52

Table 52 categorizes the income level of the family members living in the same household as the participant by post-injury years. The incomes of all family members 15 years old and over, related to the respondent by birth, marriage or adoption and living in the household were included. The proportion of participants with family income less than $25,000 ranged from 39.3% to 42.6% for participants in post-injury years 1 - 20, but declined for those in post-injury years 25, 30, 35, 40, and 45 (40.8%, 37.2%, 31.8%, 28.1%, and 18.7%, respectively). Approximately 15.0% of post-injury year 1, 5, 10, and 15 participants reported Family income of $75,000 or more, and increased across the remaining years, to 33.5% of post-injury year 45 participants.

The 'Family income' variable was first added to the database in 1996, as one of the items included in the Craig Handicap Assessment and Reporting Technique (CHART) economic self-sufficiency subscale. Use of the CHART economic self-sufficiency subscale was discontinued after September 2006. The 'Family income' variable, however, was added to the database in October 2011. To a large extent, these historical changes explain the high number of unknown/missing data in this variable.

Injuries & Spinal Surgery: Table 53 - 55

Table 53, Vertebral Injury by System, documents spinal fractures and/or dislocations that occurred at the same time as the SCI. A spinal fracture or dislocation is defined as any break, rupture, or crack through or between any parts of the vertebral column from the occiput to coccyx. On average, 79.8% of participants had at least one vertebral injury, with percentages ranging by System from 62.2% to 93.1%.

Associated injuries are summarized in **Table 54**. This variable documents at least one of the following conditions: moderate to severe traumatic brain injury (Glasgow Coma Scale score of 12 or below), non-vertebral fractures requiring surgery, severe facial injuries affecting sensory organs, major chest injury requiring chest-tube or mechanical ventilation, traumatic amputations of an arm or leg or injuries severe enough to require surgical amputation, severe hemorrhaging, brachial plexus injury, or damage to any internal organ requiring surgery. This variable excludes associated injuries not listed, negative findings from exploratory surgeries, and injuries that pre-date the SCI. Associated injuries occurred in 36.9% of cases, ranging by System from 14.4% to 50.0%.

The 'Spinal Surgery' variable (**Table 55**) documents whether any of the following spinal surgical procedures were performed at any point during the inpatient hospitalization period following the SCI: laminectomy, neural canal restoration, open reduction, spinal fusion, or internal fixation of the spine. On average, 80.5% of participants underwent spinal surgery, ranging by System from 71.5% to 86.6%.

Place of Residence: Tables 56 – 58

Table 56 summarizes place of residence at the time of injury. This variable has been collected for System admissions since December 1, 1995. In October 2000, 'Convent, monastery, or other religious order' was added to 'Group Living Situation.' In October 2011, a new code, 'Assisted Living,' was added. At the time of injury, the majority (97.9%) of participants were living in a private residence, which includes house, apartment, or individual residence in a retirement village. There is very little variability between Systems.

Place of residence at discharge by System is shown in **Table 57**. Most participants (87.3%) discharged to a private residence. The proportion of participants discharged to a private residence ranged by System from 74.0% to 93.9%.

Table 58 shows place of residence across post-injury years. By far, private residence was most common, ranging from 91.6% for post-injury year 1 participants to 97.1% for post-injury years 30 and 40 participants. The percentage of those reporting nursing home residences decreased across years, from 3.9% of post-injury year 1 participants to 1.3% of post-injury years 40 and 45 participants.

Days Hospitalized at Acute Unit: Tables 59 – 61

Table 59 depicts median days from injury to System admission by System and year of injury. Median days from injury to System admission were at the peak (20 days) in 1972-1979 and at the lowest (1 day) in 1990-1999. A change in eligibility criteria implemented in January 1987 resulted in a decrease in median days from injury to System admission. The eligibility criteria allowed only patients admitted to the System within 60 days of injury to be entered into the National SCI Database. In 2000, eligibility criteria resumed the previous standards (allowing injuries within 1 year of admission). For the recent years (2015-2021), the longest median duration from injury to System admission is 17.0 days at one System and eight Systems had a median of 1 day from injury to System admission.

Database revisions in November 1995 resulted in the separation of the single 'Length of stay' variable into 'Acute care length of stay' and 'Rehabilitation care length of stay.' Data on the length of stay were separated based on formulas involving days from injury to rehabilitation and total days hospitalized, with all short-term discharge days applied to rehabilitation. The next two tables (Tables 60 and 61) include records for those patients who were admitted to the system within 1 day of their injury (Day-1s Only).

Table 60 reflects median days spent in acute care for each System by year of injury. Median acute care length of stay has declined from 24 days in 1972-1979 to 12 days in 2010-2014.

Table 61 depicts median days hospitalized in the acute care unit by year of injury and by neurologic level and extent of lesion (neurological category). 'Neurologic category at discharge' documents the level and extent of the lesion at discharge. Minimal deficit groups were added in

1987, and retrospective updates were allowed but not required. Participants with complete tetraplegia injuries typically had the longest acute stays (an average of 25 days for all years), while participants with minimal deficits had the shortest stays. The decrease in median acute length of stay over the past five decades is noted across various levels of neurological category. Minimal deficit categories ('Paraplegia, Minimal Deficit' and 'Tetraplegia, Minimal Deficit') were added in October 1987 to better describe participants with minimal or no neurologic deficit. Retrospective updates were allowed but not required for minimal deficit categories.

Days Hospitalized at Rehabilitation: Tables 62A – 63B

The next four tables document the median rehabilitation length of stay for people with SCI that were: 1) admitted to system within 1 day of their injury (Day-1s Only, **Tables 62A and 63A**) and 2) all people admitted to rehabilitation, regardless of Day-1 status (**Tables 62B and 63B**).

Among people with SCI admitted to system within 1 day of their injury, the median rehabilitation length of stay has declined over the last five decades, from 98 days in 1972-1979 to 32 days in 2015-2021 (**Table 62A**). Among people admitted to rehabilitation, regardless of Day-1 status, the median rehabilitation length of stay has also decreased from 91 days in 1972-1979 to 42 days in 2015-2021 (**Table 62B**).

Table 63A shows that, among people with SCI that were admitted to a System within 1 day of their injury, the median days hospitalized in the rehabilitation unit were greatest for participants with complete tetraplegia (an average of 93 days for all years), ranging from 142 days in 1972-1979 to 44 days in 2015-2021. For those with incomplete paraplegia, the rehabilitation length of stay ranged from 68 days in 1972-1979 to 27 days in 2015-2021.

Including all people admitted to rehabilitation, regardless of Day-1 status, the median days hospitalized in the rehabilitation unit were greatest for participants with complete tetraplegia (an average of 92 days for all years), ranging from 122 days in 1972-1979 to 58 days in 2015-2021 with a slight increase to 68 days for 2010-2014 (**Table 63B)**. For those with incomplete paraplegia, the rehabilitation length of stay ranged from 68 days in 1972-1979 to 32 days in 1995-1999 and around 34 days since 2000. -

Neurologic Level at Discharge: Tables 64 - 67

The proportion of participants with cervical, thoracic, lumbar, and sacral levels of injury at discharge is presented in the next four tables. To determine a single neurologic level of injury, the most rostral (highest) sensory and motor level on the left and right side at discharge was used. Percentages presented in all four tables were calculated based on the total number of records (cervical, thoracic, lumbar and sacral = 33,452records).

Overall, 54.7% of participants had cervical lesions at discharge, 34.8% had thoracic lesions, 10.1% had lumbar lesions, and 0.4% had sacral lesions. Close to half (45.6%) of the participants in the

database were discharged with cervical lesions at C4 (15.7%), C5 (15.0%), C6 (10.0%), or C7 (4.9%). The next most common levels of lesion at discharge were T12 (6.0%) and L01 (4.7%).

Neurologic Categories: Tables 68 - 71

'Neurologic category at discharge,' which documents the level and extent of lesion at discharge, is separated into paraplegia complete, incomplete, or minimal deficit, and tetraplegia complete, incomplete, or minimal deficit. As above, minimal deficit groups were added in 1987, and retrospective updates were allowed but not required.

Table 68 shows that, at the time of discharge, most participants had neurologically incomplete tetraplegia (32.9%), followed by neurologically complete paraplegia (23.6%), neurologically incomplete paraplegia (18.4%), and neurologically complete tetraplegia (18.2%).

Neurologic categories at discharge by etiology group are depicted in **Table 69**. Neurologically incomplete tetraplegia ranked first for etiologies of vehicular accidents (33.3%), sports (48.1%) and falls (42.6%). Neurologically complete paraplegia ranked first (41.5%) for SCIs resulting from violence. Neurologically incomplete paraplegia ranked first (46.7%) in SCIs resulting from medical/surgical complications. Interestingly, 84.1% of all sports-related injuries resulted in tetraplegia, while 67.1% of all violence-related injuries resulted in paraplegia.

The neurologic category at discharge grouped by year of injury is depicted in **Table 70**. Both tetraplegia complete and paraplegia complete injuries have declined since the 1970s (25.3% and 27.7%, respectively) to current levels (11.4% and 17.8%, respectively, in 2015-2021).

Neurologic data in **Table 71** were collected from only those participants who completed a clinical System neurologic exam. This exam may be conducted from 6 months prior to the first anniversary of the injury to 6 months after the first anniversary. At the year 1 exam, neurologically incomplete tetraplegia ranked first (20.9%), followed by neurologically complete paraplegia (17.9%), neurologically incomplete paraplegia (13.5%), and neurologically complete tetraplegia (12.9%).

ASIA Impairment Scale: Tables 72 – 77

As mentioned above, the AIS, formerly known as the Frankel Grade, is used to quantify the degree of residual neurologic function. The next six tables report AIS grades by System, at rehabilitation admission and System discharge, and by cervical, thoracic, lumbar, and sacral levels.

Table 72 depicts the proportion of participants with each AIS grade at discharge by System. Nationally, 'Complete (A)' injuries at discharge constitute the largest category (41.9%), and 'Functional Motor Incomplete (D)' injuries constitute the second largest category (29.4%). One System has the highest rates of 'Complete (A)' injuries (57.5%), whereas one System has the highest rate of 'Functional Motor Incomplete (D)' injuries (48.6%).

AIS grade at admission to acute care, admission to rehabilitation, and discharge from the System appears in **Table 73** (for Day-1 Admissions only). The collection of data regarding neurologic function at admission to rehabilitation began October 31, 2000, and accordingly, the values in the 'Rehabilitation admission' column were generated from a smaller 'known value' sample. Between acute admission and System discharge, the proportion of participants declined in three out of the four categories ('Complete (A),' 'Sensory Incomplete (B),' and 'Non-functional Motor Incomplete (C)'). Conversely, the percentage of participants with injuries in the 'Functional Motor Incomplete (D)' category increased from 18.8% at acute admission to 32.2% at System discharge.

AIS grade by neurologic level of lesion at discharge appears in **Tables 74-76**. Among persons with cervical lesions, neurologically complete (A) and functional motor incomplete (D) lesions were equally common. Thoracic lesions were more likely to be neurologically complete (A). Lumbar lesions were more likely to be functional motor incomplete (D).

Table 77 depicts the proportion of participants with each AIS grade for each System at the first anniversary after the injury. These data require a System exam and can be collected from 6 months prior to the 1-year anniversary to 6 months after the anniversary. Of the participants with completed year 1 follow-ups, 30.8% had neurologically complete (A) injuries and 21.0% had functional motor incomplete (D) injuries.

ASIA Motor Index Scores: Tables 78 - 79

The ASIA motor index score is a measure of motor function, ranging from 0 to 100, used to document neurologic recovery. The 'ASIA Motor Index Score' variable was added in 1986 and data collection at the time of admission to rehabilitation was added in 1993. The analyses for Tables 78 and 79 used data entered since October 1993.

Mean ASIA motor index scores (Day-1 Admissions only) at acute admission, admission to rehabilitation and first definitive System discharge by System appear in **Table 78**. Nationally, the mean score increased from 44.3 at System admission to 48.4 at rehabilitation admission and to 56.2 at discharge. A similar trend was observed at each System.

Table 79 shows the mean ASIA motor index scores (57.2 for all Systems combined) at 1 year post-injury. These data require a System exam and may be collected from 6 months prior to the 1-year anniversary to 6 months after the anniversary.

Sensory Scores: Table 80 – 83

The sensory index and summary scores, as described in the International Standards for Neurological Classification of Spinal Cord Injury guidelines, were measured by testing 28 key dermatomes on each side (right and left) from C2 to S4-5, with scores ranging from 0 (no sensation) to 2 (intact). The total maximum score for light touch and pin prick on the left and right is 56 each (total 112 on the right and 112 on the left). The associated table averages excluded records categorized as 'No exam.' These variables were added October 1, 2011, and

were collected at three time points: rehabilitation admission, System discharge, and post-injury year 1 exam. Comparison of the averages must be interpreted cautiously as multiple factors impact System differences.

Table 80 shows the mean total light touch score at rehabilitation admission was 65.2. Mean System scores at rehabilitation admission ranged from 53.5 to 75.5. The mean Light Touch Total at System discharge was 70.6, and mean System Light Touch Total scores ranged from 61.8 to 81.0.

Table 81 shows the mean Pin Prick Total score at rehabilitation admission was 57.0. Mean System Pin Prick Total at rehabilitation admission ranged from 44.4 to 68.5. The mean Pin Prick Total at System discharge was 61.9, and mean System Pin Prick Total scores ranged from 51.4 to 74.3.

Tables 82 and 83 show descriptive statistics for Light Touch and Pin Prick Total Scores at post-injury year 1 by System. The mean Light Touch Total score for all Systems was 69.1, and scores ranged from 32.6 to 85.6. The mean Pin Prick Total Score for all Systems was 64.3, and scores ranged from 34.8 to 80.2.

Respirator Use: Tables 84 - 86

These tables document the use of mechanical ventilation to sustain respiration. In October 2000, data collection of respirator use during System hospitalization was deleted and the data are now collected at the time of System rehabilitation admission and at the time of System discharge. The database collects three different categories of mechanical ventilator use: 1. 'Yes, limited, short-term use for pulmonary complications;' 2. 'Yes, ventilator-dependent or ventilator use requiring a weaning process;' and 3. 'Yes, phrenic nerve stimulator.' These three groups (plus the conversion code) have been combined into the mechanical ventilator ('Respirator Use') required category. 5. 'Yes, Continuous positive airway pressure for sleep apnea' was included in the 'No' column.

Tables 84 and 85 separate paraplegia (Table 84) from tetraplegia (Table 85) level lesions. Of the participants with paraplegia level lesions admitted to System rehabilitation, 5.3% required respirator assistance. Most persons with paraplegia were discharged with no respirator use (only 0.4% required respirator use at discharge). **Table 85** shows 19.4% of the persons with tetraplegia required the use of a mechanical respirator at the time of rehabilitation admission, whereas only 5.5% were discharged requiring a respirator. Intersystem variability in the proportion of persons with tetraplegia who required the use of a respirator at System rehabilitation admission was substantial, ranging from 0.0% to 33.7%. The proportion of those with tetraplegia who were discharged requiring a respirator also varied considerably, ranging from 0.0% to 16.9%. This variability may be partly attributed to whether Systems provide services for participants requiring mechanical ventilation.

Table 86 shows the proportion of participants who required the use of a mechanical respirator at 1 year post-injury. Only 3.4% of participants in the tetraplegia group and 0.2% of participants in the paraplegia group still required the respirator at 1 year post-injury.

Functional Independence Measure Scores: Tables 87- 88

Functional status of participants at System discharge and gain in function from rehabilitation admission to System discharge are important measures of the quality of care provided by SCI Model Systems. The instrument chosen by the SCIMS to assess functional status is the Functional Independence Measure (FIM), introduced in 1986 by the Task Force to Develop a Uniform Data System (UDS) for Medical Rehabilitation. Although the complete FIM consists of 18 items, the National SCI Database documented only the motor items. The FIM Motor Total Score has 13 units as the lowest possible score and 91 units as the highest possible score (representing the most independent level of motor function). Items include feeding, grooming, bathing, dressing upper and lower body, toileting, bladder and bowel control, transfer to bed or chair, toilet, tub or shower, locomotion and stair climbing. SCIMS excluded FIM data from those less than 6 years old. Form I required FIM data after October 1988 and up to October 2018. Form II required FIM data after February 1996 and up to October 2018.

Table 87 shows the national mean FIM Motor Total Score increased from rehabilitation admission to discharge (24.9 and 53.9, respectively). There is very little variability between Systems in rehabilitation admission and discharge scores.

Table 88 shows an increase in mean FIM Motor Total Score from rehabilitation admission to discharge, regardless of the neurologic category. Persons with complete tetraplegia had the lowest FIM scores (15.0 at rehabilitation admission and 28.4 at discharge).

Method of Bladder Management: Tables 89 - 92

These tables represent the primary method of bladder management being used at discharge and by participants grouped according to post-injury year. In November 1995, new categories were added (codes: 2-'Indwelling catheter after augmentation or continent diversion;' 3-'Catheter free with external collector, no sphincterotomy;' 4-'Catheter free with external collector and sphincterotomy;' 7-'Intermittent catheter program (ICP) only;' 8-'ICP with external collector;' and 9-'ICP after augmentation or continent diversion'). Considering this is a recent change, the minimal number of participants in those categories is not surprising, and as a result, the tables must be interpreted cautiously.

Tables 89 and 90 show the method of bladder management by System at System discharge, separated by sex. The most common discharge categories for males were ICP (with or without an external collector; 44.9%), followed by normal micturition (17.5%), indwelling catheter (14.1%), and condom catheter (catheter free with external collector; 11.0%). Most females were discharged with ICP (40.1%) as well, followed by indwelling catheterization (26.8%) and normal micturition (21.5%). There is intersystem variation in bladder management. For example,

suprapubic cystostomy is used more often in one System than in the other Systems, regardless of sex.

Tables 91 and 92 show the method of bladder management used by participants grouped by year post-injury, separated by sex. Because of increasingly short lengths of stay in rehabilitation, many males have not yet completed the ICP and graduated to the use of condom catheter drainage before discharge. This trend is reflected by the decline in all forms of ICP use reported by post-injury year 1 and year 5 participants (34.8% and 30.5%, respectively, for males; 32.2% and 29.3%, respectively for females) and concomitant increase in all condom usage ('Catheter free with external collector') reported for males (15.8% and 18.8%, respectively), as compared with method of bladder management at discharge. The gradual decrease in normal micturition over time for both males and females may result from aging or individuals being increasingly less likely over time to return for follow-up. The high percentages of individuals with suprapubic cystostomies after year 20 is the result of a high proportion of records from a System, in which this is a more common method of management.

Reason for Change in Bladder Management: Table 93

This variable documents the reason for the most recent change in primary method of bladder management since the Form I or last followed Form II (whichever is most recent). Change is defined as using a different 'Bladder Management' code from the last known code. If there is more than one change in bladder management method, the most recent reason for change was reported. The primary reason is defined by the participant when more than one reason for change is reported; when the participant does not specify the primary reason, the codes are in hierarchical order. This variable was added for all Form II interviews conducted on or after October 1, 2011.

Among post-injury year 1 participants, 68.0% reported no change to the primary type of bladder management and among participants at later post-injury years, approximately 80% reported 'No change' in bladder management. Regained bladder control was the main reason for bladder management changes for those in early post-injury years (ranging from 10.0% for post-injury year 1 participants to 1.4% at post-injury year 15 participants). Medical complications were an increasing factor for change in bladder management for those in the later post-injury years, ranging from 3.3% for post-injury year 1 participants to 7.9% for post-injury year 40 participants.

Body Mass Index: Table 94-95

Height and weight have been collected since October 2006. Both measurements are taken near rehabilitation admission as well as at each Form II interview. Height may be collected by self-report but weight requires a calibrated scale measurement at a System exam, which results in a large number of missing data points for Table 95, as more than 70% of follow-up data were obtained by phone interviews or mail.

Weight and height were used to calculate body mass index (BMI; kg/m^2). Nationally, the mean BMI near the time of System rehabilitation admission is 26.7 (**Table 94**), ranging by System from 25.2 to 28.7. **Table 95** shows the mean BMI by System for each post-injury year. There was little variability in mean BMI across all post-injury years (range from 25.6 to 26.9) and across all Systems.

Diabetes Diagnosis: Tables 96 – 97

These variables identify the self-reported presence of diabetes prior to the injury and at each required follow-up year. The interviewer asks *"Prior to your spinal cord injury, had you been told by a health professional that you have diabetes or high blood sugar?"* for Form I collection, and *"Currently, do you have diabetes or high blood sugar?"* for Form II collection. The 'Diabetes' variable was added to the database for Form I and Form II in October 2011 and modified in October 2016.

Prior to injury, 10.5% of participants had diabetes. In post-injury year 1 participants, the prevalence of diabetes is 10.3% and this prevalence rate is steady over the post-injury years with a slight increase for post-injury year 40 participants (11.6%).

Urinary Tract Infection: Table 98

This variable identifies the self-reported frequency of a urinary tract infection requiring treatment with an antibiotic in the past 12 months. This variable was added to the Form II database in October 2011 and modified in October 2016 at which time codes were added to indicate frequency of UTI and existing data indicating a UTI occurred were converted to 'UTI Number Unknown'. Over one half of post-injury year 1 participants (53.9%) reported one or more urinary tract infections with antibiotic treatment (1 to 2 times, 13.6%; 3 to 5 times, 7.6%; > 5 times, 5.2%; or unknown times, 27.5%). The prevalence of urinary tract infection is fairly stable over the post-injury years.

Pressure Ulcer: Table 99

This variable identifies the self-reported occurrence of a pressure ulcer of grade 2 or higher in the past 12 months. This variable was added to the database for Form II in October 2011. Among post-injury year 1 participants, 25.2% reported the occurrence of pressure ulcers since discharge from rehabilitation. The prevalence of pressure ulcer increased over the post-injury years to 39.6% for post-injury year 45 participants.

Rehospitalizations: Tables 100 - 102

These variables document all rehospitalizations in all hospitals (i.e., System and non-System) that occurred during the 12 months prior to the date of the interview. Cause of rehospitalization was added in March 2001.

Tables 100 and 101 show the total number of rehospitalizations and mean total days by System and post-injury year. By far, the majority of participants reported no rehospitalization across all post-injury year categories. Percentages ranged from 63.4% of post-injury year 1 participants to 72.5% of post-injury year 25 participants and slowly declines 64.2 in post-injury year 45. Among those rehospitalized, the mean total of days hospitalized ranged from 23.0 days for post-injury year 1 participants to 19.1 days for post-injury year 20 participants.

Table 102, Cause of Rehospitalization by Post-Injury Year, counts each episode of rehospitalization (up to 8) per participant. Diseases of the genitourinary system were the leading cause of rehospitalization during most post-injury years, ranging from 23.5% of 940 rehospitalization episodes for post-injury year 35 to 30.0% for post-injury year 1. Disease of the skin was the second most common cause of rehospitalization, ranging from 11.4% for post-injury year 1 to 20.9% for post-injury year 20. Other common causes of rehospitalization included respiratory, digestive, circulatory, and musculoskeletal diseases. The relatively high percentages of 'Other, Unclassified' causes suggest that additional categories may need to be identified for this variable.

Anxiety Diagnosis: Table 103

This variable documents self-reported diagnosis of anxiety prior to injury (Form I). The interviewer asks *"Prior to your spinal cord injury, had you ever been told by a health professional that you had post-traumatic stress disorder (PTSD), panic disorder or generalized anxiety disorder (GAD)?"* Data are collected primarily by self-report. When more than one diagnosis is reported, the first chronologic disorder is entered to the database. This variable was added to the database for Form I in October 2011.

Most participants (87.3%) had no anxiety disorder diagnosis prior to injury (**Table 103**). General anxiety disorder prior to injury was endorsed most often (6.6%), with System percentages ranging from 1.7% to 10.6%.

Depression: Table 104

Table 104 documents a self-reported diagnosis of depression prior to the SCI (Form I). The interviewer asks *"Prior to your spinal cord injury, had you ever been told by a health professional that you have depression?"* Data are collected primarily by self-report and include major depression and clinical depression but exclude bipolar, adjustment disorder, grief and bereavement. This variable was added to the database for Form I in October 2011.

Overall, 14.3% of participants reported depression diagnosis prior to injury. System percentages ranged from 8.2% to 24.3%.

Patient Health Questionnaire: Tables 105-106

The Patient Health Questionnaire-9 (PHQ-9) consists of nine questions reflecting the frequency of problems associated with possible depression. Each of the nine questions is scored from 0 (no problem) to 3 (nearly every day). Major syndrome is defined as scoring a 2 or 3 on at least one of the first two questions and scoring at least a 2 on a total of at least five of the nine questions. Other depressive syndrome is defined as scoring a 2 or 3 on at least one of the first two questions and scoring a 2 or 3 on two to four of the nine questions. Also, the severity of depression score is calculated as the sum of the scores from the nine PHQ questions. The PHQ-9 was required for Form II collection after March 1, 2001. PHQ questions 3-9 were not required from October 2011 to September 2016, which explains the large percentage of unknown/missing data.

Table 105 depicts the frequency and percentage of persons with major or other depressive syndrome by post-injury year. Excluding unknown/missing/declined data, the percentage of persons with major depressive syndrome ranges from 11.1% for post-injury year 1 participants to 6.2% for post-injury year 35 participants. The percentage of persons with other depressive syndrome ranges from 10.5% for post-injury year 1 to 7.6% for post-injury year 15 participants.

Table 106 depicts the mean severity of depression score by post-injury year category. This analysis includes records with scores of 0. Overall, mean depression severity scores varied slightly over the years, ranging from 6.6 for post-injury year 1 participants to 5.1 for post-injury year 25 participants.

Pain: Tables 107 - 108

The severity of pain score reflects the participant's self-reported usual level of pain over the past 4 weeks, on a scale of 0 to 10. These data were required after March 1, 2001. **Table 107** depicts the mean severity of pain score. The total mean usual level of pain did not vary across post-injury years through year 40, staying between 4.2 and 4.5. Furthermore, reported severity of pain scores did not vary substantially between Systems.

Table 108 reflects responses to the question of the degree to which pain interfered with work or usual routine. This is a variable from the SF-12 that was added to the NSCISC database in May 1998. It was retained in the National SCI Database along with the self-reported rating of overall health when the remainder of the SF-12 was dropped from the database in September 2000.

Overall, most persons who reported that they had pain also reported that the pain either did not interfere with work or that it interfered only a little bit. The percentage of participants who reported pain interference as 'Not at all' was lowest (17.7%) for post-injury year 1 participants and highest, at 27.8%, for post-injury year 25 participants; the percentage for those at post-injury

years 30, 35 and 40 was 27.1%, 25.9% and 24.6%, respectively. Approximately 16%–20% of persons reported that pain interfered with work/routine 'Quite a bit' to 'Extremely' across all post-injury years.

Self-Perceived Health Status: Tables 109 - 110

"In general, would you say that your health is excellent, very good, good, fair or poor?" is question 1 from the Short Form Health Survey (SF-36). It was added to the database in 1995. "*Compared to a year ago, how would you rate your health in general now?"* is question 2 from the SF-36. If the interview is conducted at year 1, then the time frame is 'since rehabilitation discharge' instead of 'compared to a year ago.' This variable was added in May 1998. These questions are not collected from participants less than 18 years old.

Table 109 depicts the participant's perception of their current health by post-injury year. Most post-injury Year 1 participants (32.1%) endorsed 'Good' and the fewest (5.5%) endorsed 'Poor.' Endorsements of 'Excellent' and 'Very good' increased slightly across post-injury years until post-injury year 25, then decreased slightly for participants in the post-injury years 30 through 40.

Table 110 show the participant's perception of their health compared to a year ago (for post-injury Year 1 participants, 'since rehabilitation discharge'). Over half of post-injury year 1 participants reported their health as 'Much Better' or 'Somewhat Better' (32.8% and 23.9%, respectively). However, reports of 'Somewhat Worse' health increased across post-injury years, from 7.5% for post-injury year 1 participants to 20.8% for post-injury year 35 participants).

Alcohol Use – AUDIT C: Table 111 – 116

These variables document alcohol use over the past 12 months as defined by the AUDIT-C for participants at least 18 years old. The variables were added to the database for all Form I participants with System admission dates on or after October 1, 2011, and all Form II interviews conducted on or after October 1, 2011. Data are collected by interview only according to the AUDIT-C manual. Across the three Alcohol Use tables, less than 2% of participants declined to answer indicating that participants are willing to answer questions about alcohol use.

Table 111 categorizes the number of times a participant drank alcohol in the 12 months prior to injury (Form I) by System. One quarter (24.8%) of participants endorsed not drinking during the year prior to injury, with percentages ranging from 13.1% to 46.0%. About 31% of participants reported having a drink at least twice a week prior to injury.

Table 112 categorizes how often a participant drank alcohol in the 12 months prior to the follow-up interview by post-injury year. For post-injury year 1 participants, almost half (44.5%) endorsed not drinking at all since discharge, and the percentage of non-alcohol users hovered near 40% across all post-injury years. The number of drinks was fairly consistent across post-injury years.

Table 113 categorizes the typical number of drinks a participant drank on the days when drinking in the 12 months prior to injury (Form I). Over one third of participants (37.2%) endorsed having '1 or 2 drinks', with percentages ranging from 27.9% to 43.4%. About 12% of participants reported drinking 5 or more drinks on one occasion.

Table 114 categorizes the typical number of drinks a participant drank on the days when drinking in the 12 months prior to the post-injury interview. Among post-injury year 1 participants, 34.2% endorsed drinking '1 or 2 drinks' on one occasion, and the percentage increased over post-injury year to 48.4% for post-injury year 45 participants. The percentage of participants drinking 5 or more drinks at one occasion varied by post-injury years, ranging from 2.5% for post-injury year 45 participants to 6.4% for post-injury year 20 participants.

Table 115 categorizes how often a participant drank six or more drinks on one occasion in the 12 months prior to injury (Form I). Over one half of respondents (58.1%) reported never having six or more drinks on one occasion, 9.4% of participants reported drinking six or more drinks on a monthly basis, and 9.7% of participants reported drinking six or more drinks at least weekly.

Table 116 categorizes how often a participant drank six or more drinks on one occasion in the 12 months prior to the post-injury interview. About 80% of all participants endorsed never drinking six or more drinks, with the percent remaining stable across the years until post-injury year 25 participants; responses then rose slightly across years to 88.7% for post-injury year 45 participants. Across follow-up years, the percentage of participants who reported drinking six or more drinks at least weekly ranged from 1.6% of post-injury year 1 participants to 3.3% at post-injury year 20, then declining to 1.3% of post-injury year 45 participants.

Satisfaction with Life: Table 117

This table reflects the mean total score measuring the concept of life satisfaction based on the participant's responses to these five statements: *"1. In most ways my life is close to my ideal; 2. The conditions of my life are excellent; 3. I am satisfied with my life; 4. So far I have gotten the important things I want in life; and 5. If I could live my life over, I would change almost nothing."* Response options are: strongly disagree (1), disagree (2), slightly disagree (3), neither agree or disagree (4), slightly agree (5), agree (6), or strongly agree (7). Total score ranges from 5 to 35; higher scores imply more satisfaction with life.

Only records entered into the database after 1995 for participants age 18 or older were used in this analysis. Nationally, mean life satisfaction total score increased across the post-injury years, from 19.4 for post-injury year 1 participants to 24.8 for post-injury year 45 participants.

CHART: Tables 118 - 121

The Craig Handicap Assessment and Reporting Technique (CHART) questionnaire is widely used in measuring societal participation for persons with disabilities. CHART data were added to the National SCI Database in November 1995. The questionnaire is administered at follow-up to individuals who are 18 years or older. From 1995 to October 2000, the version of the CHART

that was used in the database consisted of 26 questions and five subscales (physical independence, mobility, occupation, social integration, and economic self-sufficiency). In 2000, the version included in the database was changed to the short form that consists of only 20 questions and includes a sixth subscale (cognitive independence). CHART data collected from 1996 through 2000 were converted to the short form by the NSCISC so that all CHART data in the database are in the same format. In 2006, the CHART was further reduced to 15 questions and four subscales by removing the economic self-sufficiency questions and subscale and the cognitive independence subscale. The following tables show the mean score of four subscales: physical independence, mobility, occupation, and social integration. Each subscale score is capped at 100, and scores of less than 100 imply the presence of a handicap.

Table 118 depicts the mean CHART physical independence subscale score by post-injury year for each System. The mean physical independence score increased across post-injury years, from 71.9 for post-injury year 1 participants to 86.7 for post-injury year 40 participants. However, there was considerable intersystem variability in physical independence scores. For example, for post-injury year 1 participants, mean physical independence scores by System ranged from 54.3 to 86.1.

Table 119 depicts the mean CHART mobility subscale score by post-injury year for each System. The mean mobility score shows little variability across years, ranging from 73.1 for post-injury year 1 participants to 78.2 for post-injury year 15 participants then scores declined slightly to 74.1 for post-injury year 40 participants.

Table 120 depicts the mean CHART occupation subscale score by post-injury for each System. The mean occupation score increased across years, from 49.1 for post-injury year 1 participants to 64.1 for post-injury year 25 participants, then declined slightly to 57.4 for post-injury year 40 participants. However, there was considerable intersystem variability in occupation scores. For example, mean occupation scores for post-injury year 1 participants by System ranged from 34.8 to 62.7. Although the occupation subscale includes other activities besides competitive employment, the trend over post-injury years in this subscale score is consistent with many previous studies of return to work after SCI that have shown a gradual increase in the employment rate over time.

Table 121 depicts the mean CHART social integration subscale by post-injury year for each System. Social integration scores changed very little across years, ranging from the lowest of 84.6 (post-injury year 40 participants) to the highest of 86.6 (post-injury year 1 and 15 participants).

Ambulation: Tables 122 - 125

Tables 122-124 reflect ambulation ability by post-injury year. These three variables were added May 1, 2004, and reflect the yes/no responses to these three questions: *Are you able to walk (with or without mobility aid) for 150 feet in your home? Are you able to walk (with or without mobility aid) for one street block outside? Are you able to walk (with or without mobility aid) up one flight of steps?*

Among 10,063 participants who were interviewed at 1 year post injury, 38.4% reported being able to walk for 150 feet at home, 33.2% reported being able to walk for one street block outside the home, and 32.7% reported being able to walk up one flight of stairs. The gradual decrease in ambulation ability reported over post-injury years may be the result of reduced follow-up as ambulation improves.

Table 125 reflects the types of mobility aids most often used by participants by post-injury year. Percentages may equal more than 100 because some participants used more than one mobility aid (up to five entries per record is possible). Approximately one half of post-injury year 1 participants were not ambulatory (51.6%), this increased to 79.2% of post-injury year 45 participants. Of those who were ambulatory, 17.9% of post-injury year 1 participants but only 4.5% at post-injury year 40 participants did not use a mobility aid. A straight cane was the most commonly used aid across most of the post-injury years. Only a small percentage of participants reported use of an 'Other' aid, suggesting the categories established for this variable are adequate.

Wheelchair Use: Tables 126 - 127

Variables in Tables 126 and 127 were added in May 2004. **Table 126** reflects the participants who use wheelchairs or scooters more than 40 hours per week by post-injury year. The use of wheelchairs tended to increase across the years, from 59.2% of post-injury year 1 participants to 79.5% of post-injury year 30 participants. The increase may be the result of aging or reduced follow-up as ambulation improves. **Table 127** identifies the most common type of wheelchair was 'manual' in all years, but use of power chairs increased across years, from 23.1% of post-injury year 1 participants to 31.2% of post-injury year 40 participants.

Technology Use: Tables 128-134

Table 128 reflects computer use by participants by post-injury year. This variable was required after May 1, 2004. Overall, computer use increased across post-injury years, from 72.6% of post-injury year 1 participants to 93.7% of post-injury year 45 participants. Around one-fifth of participants report no computer use from post-injury years 1 through 30 then reduces to 6.3% for participants in post injury year 45 whereas most participants reported an increase of using a computer both inside and outside the home over post injury years (40.5% at year 1 post injury to 68.6% in post injury year 45).

Table 129 reflects computer use with assistance from another person by post-injury year. This variable documents the need for assistance of another person to use a computer, including turning the computer on or off; positioning the computer or individual for computer use; assistance with set up or devices; and using a computer by proxy. This variable was added to the database for Form II in October 2011. Among post-injury year 1 participants, 9.9% required assistance from another person to operate a computer, but among post-injury year 40 participants, only 7.7% needed assistance. Participants who reported not using a computer

remained fairly stable across years at approximately 15% and declined slightly in post-injury year 45 (10.7%).

Table 130 shows utilization of assistive devices for computer use by post-injury year. This variable recorded up to five assistive devices used to operate a computer. The first device listed was the most frequently used device. This variable was added to the database for Form II in October 2011. Totals may equal more than 100% because each participant may endorse up to five devices. Across post-injury years, about two thirds of participants endorsed no assistive devices (ranging from 65.8% of post-injury year 1 participants to 70.8% of post-injury year 20 participants). Across all post-injury years, the most often used devices were speech recognition software or a brace/splint (near 5% for each).

The next four tables describe variables that were required after May 1, 2004.

Table 131 reflects internet or email usage by participants by post-injury year. This includes the use of electronic devices that access the internet or email in addition to a computer. Daily internet or email access increased across post-injury years, from 56.1% of post-injury year 1 participants to 78.0% of post-injury year 45 participants.

Table 132 shows ownership of a modified vehicle. The percentage of participants who owned a modified vehicle increased across post-injury years, from 26.1% of post-injury year 1 participants to 74.8% of post-injury year 45 participants. The most common type of modified vehicle owned by participants or their families is a van, followed by car.

Table 133 shows the frequency of participants who drive a modified vehicle (by transferring into the vehicle or driving from a wheelchair) across post-injury years. Approximately 15% of respondents who own a modified vehicle do not drive across post-injury years. The percentage of participants driving increases over post-injury years and the percentage of participants who do not own a modified vehicle decreases over post-injury years. The majority of driving respondents transfer into their vehicle rather than driving from their wheelchairs.

Table 134 reflects cell phone usage by post-injury year. The percentage of participants using a cell phone shows little variation across years, near 80%, until post-injury year 30, when use increases slightly to 87.8% for post-injury year 40 participants.

Source of Health & Disability Information: Table 135

Table 135 documents the medium the participant used to access health and disability news and information in the past 12 months. This variable has been collected since October 2006. Up to five sources are documented, with the primary source entered in the first data entry position. Percentages may total more than 100 because each participant may endorse up to five sources. The codes for 'Conversation with family or friends' and 'Conversation with health professionals', were added October 2011. The majority of respondents used the internet, television, or both to

access health and disability information. Internet use was the most frequently used source ranging from 49.3% at post injury year 1 to 69.8% at post injury year 45. Conversations with health care professionals were used by 45.2% of post-injury year 1 participants, with a marked increase for post-injury year 35, 40 and 45 participants (50.2%, 63.9%, and 68.6%, respectively).

Variables added to the database in October 2016: Table 136-215

Health Literacy at Injury: Tables 136 – 138

Tables 136-138 document self-reported health literacy by System at the time of injury. Participants 18 years old and older are asked to score their confidence in filling forms, the difficulty understanding medical information, and the need for help reading hospital materials. The responses were scored on a 5 point Likert scale. Over 60% had quite a bit or extreme confidence filling out medical forms by themselves. Over 50% endorsed never having difficulty understanding medical information. Almost 60% never or rarely needed help reading hospital materials.

SCI-QOL Resilience: Tables 139 – 156

Tables 139-156 describes resilience, as defined by the Spinal Cord Injury Quality of Life measure (SCI-QOL Resilience), by System at initial rehabilitation and by each post-injury year. Participants 18 years old and older were asked to rate the frequency of 8 resilient behaviors: “I had a positive attitude”, “I felt good about how I have coped with my injury”, “I used positive ways to cope with my injury”, “I felt I can get through difficult times”,” I tried to see the positive side of things”, “I was confident that I could overcome my limitations”, “I took action to improve my life”, and “I found new things to enjoy”. The System auto-calculated T score (ranging from 0 to 100) and Standard Error, though only the T Score is represented in this report.

Patient Health Questionnaire at Injury: Tables 157 – 158

Tables 157-158 depict the PHQ-9 frequency and percentage of persons with major or other depressive syndrome and the mean severity of depression score by System at initial rehabilitation. The PHQ-9 description is on page 72, Tables 105 and 106. At injury, over 80% of respondents indicate no depressive syndromes and the total mean severity of depression score was 5.7 out of 27, ranging from 2.6 to 13.4.

Pregnancies and Live Birth: Tables 159 – 162

For female participants 15 years old and older, the interviewer asks the number of pregnancies and number of live births. The number of pregnancies and live births by System prior to injury and at each post-injury year are presented in **Table 159-160** and **Table 161-162**, respectively. Since these variables were added in 2016, follow-up interviewers asked participants how many pregnancies and live births had occurred at the time of injury and these data were added to the National SCI Database retrospectively. Out of about 700 responses at injury, the mean number of pregnancies was 1.8 (Table 159) and live births was 1.5 (Table 161). From about 2,400 respondents across anniversary years, the total number of pregnancies hover near 2 and live births are between 1.2 and 1.5 (Tables 160 and 162).

Medical Conditions: Tables 163 – 168

The next set of tables document self-reported hypertension, hyperlipidemia, and arthritis (osteoarthritis, rheumatoid arthritis, gout, lupus or fibromyalgia). During rehabilitation, participants are asked 'Prior to your spinal cord injury, has a health professional every told you that you have … 'At Form II follow-up interviews, participants are asked 'Currently, do you have or do you take medication for …'. Again, since these variables were added in 2016, follow-up interviewers asked participants about each condition at the time of injury and these data were added to the National SCI Database retrospectively. The results are presented in **Tables 163-168**. Most respondents endorse no hypertension (73.7%), no hyperlipidemia (80.7%), and no arthritis (80.4%) prior to injury. Respondents report an increase across anniversary years in all three conditions. Arthritis increased the most across anniversary years, from 21.9% at post injury year 1 to 48.5% at post injury year 40.

Sleep and Falls: Tables 169 – 170

Tables 169-170 show the self-reported occurrence of sleep problems (including problems falling asleep and staying asleep) and falls in the past 12 months for each required follow-up year. Most respondents (38%) had no problems sleeping or problems less than monthly and this was fairly stable across post injury years. Over one-third of respondents reported no falls in the last 12 months and about one-quarter reported more than 5 falls in the last 12 months.

Bladder Incontinence: Tables 171 – 172

Tables 171-172 document the average involuntary urine leakage (incontinence) since rehabilitation admission or up to 4 weeks and for the follow-up interviews, over the last 4 weeks. At rehabilitation, over half (56.1%) report no incontinence and one-quarter report (25.9%) report at least weekly incontinence. Across follow-up years, incontinence was stable; near 60% of respondents report no incontinence and around 20% report at least weekly incontinence.

Bowel Management: Tables 173 – 180

Tables 173-178 document the most recent defecation method and bowel care procedures, the average frequency of bowel emptying, and average time required for each defecation since rehabilitation admission and within the last 4 weeks at each required follow-up year. During rehabilitation, most participants (44.6%) used suppositories as the primary method to empty the bowels and the second most used method was normal defecation (21.6%). Across post injury years, normal defecation declined from year 1 to year 45 post injury (35.0% to 18.9%, respectively). The use of suppositories decreased across post injury years (from 26.3% at year 1 post injury to 18.2% at post injury year 40) whereas digital stimulation increased (from 15.8% at post injury year 1 to 25.6% at post injury year 40). Colostomy increased from 4.5% at post injury year 1 to 16.4% at post injury year 45.

Over two-thirds (68.1%) of participants reported emptying their bowel at least once a day during rehabilitation (Table 176). Across years, Table 177 shows a steady decline of daily defecation, from 49.6% at post injury year 1 to 27.0% at post injury year 45.

Over half (55.3%) of participants in rehabilitation reported it took less than 30 minutes to empty the bowel. Across Centers, this ranged from 27.7% to 80.2%. At follow-up interview, about half of respondents reported less than 30 minutes to empty the bowel.

In addition, **Tables 179-180** present the average frequency of incontinence to solid or liquid stools since rehabilitation admission or up to 4 weeks and for the follow-up interview, over the last 4 weeks. Most participants (60.7%) experienced fecal incontinence never or less than monthly at rehabilitation. About three-quarters of respondents report never or less than monthly experiencing fecal incontinence across post injury.

Substance Use: Tables 181 – 198

The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was developed for the World Health Organization (WHO) as a technical tool to assist with early identification of substance use related health risks and substance use disorders in primary health care, general medical care and other settings. Prescribed substances are included when taken at a higher dose or more frequently than prescribed. Cannabis is included regardless of local legality or prescription. **Tables 181-198** identify up to 9 substances (Tobacco, Cannabis, Cocaine, Amphetamine type stimulants, Inhalants, Sedatives or Sleeping pills, Hallucinogens, Opioids, and Other) used by participants at least 18 years old in the last 3 months prior to the injury and in the last 3 months before the follow-up interview.

- In the 3 months prior to injury, one-quarter of participants used tobacco products daily or almost daily. In the 3 months prior to the follow-up interview, participants used tobacco products daily or almost daily from post anniversary year 1 (14.5%) increased to year 25 (18.3%) then decreased in following post injury years (year 45, 10.1%).

- Participants reported cannabis use at least weekly by almost 20% of participants 3 months prior to injury (daily or almost daily (13.7%) and weekly (5.9%)). Similarly, at follow-up participants reported cannabis use at least weekly around 20% from post injury years 1 through 25, then decreased slightly in following years (Year 45, 15.7%).
- Except for sedatives, all other drugs were reportedly used by less than 2% of participants prior to the injury and the follow-up interview.
- Use of sedatives at least weekly prior to the injury was less than 1% but at the follow-up interview, rates were near 5% from post injury years 1 through 35, after which use drops slightly.

SCI-Functional Independence with Assistive Technology: Tables 199-212

SCI-Functional Independence with Assistive Technology (SCI-FI AT) is used among participants at least 18 years old. This measures the functional status in the following domains: basic mobility, self-care, fine motor, ambulation, manual wheelchair, and power wheelchair. The data is collected close to discharge during initial rehabilitation stay or up to 30 days' post-discharge and at post injury years. **Tables 199-200** document the collection method of the SCI-FI AT items. Three available methods are NSCISC Web Program, Desktop Program, and Short Form. Eighty-four percent of interviews used the Short Forms during inpatient rehabilitation. The follow-up interviews primarily used the Short Forms as well, ranging between 73.8% at post injury years 10 and 15 to 88.7% at post injury year 45.

T scores for each domain, ranging from 0-100, is presented in **Tables 201-212**. The total mean rehabilitation T Score for each domain was slightly lower than the total mean T Score at follow-up. Most domains decreased slightly after post injury year 30, except for Power Wheelchair domain which increased from post injury year 1 (43.4) to post injury year 45 (48.3). This may partly be due to manual wheelchair users transitioning to power wheelchairs in later years.

Devices to access Internet/Email: Table 213

Table 213 records the access to internet or email using a mobile device by post-injury year. Mobile devices include cell phones, smart phones, Blackberries, Netbooks/Tablets, PDAs, iPads, iPods, etc. If multiple devices are used, the primary device is reported. Data were collected since October 2011. At post injury year 1, nearly 60% of participants used a smartphone to access the internet or email. The percent using a smartphone decreased until post injury year 35 (41.8%) then increased to post injury year 45 (53.5%).

Weeks Worked: Table 214

Table 214 identifies the number of weeks worked in the last 12 months (or since injury if less than 12 months after SCI) at the time of the follow-up interview. A year-round job is 52 weeks

regardless of vacation or sick leave taken. Work includes any civilian work for pay or profit or worked without pay on a family operated farm or business. For those working, the total average weeks worked was 27.8 at post injury year 1, weeks worked increased until post injury year 30 (46.2), then declined to 35.7 weeks worked at post injury year 45.

Primary Mode of Transportation: Table 215

Table 215 reflects the primary mode of transportation for trips away from home for each post injury year. Most participants reported using a private car, truck or van for transportation (71.7% at post injury year 1 to 84.6% at post injury year 40). The second most frequently used transportation was a special transit for people with disabilities (14.6% at post injury year 1 to 4.7 at post injury year 40).

Tables

Table 1. Total Forms Entered into the National SCI Database as of November 05, 2021

Form II excludes Lost to Follow-up

	Registry	Form I	Form II	Total
Total	15,161	35,675	129,132	179,968

Footnote 1: Form II includes 29,789 participants with Follow-up records.

Table 2. Number of New Records Entered into the National SCI Database since the Last Annual Report in September 2020

Form II excludes Lost to Follow-up

	Registry	Form I	Form II	Total
Total	421	943	2,297	3,661

Table 3. Number of New Records Entered into the National SCI Database for 2016-2021 Funding Cycle

Form II excludes Lost to Follow-up

	Registry	Form I	Form II	Total
Total	1,515	3,518	12,156	17,189

Table 4. Percentage of Form I Day-1 Admissions Entered into the National SCI Database for 2016-2021 Funding Cycle

	Total Number of Form Is Entered	Total Day-1 Admissions	% Day-1 Admissions
Total	3,518	1,187	33.7

Table 5. Number of Registry Patients by Year of Injury

(Continued)

	Year of Injury													
	1986	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Total	73	488	435	478	521	508	553	563	560	617	568	581	607	570

(Continued)

	Year of Injury										
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Total	444	506	477	358	373	453	404	386	370	431	444

	Year of Injury											
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Total	400	319	340	270	354	308	352	328	267	304	151	15,161

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 6. Number of Form I Patients by Year of Injury

(Continued)

	Year of Injury														
System	**1972**	**1973**	**1974**	**1975**	**1976**	**1977**	**1978**	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**	**1986**
Total	3	220	402	579	684	822	848	1,005	1,130	818	749	1,155	1,097	977	931

(Continued)

	Year of Injury													
	1987	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Total	662	628	645	597	705	650	654	689	638	735	754	729	767	674

(Continued)

	Year of Injury												
	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Total	716	716	723	694	636	658	686	778	787	697	703	676	757

	Year of Injury								
System	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Total	753	752	663	748	770	770	622	378	35,675

Footnote 1: Enrollment criteria changed in 1987 and 2000.

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 7. Number of Form I Day-1 Admissions by Year of Injury

(Continued)

	Year of Injury													
	1972	**1973**	**1974**	**1975**	**1976**	**1977**	**1978**	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**
Total	1	72	103	178	196	238	229	293	359	262	221	463	435	331

(Continued)

	Year of Injury													
	1986	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Total	429	378	348	359	382	413	388	394	377	351	409	400	406	397

(Continued)

	Year of Injury										
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Total	323	356	350	290	267	282	290	277	290	249	269

	Year of Injury											
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Total	286	254	274	258	273	239	252	232	269	227	130	14,749

Footnote 1: Enrollment criteria changed in 1987 and 2000.

Table 8. Number of Form IIs by Post-Injury Year

Excludes Lost to Follow-up

(Continued)

	Post-Injury Year													
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Total	27,070	12,971	9,533	8,122	15,497	5,895	5,044	4,163	3,441	9,269	2,119	1,567	1,122	885

(Continued)

	Post-Injury Year															
	15	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
Total	6,350	489	344	260	192	4,804	50	24	16	19	3,803	8	5	8	9	2,908

	Post-Injury Year									
	31	**32**	**33**	**34**	**35**	**36**	**39**	**40**	**45**	**Total**
Total	1	1	1	1	2,033	1	1	947	159	129,132

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 9. Number of Form IIs by Post-Injury Year and Calendar Year of Data Collection

Excludes Lost to Follow-up *(Continued on next page)*

	Calendar Year of Data Collection											
Post-Injury year	**1975-1986**	**1987**	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**
1	7,513	981	693	451	427	590	521	582	529	485	506	571
2	5,999	808	723	443	381	457	333	555	440	390	407	466
3	4,669	681	624	540	390	399	275	396	445	361	245	199
4	3,635	597	496	445	421	434	263	368	306	350	254	211
5	2,921	408	430	361	328	472	254	328	300	242	335	389
6	2,277	384	254	323	280	381	295	305	295	217	114	220
7	1,713	405	248	205	258	354	257	345	260	204	107	112
8	1,268	305	279	220	141	280	221	289	301	211	92	89
9	935	239	208	228	167	181	210	222	269	234	89	104
10	634	211	147	186	174	202	146	226	216	234	259	231
11	364	176	139	152	121	186	135	140	194	179	21	57
12	148	146	110	132	107	132	129	141	118	160	12	11
13	35	81	100	105	92	107	93	134	124	99	9	5
14	0	35	59	96	71	100	70	115	128	112	7	17
15	0	0	29	57	80	98	112	83	103	140	180	224
16	0	0	0	24	38	83	53	75	69	91	18	6
17	0	0	0	0	14	32	67	57	72	59	13	5
18	0	0	0	0	0	11	25	70	49	64	7	7
19	0	0	0	0	0	0	4	26	63	47	2	20
20	0	0	0	0	0	0	0	7	20	75	111	167
21	0	0	0	0	0	0	0	0	3	20	4	3
22	0	0	0	0	0	0	0	0	0	2	2	4
23	0	0	0	0	0	0	0	0	0	0	0	3
24	0	0	0	0	0	0	0	0	0	0	0	2
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
Total	32,111	5,457	4,539	3,968	3,490	4,499	3,463	4,464	4,304	3,976	2,794	3,123

Footnote 1: Date of each record first entered into the database (Indate) was added in 1986.

Footnote 2: Form II data collection frequency changed in 1995 and 2000.

Table 9. Number of Form IIs by Post-Injury Year and Calendar Year of Data Collection

Excludes Lost to Follow-up *(Continued on next page)*

	Calendar Year of Data Collection												
Post-injury year	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
1	590	548	454	476	434	490	592	472	457	516	616	537	667
2	467	468	389	45	18	30	31	15	10	9	18	13	20
3	87	113	48	26	1	3	8	1	1	2	6	2	2
4	197	64	60	5	2	2	0	1	0	1	5	1	0
5	348	279	296	305	272	243	272	300	338	423	382	322	338
6	230	162	119	14	1	1	2	1	0	0	7	2	3
7	213	174	142	32	1	0	1	1	1	1	3	2	0
8	100	174	160	22	4	0	2	0	0	0	1	0	0
9	82	98	139	20	7	6	0	0	0	0	1	0	0
10	212	192	181	239	212	169	188	196	190	296	311	250	268
11	88	82	57	13	2	4	1	1	0	1	1	1	1
12	62	71	57	7	2	8	3	1	1	0	4	3	0
13	12	42	59	9	3	8	0	0	0	0	3	1	0
14	13	10	35	9	2	3	1	0	0	0	1	0	0
15	263	252	234	237	140	117	143	158	178	239	221	187	202
16	10	4	2	0	0	2	3	0	0	0	9	1	0
17	10	0	1	4	0	0	6	0	0	0	3	0	0
18	12	0	1	2	0	1	8	0	0	0	1	0	0
19	11	8	5	1	0	1	2	0	0	0	1	0	0
20	170	178	160	203	182	163	223	202	215	173	130	111	155
21	8	2	1	0	0	0	3	1	4	0	0	1	0
22	5	2	2	0	1	0	1	2	0	0	1	2	0
23	5	0	0	0	0	2	2	0	0	0	1	0	0
24	2	2	4	0	0	0	9	0	0	0	0	0	0
25	6	55	105	155	131	142	178	196	166	219	209	178	217
26	0	0	0	0	0	0	3	1	0	2	0	0	0
27	0	0	0	0	0	0	5	0	0	0	0	0	0
28	0	0	0	0	0	0	5	2	0	0	0	0	0
29	0	0	0	0	0	0	8	1	0	0	0	0	0
30	0	0	0	0	0	5	53	105	112	205	177	179	214
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	6	53	100
36	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,203	2,980	2,711	1,824	1,415	1,400	1,753	1,657	1,673	2,087	2,118	1,846	2,187

Footnote 1: Date of each record first entered into the database (Indate) was added in 1986.
Footnote 2: Form II data collection frequency changed in 1995 and 2000.

Table 9. Number of Form IIs by Post-Injury Year and Calendar Year of Data Collection

Excludes Lost to Follow-up

	Calendar Year of Data Collection											
Post-injury year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
1	539	381	650	671	648	570	595	626	644	585	463	27,070
2	12	8	4	1	4	1	1	0	1	4	0	12,971
3	1	1	2	1	0	1	0	0	1	2	0	9,533
4	1	0	0	1	0	0	0	0	0	2	0	8,122
5	331	367	459	430	488	335	453	420	495	462	371	15,497
6	1	1	2	2	1	0	0	0	0	1	0	5,895
7	0	1	0	2	0	0	0	0	0	2	0	5,044
8	0	0	0	0	1	1	0	0	1	1	0	4,163
9	1	0	0	0	0	0	0	0	0	1	0	3,441
10	241	316	410	312	351	258	340	349	351	329	242	9,269
11	1	0	0	0	0	0	0	0	1	1	0	2,119
12	0	0	0	0	0	1	0	0	0	1	0	1,567
13	0	0	0	0	0	1	0	0	0	0	0	1,122
14	0	0	0	0	1	0	0	0	0	0	0	885
15	175	238	253	226	251	216	285	336	282	236	175	6,350
16	0	0	0	0	0	1	0	0	0	0	0	489
17	0	0	1	0	0	0	0	0	0	0	0	344
18	0	0	0	0	1	1	0	0	0	0	0	260
19	0	0	0	0	0	0	0	0	0	1	0	192
20	140	222	201	225	249	168	233	180	216	160	165	4,804
21	0	0	0	0	0	0	0	0	0	0	0	50
22	0	0	0	0	0	0	0	0	0	0	0	24
23	1	0	0	1	0	1	0	0	0	0	0	16
24	0	0	0	0	0	0	0	0	0	0	0	19
25	168	204	157	143	170	156	210	172	175	169	122	3,803
26	0	1	0	0	0	0	0	0	0	1	0	8
27	0	0	0	0	0	0	0	0	0	0	0	5
28	0	0	0	0	0	1	0	0	0	0	0	8
29	0	0	0	0	0	0	0	0	0	0	0	9
30	179	213	190	245	244	180	192	124	105	102	84	2,908
31	0	0	0	0	0	1	0	0	0	0	0	1
32	0	0	0	0	1	0	0	0	0	0	0	1
33	0	0	0	0	0	1	0	0	0	0	0	1
34	0	0	0	0	0	0	0	1	0	0	0	1
35	105	183	185	154	241	166	176	159	220	159	126	2,033
36	0	0	0	0	0	0	1	0	0	0	0	1
39	0	0	0	0	0	1	0	0	0	0	0	1
40	0	1	9	38	113	101	138	109	174	153	111	947
45	0	0	0	0	0	0	1	11	40	44	63	159
Total	1,896	2,137	2,523	2,452	2,764	2,162	2,625	2,487	2,706	2,416	1,922	129,132

Footnote 1: Date of each record first entered into the database (Indate) was added in 1986.

Footnote 2: Form II data collection frequency changed in 1995 and 2000.

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 10. Primary Cause of Death

ICD10 Codes	Primary Cause of Death	Overall	≤ 1 year	>1 year
J00-J99	Diseases of the respiratory system	3,074 (21.4)	595 (30.9)	2,479 (19.9)
A00-B99	Infective and parasitic diseases	1,723 (12.0)	182 (9.5)	1,541 (12.4)
C00-D48	Neoplasms	1,552 (10.8)	81 (4.2)	1,471 (11.8)
I10-I25	Hypertensive and ischemic heart disease	1,484 (10.3)	129 (6.7)	1,355 (10.9)
I00-I09, I30-I52	Other heart disease	1,184 (8.2)	263 (13.7)	921 (7.4)
S00-X59	Unintentional injuries	958 (6.7)	53 (2.8)	905 (7.3)
K00-K93	Diseases of the digestive system	697 (4.9)	65 (3.4)	632 (5.1)
I60-I69	Cerebrovascular disease	508 (3.5)	62 (3.2)	446 (3.6)
X60-X84	Suicide	422 (2.9)	27 (1.4)	395 (3.2)
I26-I28	Disease of pulmonary circulation	420 (2.9)	170 (8.8)	250 (2.0)
N00-N99	Diseases of the genitourinary system	411 (2.9)	50 (2.6)	361 (2.9)
E00-E90	Endocrine, nutritional, metabolic and immunity disorders	404 (2.8)	31 (1.6)	373 (3.0)
R00-R99	Symptoms and ill-defined conditions	391 (2.7)	62 (3.2)	329 (2.7)
G00-H95	Diseases of the nervous system and sense organs	295 (2.1)	66 (3.4)	229 (1.8)
I70-I79	Diseases of the arteries, arterioles, and capillaries	164 (1.1)	26 (1.4)	138 (1.1)
M00-M99	Diseases of the musculoskeletal system and connective tissue	163 (1.1)	6 (0.3)	157 (1.3)
F00-F99	Mental disorders	142 (1.0)	16 (0.8)	126 (1.0)
Y10-Y34	Subsequent trauma of uncertain nature (unintentional/suicide/homicide)	139 (1.0)	11 (0.6)	128 (1.0)
X85-Y09	Homicides	119 (0.8)	8 (0.4)	111 (0.9)
D50-D89	Diseases of blood and blood-forming organs	43 (0.3)	4 (0.2)	39 (0.3)
I80-I89	Diseases of veins, lymphatics, and other diseases of the circulatory system	25 (0.2)	10 (0.5)	15 (0.1)
Q00-Q99	Congenital anomalies	18 (0.1)	1 (0.1)	17 (0.1)
Y35	Legal intervention	2 (<0.1)	0 (0.0)	2 (<0.1)
	All others	24 (0.2)	7 (0.4)	17 (0.1)
	Total known causes of death	14,362 (100.0)	1,925 (100.0)	12,437 (100.0)
	Total unknown causes of death	3,119	305	2,814
	Total deaths	17,481	2,230	15,251

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 11. Cumulative Survival – National

Years Post Injury	Patients Entered	Dead	Censored	Effective Number Exposed	Proportion Dead	Proportion Surviving	Cumulative Survival at Beginning of Interval
0 - 1	54,687	2,230	9,921	49,726.5	0.0448	0.9552	1.0000
1 - 2	42,536	997	2,759	41,156.5	0.0242	0.9758	0.9552
2 - 3	38,780	687	833	38,363.5	0.0179	0.9821	0.9320
3 - 4	37,260	680	338	37,091.0	0.0183	0.9817	0.9153
4 - 5	36,242	624	774	35,855.0	0.0174	0.9826	0.8985
5 - 6	34,844	589	2,101	33,793.5	0.0174	0.9826	0.8829
6 - 7	32,154	571	942	31,683.0	0.0180	0.9820	0.8675
7 - 8	30,641	542	382	30,450.0	0.0178	0.9822	0.8519
8 - 9	29,717	552	268	29,583.0	0.0187	0.9813	0.8367
9 - 10	28,897	498	550	28,622.0	0.0174	0.9826	0.8211
10 - 11	27,849	554	1,535	27,081.5	0.0205	0.9795	0.8068
11 - 12	25,760	451	659	25,430.5	0.0177	0.9823	0.7903
12 - 13	24,650	471	175	24,562.5	0.0192	0.9808	0.7763
13 - 14	24,004	439	155	23,926.5	0.0183	0.9817	0.7614
14 - 15	23,410	507	289	23,265.5	0.0218	0.9782	0.7474
15 - 16	22,614	430	931	22,148.5	0.0194	0.9806	0.7312
16 - 17	21,253	428	685	20,910.5	0.0205	0.9795	0.7170
17 - 18	20,140	405	385	19,947.5	0.0203	0.9797	0.7023
18 - 19	19,350	392	384	19,158.0	0.0205	0.9795	0.6880
19 - 20	18,574	422	374	18,387.0	0.0230	0.9770	0.6739
20 - 21	17,778	380	617	17,469.5	0.0218	0.9782	0.6585
21 - 22	16,781	338	724	16,419.0	0.0206	0.9794	0.6442
22 - 23	15,719	372	517	15,460.5	0.0241	0.9759	0.6309
23 - 24	14,830	352	524	14,568.0	0.0242	0.9758	0.6157
24 - 25	13,954	298	563	13,672.5	0.0218	0.9782	0.6008
25 - 26	13,093	331	724	12,731.0	0.0260	0.9740	0.5877
26 - 27	12,038	284	804	11,636.0	0.0244	0.9756	0.5725
27 - 28	10,950	294	596	10,652.0	0.0276	0.9724	0.5585
28 - 29	10,060	261	533	9,793.5	0.0267	0.9733	0.5431
29 - 30	9,266	243	540	8,996.0	0.0270	0.9730	0.5286
30 - 31	8,483	240	645	8,160.5	0.0294	0.9706	0.5143
31 - 32	7,598	215	566	7,315.0	0.0294	0.9706	0.4992
32 - 33	6,817	166	467	6,583.5	0.0252	0.9748	0.4845
33 - 34	6,184	207	416	5,976.0	0.0346	0.9654	0.4723
34 - 35	5,561	190	413	5,354.5	0.0355	0.9645	0.4559
35 - 36	4,958	166	523	4,696.5	0.0353	0.9647	0.4398
36 - 37	4,269	133	509	4,014.5	0.0331	0.9669	0.4242
37 - 38	3,627	84	368	3,443.0	0.0244	0.9756	0.4102
38 - 39	3,175	105	273	3,038.5	0.0346	0.9654	0.4002
39 - 40	2,797	97	356	2,619.0	0.0370	0.9630	0.3863
40 - 41	2,344	91	524	2,082.0	0.0437	0.9563	0.3720
41 - 42	1,729	64	380	1,539.0	0.0416	0.9584	0.3558
42 - 43	1,285	26	262	1,154.0	0.0225	0.9775	0.3410
43 - 44	997	30	273	860.5	0.0349	0.9651	0.3333
44 - 45	694	29	208	590.0	0.0492	0.9508	0.3217
45 - 46	457	9	194	360.0	0.0250	0.9750	0.3059
46 - 47	254	5	147	180.5	0.0277	0.9723	0.2982
47 - 48	102	2	97	53.5	0.0374	0.9626	0.2900
48 - 49	3	0	3	1.5	0.0000	1.0000	0.2791
Total	54,687	17,481	37,206				

Footnote 1: Patients entered = Number of individuals alive at start of interval.
Footnote 2: Dead = Number of individuals who died during the interval.
Footnote 3: Censored = Number of individuals alive at start of interval ineligible for further follow-up due to study termination or lost to follow-up (survival status was unknown) during the interval.
*Footnote 4: Effective Number Exposed = Number of individuals exposed to risk of dying in interval (patients entered - 0.5 * censored).*
Footnote 5: Proportion Dead = Conditional probability of death during the interval (dead / effective number exposed).
Footnote 6: Proportion Surviving = Conditional probability of surviving the interval (1- proportion dead).
*Footnote 7: Cumulative Survival at Beginning of Interval = previous cumulative survival * proportion surviving previous interval.*

Table 13A. SMRs for Persons with SCI Surviving at Least 24 Hours Post-Injury

Neurologic Group	Age Group	Actual Deaths	Expected Deaths	SMR	95% Confidence Limits
Vent Dependent	0-30	231	2.46	93.90	82.37 – 106.6
	31-45	195	4.43	44.02	38.16 – 50.53
	46-60	214	8.71	24.57	21.44 – 28.03
	61+	369	18.13	20.35	18.35– 22.51
C1-4 AIS A,B,C	0-30	292	24.37	11.98	10.67 – 13.42
	31-45	783	65.70	11.92	11.10 – 12.77
	46-60	989	134.91	7.33	6.88 – 7.80
	61+	1,009	215.61	4.68	4.40 – 4.98
C5-8 AIS A,B,C	0-30	338	49.97	6.76	6.07 – 7.51
	31-45	996	146.82	6.78	6.37 – 7.22
	46-60	1,516	293.24	5.17	4.91 – 5.44
	61+	1,198	335.24	3.57	3.38 – 3.78
T1-S3 AIS A,B,C	0-30	436	81.39	5.36	4.87 – 5.88
	31-45	1,179	249.73	4.72	4.46 – 5.00
	46-60	1,639	502.10	3.26	3.11 – 3.43
	61+	1,611	665.88	2.42	2.30 – 2.54
All Level AIS D	0-30	117	43.79	2.67	2.22 – 3.19
	31-45	370	155.31	2.38	2.15 – 2.64
	46-60	915	473.02	1.93	1.81 – 2.06
	61+	2,133	1328.82	1.61	1.54 – 1.67

Footnote 1: SMR= Standardized mortality ratio (Actual deaths/Expected deaths).

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 13B. SMRs for Persons with SCI Surviving at Least 1 Year Post-Injury

Neurologic Group	Age Group	Actual Deaths	Expected Deaths	SMR	95% Confidence Limits
Vent Dependent	0-30	104	2.08	50.00	41.06 – 60.33
	31-45	104	4.01	25.94	21.30 – 31.30
	46-60	116	7.50	15.47	12.84 – 18.48
	61+	82	11.16	7.35	5.88 – 9.07
C1-4 AIS A,B,C	0-30	240	21.21	11.32	9.95 – 12.82
	31-45	717	62.38	11.49	10.68 – 12.36
	46-60	872	126.22	6.91	6.46 – 7.38
	61+	756	193.22	3.91	3.64 – 4.20
C5-8 AIS A,B,C	0-30	274	44.17	6.20	5.50 – 6.97
	31-45	945	142.23	6.64	6.23 – 7.08
	46-60	1,418	285.28	4.97	4.72 – 5.23
	61+	1,036	316.85	3.27	3.08 – 3.47
T1-S3 AIS A,B,C	0-30	372	71.28	5.22	4.71 – 5.77
	31-45	1,114	241.38	4.62	4.35 – 4.89
	46-60	1,572	490.65	3.20	3.05 – 3.37
	61+	1,482	645.95	2.29	2.18 – 2.41
All Level AIS D	0-30	94	38.43	2.44	1.99 – 2.98
	31-45	357	148.97	2.40	2.16 – 2.66
	46-60	854	452.80	1.89	1.76 – 2.02
	61+	1,971	1261.17	1.56	1.50– 1.63

Footnote 1: SMR= Standardized mortality ratio (Actual deaths/Expected deaths).

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 14A. Life Expectancy for Persons with SCI Surviving at Least 24 Hours Post-Injury

		AIS D	AIS ABC			Vent Dependent
Age at Injury	No SCI	Any Level	T1-S3	C5-C8	C1-C4	Any Level
10 years	69.3	61.7	54.0	48.4	41.3	16.8
15 years	64.3	56.8	49.2	43.7	36.6	12.8
20 years	59.5	52.1	44.8	39.4	32.6	10.5
25 years	54.8	47.7	40.8	35.5	29.3	9.9
30 years	50.1	43.4	37.0	31.8	26.2	10.8
35 years	45.4	39.2	33.3	28.3	23.4	10.1
40 years	40.8	34.9	29.6	24.8	20.7	8.8
45 years	36.2	30.8	26.0	21.6	18.2	8.0
50 years	31.7	26.7	22.3	18.3	15.3	6.3
55 years	27.4	22.8	18.9	15.3	12.8	4.7
60 years	23.3	19.3	16.0	13.0	11.1	3.7
65 years	19.5	15.8	13.0	10.5	8.9	2.8
70 years	15.8	12.5	10.0	7.9	6.6	1.9
75 years	12.3	9.5	7.4	5.7	4.6	1.1
80 years	9.2	6.8	5.2	3.8	3.0	0.5

Footnote 1: Values for persons with no SCI are from the 2018 life tables for the U.S. general population.

Table 14B. Life Expectancy for Persons with SCI Surviving at Least 1 Year Post-Injury

		AIS D	AIS ABC			Vent Dependent
Current Age	No SCI	Any Level	T1-S3	C5-C8	C1-C4	Any Level
10 years	69.3	62.1	54.5	49.3	42.4	24.5
15 years	64.3	57.2	49.7	44.5	37.7	20.3
20 years	59.5	52.5	45.3	40.1	33.7	17.6
25 years	54.8	48.1	41.3	36.2	30.3	16.5
30 years	50.1	43.7	37.5	32.4	27.2	16.4
35 years	45.4	39.4	33.7	28.9	24.3	14.9
40 years	40.8	35.2	30.0	25.5	21.6	13.2
45 years	36.2	31.1	26.4	22.2	19.2	11.8
50 years	31.7	26.9	22.7	18.9	16.4	9.8
55 years	27.4	23.1	19.3	15.9	13.9	8.2
60 years	23.3	19.5	16.4	13.7	12.2	7.9
65 years	19.5	16.1	13.3	11.0	9.9	6.6
70 years	15.8	12.7	10.4	8.4	7.5	4.8
75 years	12.3	9.7	7.7	6.0	5.3	3.2
80 years	9.2	7.0	5.4	4.1	3.5	2.0

Footnote 1: Values for persons with no SCI are from the 2018 life tables for the U.S. general population.

Table 15. Category of Follow-up Care

	Category of Follow-up Care					
n (%)	System appt	Interview only	Lost	Future follow-up not required	Unkn	Total
Total	70,705 (35.8)	55,858 (28.3)	68,248 (34.6)	2,217 (1.1)	352 (0.2)	197,380

Footnote 1: 'Future Follow-up Not Required'=Form IIs coded 8 (Minimal Deficit).
Footnote 2: 'Lost' includes Lost to Follow-up due to breaks in funding.

Table 16. Category of Follow-up Care by Post-Injury Year

	Post-Injury Year											
Category of Follow-up Care n (%)	1	5	10	15	20	25	30	35	40	45	50	Total
System appt	19,103 (58.8)	7,097 (27.6)	3,506 (17.2)	1,925 (11.8)	1,198 (9.3)	802 (8.2)	439 (6.3)	228 (5.2)	106 (5.6)	15 (4.5)	0 (0.0)	34,419
Interview only	6,748 (20.8)	8,090 (31.4)	5,651 (27.6)	4,369 (26.8)	3,572 (27.7)	2,972 (30.3)	2,447 (35.0)	1,786 (40.9)	841 (44.2)	144 (43.2)	0 (0.0)	36,620
Future follow-up not required	1,131 (3.5)	272 (1.1)	106 (0.5)	49 (0.3)	31 (0.2)	27 (0.3)	22 (0.3)	17 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	1,655
Lost	5,407 (16.6)	10,229 (39.8)	11,169 (54.6)	9,929 (61.0)	8,093 (62.8)	6,005 (61.2)	4,081 (58.4)	2,332 (53.4)	957 (50.3)	174 (52.3)	1 (100.0)	58,377
Unkn	88 (0.3)	38 (0.1)	6 (0.0)	7 (0.0)	3 (0.0)	2 (0.0)	0 (0.0)	2 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	146
Total	32,477	25,726	20,438	16,279	12,897	9,808	6,989	4,365	1,904	333	1	131,217

Footnote 1: 'Lost' includes Lost to Follow-up due to break in funding.

Table 17. Reasons for Lost by Post-Injury Year: Lost to Follow-up Records Only

	Post-Injury Year											
Reason for Lost n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**Total**
Refused/withdrew consent	97 (2.8)	89 (1.0)	60 (0.6)	48 (0.5)	53 (0.7)	35 (0.6)	5 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	387
Incarcerated and not available	65 (1.9)	86 (1.0)	67 (0.6)	62 (0.6)	40 (0.5)	18 (0.3)	15 (0.4)	8 (0.3)	5 (0.5)	1 (0.6)	0 (0.0)	367
Unable to contact	845 (24.4)	1,118 (12.4)	992 (9.3)	663 (6.8)	606 (7.5)	572 (9.5)	302 (7.4)	53 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	5,151
Refused interview	71 (2.0)	78 (0.9)	86 (0.8)	71 (0.7)	56 (0.7)	81 (1.3)	59 (1.4)	49 (2.1)	19 (2.0)	1 (0.6)	0 (0.0)	571
Withdrew consent	210 (6.1)	200 (2.2)	190 (1.8)	173 (1.8)	133 (1.7)	150 (2.5)	167 (4.1)	102 (4.4)	42 (4.4)	6 (3.4)	1 (100.0)	1,374
ID unkn due to break in funding	2 (0.1)	21 (0.2)	21 (0.2)	21 (0.2)	130 (1.6)	398 (6.6)	797 (19.5)	395 (16.9)	58 (6.1)	13 (7.5)	0 (0.0)	1,856
Contact made but survey not completed*	117 (3.4)	148 (1.6)	114 (1.1)	122 (1.2)	124 (1.5)	110 (1.8)	98 (2.4)	96 (4.1)	49 (5.1)	5 (2.9)	0 (0.0)	983
Language barrier*	0 (0.0)	4 (0.0)	7 (0.1)	3 (0.0)	4 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	21
Moved out of country*	13 (0.4)	31 (0.3)	39 (0.4)	17 (0.2)	13 (0.2)	9 (0.1)	6 (0.1)	10 (0.4)	3 (0.3)	1 (0.6)	0 (0.0)	142
No contact, but valid information*	183 (5.3)	220 (2.4)	292 (2.7)	262 (2.7)	287 (3.6)	220 (3.7)	197 (4.8)	205 (8.8)	105 (11.0)	12 (6.9)	0 (0.0)	1,983
No contact, no valid information*	174 (5.0)	372 (4.1)	438 (4.1)	457 (4.7)	540 (6.7)	484 (8.1)	448 (11.0)	380 (16.3)	206 (21.5)	29 (16.7)	0 (0.0)	3,528
Identity unkn to NSCISC	0 (0.0)	18 (0.2)	43 (0.4)	1 (0.0)	1 (0.0)	146 (2.4)	32 (0.8)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	243
Break in funding	294 (8.5)	2,343 (26.0)	2,970 (27.9)	3,244 (33.2)	2,772 (34.4)	2,082 (34.7)	1,361 (33.3)	910 (39.0)	460 (48.1)	104 (59.8)	0 (0.0)	16,540
Other	115 (3.3)	112 (1.2)	93 (0.9)	90 (0.9)	114 (1.4)	41 (0.7)	38 (0.9)	14 (0.6)	7 (0.7)	2 (1.1)	0 (0.0)	626
Unkn	1,284 (37.0)	4,159 (46.2)	5,244 (49.2)	4,542 (46.5)	3,184 (39.5)	1,658 (27.6)	555 (13.6)	108 (4.6)	2 (0.2)	0 (0.0)	0 (0.0)	20,736
Total	3,470 (6.4)	8,999 (16.5)	10,656 (19.5)	9,776 (17.9)	8,057 (14.8)	6,005 (11.0)	4,081 (7.5)	2,332 (4.3)	957 (1.8)	174 (0.3)	1 (0.0)	54,508

Footnote 1: Form IIs entered into the database since January 1, 1998.
Footnote 2: In February 2007, 'Refusal/Withdrawn Consent' code is invalid; 'Withdrew consent' and 'Patient refusal' codes were added.
Footnote 3: In February 2009, 'Identity unknown' code was added for participants with no personal identifiers due to break in funding.
*Footnote 4: In October 2011, 'Unable to contact' is invalid; *codes were added.*

Table 18. Form I Participant Status

	Participant Status						
n (%)	Deceased	Neuro-recovery	With-drawn	ID unkn	Eligible	Eligible/ lost	Total
Total	12,169 (34.1)	2,447 (6.9)	1,295 (3.6)	1,033 (2.9)	12,758 (35.8)	5,973 (16.7)	35,675

Footnote 1: Eligible/Lost: Eligible for follow-up, but last Form II coded lost (Category of Care=5).

Table 19. How the Interview Was Conducted

	How was interview conducted						
n (%)	In person	By phone	Mail	Combo	Not done, N/A	Unkn	Total
Total	4,310 (8.5)	36,148 (71.2)	4,637 (9.1)	4,086 (8.0)	1,276 (2.5)	331 (0.7)	50,788

Footnote 1: Form IIs entered into the database since March 1, 1996.
Footnote 2: Code 4 (combo) added in 1998.

Table 20. Age at Injury: Frequency Distribution

Age	Freq-uency	Percent	Cumulative Percent
<1	5	0.01	0.01
1	13	0.04	0.05
2	10	0.03	0.08
3	22	0.06	0.14
4	22	0.06	0.20
5	18	0.05	0.25
6	20	0.06	0.31
7	15	0.04	0.35
8	19	0.05	0.40
9	21	0.06	0.46
10	33	0.09	0.56
11	16	0.04	0.60
12	37	0.10	0.70
13	108	0.30	1.01
14	215	0.60	1.61
15	424	1.19	2.80
16	821	2.30	5.10
17	1187	3.33	8.43
18	1474	4.13	12.56
19	1508	4.23	16.78
20	1380	3.87	20.65
21	1354	3.80	24.45
22	1265	3.55	27.99
23	1160	3.25	31.25
24	1114	3.12	34.37
25	1039	2.91	37.28
26	949	2.66	39.94
27	915	2.56	42.51
28	864	2.42	44.93
29	849	2.38	47.31
30	772	2.16	49.47
31	729	2.04	51.52
32	709	1.99	53.50
33	588	1.65	55.15
34	544	1.52	56.68
35	594	1.67	58.34
36	568	1.59	59.93
37	534	1.50	61.43
38	572	1.60	63.03
39	488	1.37	64.40
40	471	1.32	65.72
41	489	1.37	67.09
42	469	1.31	68.41
43	452	1.27	69.67
44	455	1.28	70.95
45	440	1.23	72.18
46	410	1.15	73.33
47	433	1.21	74.55
48	430	1.21	75.75
49	416	1.17	76.92
50	424	1.19	78.11
51	376	1.05	79.16
52	392	1.10	80.26
53	394	1.10	81.36
54	382	1.07	82.43
55	370	1.04	83.47
56	393	1.10	84.57
57	367	1.03	85.60
58	347	0.97	86.57
59	327	0.92	87.49
60	343	0.96	88.45
61	322	0.90	89.35
62	305	0.85	90.21
63	260	0.73	90.94
64	266	0.75	91.68
65	248	0.70	92.38
66	264	0.74	93.12
67	239	0.67	93.79
68	229	0.64	94.43
69	197	0.55	94.98
70	169	0.47	95.46
71	182	0.51	95.97
72	136	0.38	96.35
73	148	0.41	96.76
74	140	0.39	97.15
75	136	0.38	97.54
76	112	0.31	97.85
77	130	0.36	98.21
78	93	0.26	98.48
79	103	0.29	98.76
80	72	0.20	98.97
81	53	0.15	99.11
82	54	0.15	99.27
83	54	0.15	99.42
84	42	0.12	99.53
85	36	0.10	99.64
86	35	0.10	99.73
87	22	0.06	99.80
88	22	0.06	99.86
89	17	0.05	99.90
90	11	0.03	99.94
91	7	0.02	99.96
92	6	0.02	99.97
93	1	<0.01	99.97
94	3	0.01	99.98
95	3	0.01	99.99
97	1	<0.01	99.99
98	1	<0.01	100.00
99	1	<0.01	100.00

Footnote 1: Excludes 1 record reporting unknown age.

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 21. Age at Injury

	Age at Injury				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	35,675	35.9	17.3	0	99

Table 22. Trend in Age by Year of Injury

Year of Injury	Age at Injury				
	N	Mean	Standard Deviation	Minimum	Maximum
1972-1979	4,563	28.7	14.1	1	88
1980-1984	4,949	30.5	14.7	1	90
1985-1989	3,843	32.3	15.8	0	92
1990-1994	3,295	33.7	16.0	1	97
1995-1999	3,623	36.4	17.0	0	98
2000-2004	3,443	37.6	16.7	3	90
2005-2009	3,606	40.5	18.0	1	94
2010-2014	3,650	42.2	18.4	0	95
2015-2021	4,703	43.2	18.5	0	99
Total	35,675	35.9	17.3	0	99

Footnote 1: September 2021: Trend data for 2010-2014 & 2015-2020 was updated.

Table 23. Sex

n (%)	Sex		
	Male	Female	Total
Total	28,664 (80.4)	7,005 (19.6)	35,669

Footnote 1: Excludes 6 records reporting sex as 'transgender' or 'unknown'.

Table 24. Racial Group

n (%)	Racial Group							
	Caucasian	African American	Native American	Asian	Other	Declined	Unkn	Total
Total	23,990 (67.2)	8,208 (23.0)	331 (0.9)	637 (1.8)	758 (2.1)	36 (0.1)	1,715 (4.8)	35,675

Footnote 1: High percentages of unknowns are mainly due to database conversion process in 1995.
Footnote 2: 'Declined' code was added in October 2011.

Table 25. Hispanic Origin

n (%)	Hispanic Origin				
	No	Yes	Declined	Unkn	Total
Total	31,764 (89.0)	3,581 (10.0)	20 (0.1)	310 (0.9)	35,675

Footnote 1: 'Declined' code was added in October 2011.

Table 26. Hispanic Origin by Race

Hispanic Origin n (%)	Racial Group							
	Caucasian	African American	Native American	Asian	Other	Declined	Unkn	Total
No	22,644 (63.5)	7,991 (22.4)	282 (0.8)	617 (1.7)	215 (0.6)	6 (0.0)	9 (0.0)	31,764
Yes	1,232 (3.5)	130 (0.4)	48 (0.1)	19 (0.1)	534 (1.5)	26 (0.1)	1,592 (4.5)	3,581
Declined	7 (0.0)	4 (0.0)	0 (0.0)	0 (0.0)	5 (0.0)	4 (0.0)	0 (0.0)	20
Unkn	107 (0.3)	83 (0.2)	1 (0.0)	1 (0.0)	4 (0.0)	0 (0.0)	114 (0.3)	310
Total	23,990	8,208	331	637	758	36	1,715	35,675

Footnote 1: High percentage of unknowns is mainly due to a database conversion process in 1995.
Footnote 2: 'Declined' code was added in October 2011.

Table 27. Trend in Race by Year of Injury

	Year of Injury									
Racial Group n (%)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Total**
Caucasian	3,506 (76.8)	3,524 (71.2)	2,489 (64.8)	1,804 (54.7)	2,251 (62.1)	2,416 (70.2)	2,392 (66.3)	2,572 (70.5)	3,036 (64.6)	23,990
African American	648 (14.2)	873 (17.6)	957 (24.9)	959 (29.1)	982 (27.1)	814 (23.6)	961 (26.7)	814 (22.3)	1,200 (25.5)	8,208
Native American	88 (1.9)	65 (1.3)	29 (0.8)	15 (0.5)	17 (0.5)	11 (0.3)	31 (0.9)	35 (1.0)	40 (0.9)	331
Asian	42 (0.9)	61 (1.2)	55 (1.4)	62 (1.9)	83 (2.3)	71 (2.1)	74 (2.1)	66 (1.8)	123 (2.6)	637
Other	16 (0.4)	17 (0.3)	10 (0.3)	47 (1.4)	110 (3.0)	98 (2.8)	114 (3.2)	110 (3.0)	236 (5.0)	758
Declined	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7 (0.2)	29 (0.6)	36
Unkn	263 (5.8)	409 (8.3)	303 (7.9)	408 (12.4)	180 (5.0)	33 (1.0)	34 (0.9)	46 (1.3)	39 (0.8)	1,715
Total	4,563	4,949	3,843	3,295	3,623	3,443	3,606	3,650	4,703	35,675

Footnote 1: High percentage of unknowns is mainly due to a database conversion process in 1995.
Footnote 2: 'Declined' code was added in October 2011.
Footnote 2: September 2021: Trend data for 2010-2014 & 2015-2020 was updated.

Table 28. Trend in Hispanic Origin by Year of Injury

	Year of Injury									
Hispanic Origin n (%)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Total**
No	4,288 (94.0)	4,539 (91.7)	3,535 (92.0)	2,856 (86.7)	3,122 (86.2)	2,992 (86.9)	3,251 (90.2)	3,187 (87.3)	3,994 (84.9)	31,764
Yes	272 (6.0)	408 (8.2)	307 (8.0)	421 (12.8)	398 (11.0)	429 (12.5)	310 (8.6)	381 (10.4)	655 (13.9)	3,581
Declined	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.0)	7 (0.2)	12 (0.3)	20
Unkn	3 (0.1)	2 (0.0)	1 (0.0)	18 (0.5)	103 (2.8)	22 (0.6)	44 (1.2)	75 (2.1)	42 (0.9)	310
Total	4,563	4,949	3,843	3,295	3,623	3,443	3,606	3,650	4,703	35,675

Footnote 1: 'Declined' code was added in October 2011.
Footnote 2: September 2021: Trend data for 2010-2014 & 2015-2020 was updated.

Table 29. Ability to Speak and Understand English at Time of Injury

	English Understanding							
n (%)	Very well	Well	Not well	Not at all	Speaks English, unkn ability	Declined	Unkn	Total
Total	6,495 (43.5)	439 (2.9)	114 (0.8)	269 (1.8)	7,472 (50.1)	1 (0.0)	137 (0.9)	14,927

Footnote 1: Data were required for all admissions to System since October 1, 2000.
Footnote 2: High percentage of "Speaks English, unknown ability" is mainly due to a database conversion process in 2011.

Table 30. Etiology of SCI by Sex

Rank	Etiology n (%)	Males	Females	Total
1	Auto accident	8,099 (28.3)	3,214 (45.9)	11,313 (31.8)
2	Fall	6,615 (23.1)	1,646 (23.5)	8,261 (23.2)
3	Gunshot wound	4,789 (16.7)	648 (9.3)	5,437 (15.3)
4	Motorcycle accident	2,036 (7.1)	157 (2.2)	2,193 (6.2)
5	Diving	1,855 (6.5)	170 (2.4)	2,025 (5.7)
6	Medical/surgical complication	648 (2.3)	374 (5.3)	1,022 (2.9)
7	Hit by falling/flying object	906 (3.2)	53 (0.8)	959 (2.7)
8	Bicycle	559 (2.0)	78 (1.1)	637 (1.8)
9	Pedestrian	400 (1.4)	141 (2.0)	541 (1.5)
10	Person-to-person contact	269 (0.9)	72 (1.0)	341 (1.0)
11	Other unclassified	281 (1.0)	31 (0.4)	312 (0.9)
12	All-terrain vehicle (ATV) and cycle (ATC)	245 (0.9)	47 (0.7)	292 (0.8)
13	All other penetrating wounds	213 (0.7)	60 (0.9)	273 (0.8)
14	Other vehicular	197 (0.7)	20 (0.3)	217 (0.6)
15	Snow skiing	192 (0.7)	21 (0.3)	213 (0.6)
16	Winter sports	148 (0.5)	31 (0.4)	179 (0.5)
17	Other sport	142 (0.5)	35 (0.5)	177 (0.5)
18	Horseback riding	78 (0.3)	88 (1.3)	166 (0.5)
19	Football	156 (0.5)	0 (0.0)	156 (0.4)
20	Surfing: includes body surfing	149 (0.5)	6 (0.1)	155 (0.4)
21	Fixed-wing aircraft	76 (0.3)	31 (0.4)	107 (0.3)
22	Wrestling	96 (0.3)	2 (0.0)	98 (0.3)
23	Trampoline	72 (0.3)	9 (0.1)	81 (0.2)
24	Gymnastics	40 (0.1)	21 (0.3)	61 (0.2)
25	Snowmobile	50 (0.2)	10 (0.1)	60 (0.2)
26	Field sports	45 (0.2)	2 (0.0)	47 (0.1)
27	Air sports	43 (0.2)	3 (0.0)	46 (0.1)
28	Hang gliding	39 (0.1)	2 (0.0)	41 (0.1)
29	Boat	27 (0.1)	14 (0.2)	41 (0.1)
30	Water skiing	33 (0.1)	3 (0.0)	36 (0.1)
31	Rotating wing aircraft	33 (0.1)	2 (0.0)	35 (0.1)
32	Baseball/softball	25 (0.1)	1 (0.0)	26 (0.1)
33	Rodeo	24 (0.1)	1 (0.0)	25 (0.1)
34	Explosion	14 (0.0)	2 (0.0)	16 (0.0)
35	Basketball/volleyball	15 (0.1)	0 (0.0)	15 (0.0)
36	Skateboard	10 (0.0)	1 (0.0)	11 (0.0)
37	Track and field	6 (0.0)	0 (0.0)	6 (0.0)
	Total	28,625	6,996	35,621

Footnote 1: Excludes 54 records reporting unknown etiology and/or transgender or unknown sex.

Table 31. Grouped Etiology

n (%)	Etiology							
	Vehicular	Violence	Sports	Falls	Med/surg	Other	Unkn	Total
Total	14,897 (41.8)	6,068 (17.0)	3,564 (10.0)	8,263 (23.2)	1,022 (2.9)	1,812 (5.1)	49 (0.1)	35,675

Footnote 1: Vehicular=codes 1-9; Violence=codes 10-15; Sports=codes 20-29, 70-78; Falls=code 30; Medical/surgical complication=code 50.

Table 32. Grouped Etiology by Age at Injury

Etiology n (%)	Age at Injury						
	<15	16-30	31-45	46-60	61-75	≥ 76	Total
Vehicular	367 (36.8)	7,680 (46.1)	3,587 (44.3)	2,200 (37.9)	896 (27.6)	167 (19.0)	14,897
Violence	232 (23.2)	4,056 (24.4)	1,337 (16.5)	366 (6.3)	68 (2.1)	9 (1.0)	6,068
Sports	239 (23.9)	2,351 (14.1)	605 (7.5)	263 (4.5)	98 (3.0)	8 (0.9)	3,564
Falls	79 (7.9)	1,755 (10.5)	1,857 (22.9)	2,246 (38.7)	1,732 (53.4)	594 (67.6)	8,263
Med/surg	27 (2.7)	111 (0.7)	132 (1.6)	354 (6.1)	325 (10.0)	73 (8.3)	1,022
Other	52 (5.2)	683 (4.1)	573 (7.1)	362 (6.2)	117 (3.6)	25 (2.8)	1,812
Unkn	2 (0.2)	15 (0.1)	11 (0.1)	13 (0.2)	5 (0.2)	3 (0.3)	49
Total	998	16,651	8,102	5,804	3,241	879	35,675

Footnote 1: Vehicular=codes 1-9; Violence=codes 10-15; Sports=codes 20-29, 70-78; Falls=code 30; Medical/surgical complication=code 50.

Table 33. Grouped Etiology by Sex

Etiology n (%)	Sex		
	Male	Female	Total
Vehicular	11,322 (39.5)	3,573 (51.0)	14,895
Violence	5,285 (18.4)	782 (11.2)	6,067
Sports	3,168 (11.1)	396 (5.7)	3,564
Falls	6,615 (23.1)	1,646 (23.5)	8,261
Med/surg	648 (2.3)	374 (5.3)	1,022
Other	1,587 (5.5)	225 (3.2)	1,812
Unkn	39 (0.1)	9 (0.1)	48
Total	28,664	7,005	35,669

Footnote 1: Vehicular=codes 1-9; Violence=codes 10-15; Sports=codes 20-29, 70-78; Falls=code 30; Medical/surgical complication=code 50.
Footnote 2: Excludes 6 records reporting sex as 'transgender' or 'unknown'.

Table 34. Grouped Etiology by Racial Group

	Racial Group							
Etiology n (%)	**Caucasian**	**African American**	**Native American**	**Asian**	**Other**	**Declined**	**Unkn**	**Total**
Vehicular	11,267 (47.0)	2,342 (28.5)	185 (55.9)	268 (42.1)	298 (39.3)	16 (44.4)	521 (30.4)	14,897
Violence	1,556 (6.5)	3,505 (42.7)	46 (13.9)	95 (14.9)	161 (21.2)	7 (19.4)	698 (40.7)	6,068
Sports	3,115 (13.0)	232 (2.8)	14 (4.2)	52 (8.2)	44 (5.8)	2 (5.6)	105 (6.1)	3,564
Falls	5,959 (24.8)	1,600 (19.5)	63 (19.0)	168 (26.4)	192 (25.3)	10 (27.8)	271 (15.8)	8,263
Med/surg	775 (3.2)	178 (2.2)	4 (1.2)	21 (3.3)	21 (2.8)	0 (0.0)	23 (1.3)	1,022
Other	1,284 (5.4)	344 (4.2)	19 (5.7)	31 (4.9)	42 (5.5)	1 (2.8)	91 (5.3)	1,812
Unkn	34 (0.1)	7 (0.1)	0 (0.0)	2 (0.3)	0 (0.0)	0 (0.0)	6 (0.3)	49
Total	23,990	8,208	331	637	758	36	1,715	35,675

Footnote 1: Vehicular=codes 1-9; Violence=codes 10-15; Sports=codes 20-29, 70-78; Falls=code 30; Medical/surgical complication=code 50.

Table 35. Grouped Etiology by Hispanic Origin

	Hispanic Origin				
Etiology n (%)	**No**	**Yes**	**Declined**	**Unkn**	**Total**
Vehicular	13,504 (42.5)	1,287 (35.9)	6 (30.0)	100 (32.3)	14,897
Violence	4,901 (15.4)	1,096 (30.6)	5 (25.0)	66 (21.3)	6,068
Sports	3,322 (10.5)	223 (6.2)	1 (5.0)	18 (5.8)	3,564
Falls	7,445 (23.4)	715 (20.0)	6 (30.0)	97 (31.3)	8,263
Med/surg	934 (2.9)	82 (2.3)	0 (0.0)	6 (1.9)	1,022
Other	1,620 (5.1)	172 (4.8)	2 (10.0)	18 (5.8)	1,812
Unkn	38 (0.1)	6 (0.2)	0 (0.0)	5 (1.6)	49
Total	31,764	3,581	20	310	35,675

Footnote 1: Vehicular=codes 1-9; Violence=codes 10-15; Sports=codes 20-29, 70-78; Falls=code 30; Medical/surgical complication=code 50.

Table 36. Trend in Grouped Etiology by Year of Injury

	Year of Injury									
Etiology n (%)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Total**
Vehicular	2,142 (46.9)	2,236 (45.2)	1,620 (42.2)	1,197 (36.3)	1,449 (40.0)	1,634 (47.5)	1,459 (40.5)	1,395 (38.2)	1,765 (37.5)	14,897
Violence	605 (13.3)	792 (16.0)	723 (18.8)	952 (28.9)	764 (21.1)	478 (13.9)	544 (15.1)	493 (13.5)	717 (15.2)	6,068
Sports	655 (14.4)	705 (14.2)	390 (10.1)	249 (7.6)	254 (7.0)	302 (8.8)	289 (8.0)	329 (9.0)	391 (8.3)	3,564
Falls	752 (16.5)	836 (16.9)	796 (20.7)	659 (20.0)	847 (23.4)	792 (23.0)	999 (27.7)	1,109 (30.4)	1,473 (31.3)	8,263
Med/surg	53 (1.2)	83 (1.7)	80 (2.1)	76 (2.3)	131 (3.6)	87 (2.5)	170 (4.7)	171 (4.7)	171 (3.6)	1,022
Other	353 (7.7)	294 (5.9)	231 (6.0)	159 (4.8)	174 (4.8)	145 (4.2)	141 (3.9)	145 (4.0)	170 (3.6)	1,812
Unkn	3 (0.1)	3 (0.1)	3 (0.1)	3 (0.1)	4 (0.1)	5 (0.1)	4 (0.1)	8 (0.2)	16 (0.3)	49
Total	4,563	4,949	3,843	3,295	3,623	3,443	3,606	3,650	4,703	35,675

Footnote 1: Vehicular=codes 1-9; Violence=codes 10-15; Sports=codes 20-29, 70-78; Falls=code 30; Medical/surgical complication=code 50.
Footnote 2: September 2021: Trend data for 2010-2014 & 2015-2020 was updated.

Table 37. Work Relatedness

	Injury Related to Work			
n (%)	**No**	**Yes**	**Unkn**	**Total**
Total	13,576 (89.5)	1,420 (9.4)	179 (1.2)	15,175

Footnote 1: Form Is entered to the database since January 1, 2001.

Table 38. Marital Status at Time of Injury

	Marital Status at Injury								
n (%)	Single	Married	Divorced	Separated	Widowed	Signifi-cant other	Other	Unkn	Total
Total	17,927 (50.3)	11,804 (33.1)	3,314 (9.3)	1,153 (3.2)	942 (2.6)	262 (0.7)	41 (0.1)	232 (0.7)	35,675

Footnote 1: 'Significant other' was added in October 2011.

Table 39. Marital Status by Post-Injury Year

	Post-Injury Year										
Marital Status n (%)	1	5	10	15	20	25	30	35	40	45	Total
Single	13,159 (48.6)	6,931 (44.7)	3,726 (40.2)	2,335 (36.8)	1,684 (35.1)	1,292 (34.0)	896 (30.8)	563 (27.7)	233 (24.6)	33 (20.8)	30,852
Married	8,793 (32.5)	4,996 (32.2)	3,086 (33.3)	2,152 (33.9)	1,692 (35.2)	1,354 (35.6)	1,096 (37.7)	833 (41.0)	407 (43.0)	76 (47.8)	24,485
Divorced	2,962 (10.9)	2,392 (15.4)	1,740 (18.8)	1,376 (21.7)	1,079 (22.5)	879 (23.1)	686 (23.6)	455 (22.4)	204 (21.5)	37 (23.3)	11,810
Separated	875 (3.2)	411 (2.7)	232 (2.5)	150 (2.4)	109 (2.3)	74 (1.9)	65 (2.2)	37 (1.8)	14 (1.5)	2 (1.3)	1,969
Widowed	655 (2.4)	390 (2.5)	250 (2.7)	156 (2.5)	125 (2.6)	124 (3.3)	103 (3.5)	72 (3.5)	45 (4.8)	6 (3.8)	1,926
Significant other	254 (0.9)	149 (1.0)	113 (1.2)	102 (1.6)	65 (1.4)	48 (1.3)	46 (1.6)	58 (2.9)	35 (3.7)	4 (2.5)	874
Other	29 (0. 1)	18 (0.1)	11 (0.1)	8 (0.1)	5 (0.1)	7 (0.2)	3 (0.1)	1 (0.0)	1 (0.1)	0 (0.0)	83
Unkn	343 (1.3)	210 (1.4)	111 (1.2)	71 (1.1)	45 (0.9)	25 (0.7)	13 (0.4)	14 (0.7)	8 (0.8)	1 (0.6)	841
Total	27,070	15,497	9,269	6,350	4,804	3,803	2,908	2,033	947	159	72,840

Footnote 1: 'Significant other' was added in October 2011.

Table 40. Change in Marital Status by Post-Injury Year

Change in Marital Status n (%)	Post-Injury Year										
	1	5	10	15	20	25	30	35	40	45	Total
No change	10,742 (92.4)	6,657 (85.3)	4,910 (84.4)	3,770 (83.9)	3,301 (84.3)	3,052 (83.9)	2,420 (83.2)	1,725 (84.8)	823 (86.9)	138 (86.8)	37,538
Divorce	232 (2.0)	424 (5.4)	267 (4.6)	204 (4.5)	180 (4.6)	152 (4.2)	125 (4.3)	72 (3.5)	23 (2.4)	4 (2.5)	1,683
Marriage	213 (1.8)	318 (4.1)	326 (5.6)	239 (5.3)	226 (5.8)	208 (5.7)	160 (5.5)	99 (4.9)	36 (3.8)	4 (2.5)	1,829
Widowed	48 (0.4)	68 (0.9)	51 (0.9)	32 (0.7)	30 (0.8)	45 (1.2)	35 (1.2)	31 (1.5)	16 (1.7)	2 (1.3)	358
Divorce + Marriage	27 (0.2)	54 (0.7)	53 (0.9)	68 (1.5)	64 (1.6)	83 (2.3)	77 (2.6)	40 (2.0)	12 (1.3)	3 (1.9)	481
Widowed + Marriage	1 (0.0)	9 (0.1)	7 (0.1)	6 (0.1)	4 (0.1)	9 (0.2)	11 (0.4)	6 (0.3)	5 (0.5)	1 (0.6)	59
Divorce, marriage + Widowed	4 (0.0)	2 (0.0)	1 (0.0)	1 (0.0)	2 (0.1)	3 (0.1)	6 (0.2)	2 (0.1)	3 (0.3)	0 (0.0)	24
Significant other	157 (1.4)	128 (1.6)	89 (1.5)	97 (2.2)	43 (1.1)	36 (1.0)	40 (1.4)	37 (1.8)	17 (1.8)	6 (3.8)	650
Other	59 (0.5)	39 (0.5)	41 (0.7)	17 (0.4)	20 (0.5)	18 (0.5)	18 (0.6)	5 (0.2)	3 (0.3)	0 (0.0)	220
Unkn	146 (1.3)	107 (1.4)	73 (1.3)	61 (1.4)	46 (1.2)	31 (0.9)	16 (0.6)	16 (0.8)	9 (1.0)	1 (0.6)	506
Total	11,629	7,806	5,818	4,495	3,916	3,637	2,908	2,033	947	159	43,348

Footnote 1: Form IIs entered into the database since January 1, 2001.
Footnote 2: 'Significant other' was added in October 2011.

Table 41. Highest Level of Education at Time of Injury

n (%)	Education Level									
	8th grade or less	9th-11th grade	High school or GED	Assoc	Bachs	Mas-ters	Doc-torate	Other	Unkn	Total
Total	2,820 (7.9)	7,748 (21.7)	17,389 (48.7)	1,233 (3.5)	2,908 (8.2)	845 (2.4)	465 (1.3)	336 (0.9)	1,931 (5.4)	35,675

Table 42. Highest Level of Education by Post-Injury Year

	Post-Injury Year										
Education Level n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**Total**
8th grade or less	1,757 (6.5)	756 (4.9)	380 (4.1)	182 (2.9)	122 (2.5)	80 (2.1)	68 (2.3)	43 (2.1)	18 (1.9)	2 (1.3)	3,408
9th to 11th grade	5,306 (19.6)	2,013 (13.0)	1,051 (11.3)	622 (9.8)	456 (9.5)	310 (8.2)	186 (6.4)	108 (5.3)	48 (5.1)	3 (1.9)	10,103
High School/GED	14,233 (52.6)	8,569 (55.3)	4,630 (50.0)	3,104 (48.9)	2,215 (46.1)	1,725 (45.4)	1,257 (43.2)	801 (39.4)	327 (34.5)	47 (29.6)	36,908
Associate degree	1,139 (4.2)	943 (6.1)	778 (8.4)	592 (9.3)	495 (10.3)	388 (10.2)	317 (10.9)	244 (12.0)	111 (11.7)	21 (13.2)	5,028
Bachelor's degree	2,544 (9.4)	1,934 (12.5)	1,479 (16.0)	1,097 (17.3)	882 (18.4)	784 (20.6)	635 (21.8)	493 (24.2)	253 (26.7)	45 (28.3)	10,146
Master's degree	760 (2.8)	525 (3.4)	459 (5.0)	397 (6.3)	339 (7.1)	304 (8.0)	268 (9.2)	206 (10.1)	117 (12.4)	29 (18.2)	3,404
Doctorate degree	394 (1.5)	233 (1.5)	176 (1.9)	134 (2.1)	119 (2.5)	107 (2.8)	108 (3.7)	82 (4.0)	49 (5.2)	7 (4.4)	1,409
Other	302 (1.1)	212 (1.4)	164 (1.8)	120 (1.9)	102 (2.1)	60 (1.6)	41 (1.4)	36 (1.8)	9 (1.0)	4 (2.5)	1,050
Unkn	635 (2.3)	312 (2.0)	152 (1.6)	102 (1.6)	74 (1.5)	45 (1.2)	28 (1.0)	20 (1.0)	15 (1.6)	1 (0.6)	1,384
Total	27,070	15,497	9,269	6,350	4,804	3,803	2,908	2,033	947	159	72,840

Table 43. Occupational Status at Time of Injury

	Occupational Status at Injury											
n (%)	**Work**	**Home-maker**	**OJT**	**Work-shop**	**Stud-ent**	**Unem-ployed**	**Retir-ed**	**Retir-ed, disab-ility***	**Retir-ed, non-disab-ility***	**Other**	**Unkn**	**Total**
Total	20,776 (58.2)	640 (1.8)	86 (0.2)	20 (0.1)	4,981 (14.0)	5,413 (15.2)	2,383 (6.7)	126 (0.4)	327 (0.9)	494 (1.4)	429 (1.2)	35,675

*Footnote 1: In June 2017, 'Retired' code invalid; * 'Retired, disability' and *'Retired, non-disability' codes were added.*
Footnote 3: OJT = on the job training.

Table 44. Occupational Status by Post-Injury Year

	Post-Injury Year										
Occupational Status n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**Total**
Work	3,463 (12.8)	3,234 (20.9)	2,457 (26.5)	1,927 (30.3)	1,554 (32.3)	1,268 (33.3)	929 (31.9)	622 (30.6)	252 (26.6)	39 (24.5)	15,745
Homemaker	417 (1.5)	282 (1.8)	201 (2.2)	141 (2.2)	85 (1.8)	74 (1.9)	71 (2.4)	45 (2.2)	21 (2.2)	3 (1.9)	1,340
OJT	32 (0.1)	20 (0.1)	8 (0.1)	4 (0.1)	6 (0.1)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	72
Workshop	13 (0.0)	6 (0.0)	8 (0.1)	2 (0.0)	1 (0.0)	3 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	33
Student	3,824 (14.1)	2,132 (13.8)	552 (6.0)	189 (3.0)	100 (2.1)	47 (1.2)	16 (0.6)	11 (0.5)	1 (0.1)	0 (0.0)	6,872
Unemployed	14,434 (53.3)	7,039 (45.4)	4,271 (46.1)	2,788 (43.9)	2,093 (43.6)	1,543 (40.6)	1,035 (35.6)	612 (30.1)	195 (20.6)	16 (10.1)	34,026
Retired	1,728 (6.4)	1,089 (7.0)	665 (7.2)	456 (7.2)	331 (6.9)	326 (8.6)	406 (14.0)	324 (15.9)	108 (11.4)	1 (0.6)	5,434
Retired, disability*	345 (1.3)	325 (2.1)	260 (2.8)	227 (3.6)	164 (3.4)	138 (3.6)	113 (3.9)	191 (9.4)	202 (21.3)	57 (35.8)	2,022
Retired, non-disability*	255 (0.9)	215 (1.4)	129 (1.4)	87 (1.4)	71 (1.5)	46 (1.2)	32 (1.1)	92 (4.5)	118 (12.5)	38 (23.9)	1,083
Other	1,865 (6.9)	800 (5.2)	532 (5.7)	404 (6.4)	325 (6.8)	307 (8.1)	275 (9.5)	118 (5.8)	35 (3.7)	4 (2.5)	4,665
Unkn	694 (2.6)	355 (2.3)	186 (2.0)	125 (2.0)	74 (1.5)	49 (1.3)	31 (1.1)	18 (0.9)	15 (1.6)	1 (0.6)	1,548
Total	27,070 (37.2)	15,497 (21.3)	9,269 (12.7)	6,350 (8.7)	4,804 (6.6)	3,803 (5.2)	2,908 (4.0)	2,033 (2.8)	947 (1.3)	159 (0.2)	72,840

*Footnote 1: In June 2017, 'Retired' code became invalid; * 'Retired, disability' and *'Retired, non-disability' codes were added.*
Footnote 2: OJT = on the job training.

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 45. Job Census Code at Time of Injury

(Continued)

	Job Census Code						
n (%)	Management, business, financial	Computer, engineer, science*	Education, legal, communication, arts media*	Healthcare practitioners and technicians*	Services	Sales and related	Office and admin support
Total	1,024 (6.7)	113 (0.7)	166 (1.1)	148 (1.0)	1,237 (8.2)	547 (3.6)	449 (3.0)

(Continued)

	Job Census Code						
n (%)	Farming, fishing and forestry	Construction/ extraction*	Install/ maintain/ repair	Production*	Transportation and material moving	Military specific	Professional specialty**
Total	281 (1.9)	338 (2.2)	519 (3.4)	118 (0.8)	645 (4.3)	47 (0.3)	984 (6.5)

	Job Census Code					
n (%)	Technicians and related support**	Precision production, craft, and repair**	Handlers, equipment cleaners, helpers, and laborers**	NA, not working	Unkn	Total
Total	338 (2.2)	1,290 (8.5)	679 (4.5)	5,865 (38.6)	387 (2.6)	15,175

Footnote 1: Form Is entered to the database since January 1, 2001.
*Footnote 2: In October 2016: * codes were added, ** codes become invalid.*

Table 46. Job Census Code by Post-Injury Year

	Post-Injury Year										
Job Census Code n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**Total**
Management, business, financial	458 (3.9)	375 (4.8)	324 (5.6)	298 (6.6)	318 (8.1)	292 (8.0)	243 (8.4)	190 (9.3)	90 (9.5)	17 (10.7)	2,605
Computer, engineer, science*	68 (0.6)	55 (0.7)	34 (0.6)	48 (1.1)	29 (0.7)	27 (0.7)	29 (1.0)	47 (2.3)	24 (2.5)	4 (2.5)	365
Education, legal, communication, art/media*	67 (0.6)	65 (0.8)	49 (0.8)	50 (1.1)	36 (0.9)	43 (1.2)	26 (0.9)	44 (2.2)	33 (3.5)	5 (3.1)	418
Healthcare practitioners and technicians*	35 (0.3)	44 (0.6)	32 (0.6)	30 (0.7)	14 (0.4)	12 (0.3)	9 (0.3)	10 (0.5)	5 (0.5)	3 (1.9)	194
Services	141 (1.2)	136 (1.7)	93 (1.6)	73 (1.6)	71 (1.8)	54 (1.5)	30 (1.0)	16 (0.8)	12 (1.3)	2 (1.3)	628
Sales and related	155 (1.3)	186 (2.4)	159 (2.7)	112 (2.5)	93 (2.4)	87 (2.4)	62 (2.1)	36 (1.8)	11 (1.2)	1 (0.6)	902
Office and admin support	135 (1.2)	180 (2.3)	163 (2.8)	162 (3.6)	132 (3.4)	140 (3.8)	91 (3.1)	47 (2.3)	17 (1.8)	2 (1.3)	1,069
Farming, fishing and forestry	40 (0.3)	32 (0.4)	23 (0.4)	20 (0.4)	15 (0.4)	20 (0.5)	17 (0.6)	7 (0.3)	4 (0.4)	1 (0.6)	179
Construction/extraction*	12 (0.1)	13 (0.2)	9 (0.2)	8 (0.2)	6 (0.2)	5 (0.1)	5 (0.2)	5 (0.2)	2 (0.2)	1 (0.6)	66
Install/maintain/repair	36 (0.3)	42 (0.5)	26 (0.4)	21 (0.5)	23 (0.6)	10 (0.3)	8 (0.3)	8 (0.4)	4 (0.4)	1 (0.6)	179
Production*	12 (0.1)	10 (0.1)	7 (0.1)	3 (0.1)	4 (0.1)	0 (0.0)	2 (0.1)	4 (0.2)	2 (0.2)	0 (0.0)	44
Transportation and material moving	37 (0.3)	32 (0.4)	22 (0.4)	16 (0.4)	17 (0.4)	15 (0.4)	17 (0.6)	3 (0.1)	9 (1.0)	2 (1.3)	170
Military specific	6 (0.1)	3 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	13
Professional specialty**	367 (3.2)	317 (4.1)	351 (6.0)	321 (7.1)	347 (8.9)	370 (10.2)	297 (10.2)	164 (8.1)	32 (3.4)	0 (0.0)	2,566
Technicians and related support**	70 (0.6)	75 (1.0)	72 (1.2)	57 (1.3)	54 (1.4)	60 (1.6)	46 (1.6)	23 (1.1)	2 (0.2)	0 (0.0)	459
Precision production, craft, and repair**	75 (0.6)	67 (0.9)	67 (1.2)	56 (1.2)	36 (0.9)	40 (1.1)	29 (1.0)	13 (0.6)	3 (0.3)	0 (0.0)	386
Handlers, equipment cleaners, helpers, and laborers**	27 (0.2)	22 (0.3)	17 (0.3)	13 (0.3)	6 (0.2)	12 (0.3)	10 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	107
N/A, not working	9,580 (82.4)	5,953 (76.3)	4,227 (72.7)	3,083 (68.6)	2,617 (66.8)	2,379 (65.4)	1,948 (67.0)	1,393 (68.5)	680 (71.8)	119 (74.8)	31,979
Unkn	308 (2.6)	199 (2.5)	142 (2.4)	123 (2.7)	98 (2.5)	70 (1.9)	38 (1.3)	23 (1.1)	17 (1.8)	1 (0.6)	1,019
Total	11,629 (26.8)	7,806 (18.0)	5,818 (13.4)	4,495 (10.4)	3,916 (9.0)	3,637 (8.4)	2,908 (6.7)	2,033 (4.7)	947 (2.2)	159 (0.4)	43,348

Footnote 1: Form Is entered to the database since January 1, 2001.

*Footnote 2: In October 2016: * codes were added, ** codes become invalid.*

Table 47. Veteran Status at Time of Injury

n (%)	Veteran Status			
	No	Yes	Unkn	Total
Total	13,741 (90.6)	1,219 (8.0)	215 (1.4)	15,175

Footnote 1: Form Is entered to the database since January 1, 2001.

Table 48. VA Health Care System Services Used by Post-Injury Year

VA Healthcare Services Used n (%)	Post-Injury Year										
	1	5	10	15	20	25	30	35	40	45	Total
No	1,253 (10.8)	564 (7.2)	462 (7.9)	349 (7.8)	293 (7.5)	305 (8.4)	242 (8.3)	133 (6.5)	46 (4.9)	9 (5.7)	3,656
Yes	476 (4.1)	341 (4.4)	220 (3.8)	154 (3.4)	142 (3.6)	146 (4.0)	135 (4.6)	92 (4.5)	46 (4.9)	6 (3.8)	1,758
N/A, not a veteran	9,686 (83.2)	6,721 (86.1)	5,010 (86.1)	3,905 (86.8)	3,411 (87.1)	3,133 (86.1)	2,500 (86.0)	1,781 (87.6)	838 (88.5)	142 (89.3)	37,127
Unkn	233 (2.0)	180 (2.3)	127 (2.2)	89 (2.0)	71 (1.8)	53 (1.5)	31 (1.1)	27 (1.3)	17 (1.8)	2 (1.3)	830
Total	11,648 (26.9)	7,806 (18.0)	5,819 (13.4)	4,497 (10.4)	3,917 (9.0)	3,637 (8.4)	2,908 (6.7)	2,033 (4.7)	947 (2.2)	159 (0.4)	43,371

Footnote 1: Form IIs entered into the database since October 31, 2000.

Table 49. Primary Payer of Medical Costs at Time of Injury

n (%)	Primary Payer									
	Private insurance	Medi-care	Medicaid	Worker's compen-sation	Vet admin	Other govern ment	No pay	Private funds	Other	Total
Total	11,283 (49.7)	1,956 (8.6)	6,117 (27.0)	1,539 (6.8)	59 (0.3)	288 (1.3)	846 (3.7)	374 (1.6)	233 (1.0)	22,695

Footnote 1: This variable was not collected between 2006 and 2011. Exclude records 12,927 coded as 'unknown/decline.'

Table 50. Primary Payer of Medical Costs by Post-Injury Year

	Post-Injury Year										
Primary Payer n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**Total**
Private insurance	7,684 (44.1)	3,499 (32.0)	2,145 (29.9)	1,655 (31.8)	1,280 (31.7)	889 (32.0)	636 (32.9)	571 (32.7)	300 (32.2)	40 (25.6)	18,699
Medicare	1,572 (9.0)	3,428 (31.4)	2,758 (38.5)	2,085 (40.0)	1,697 (42.0)	1,181 (42.5)	870 (45.0)	865 (49.5)	505 (54.2)	98 (62.8)	15,059
Medicaid	5,688 (32.6)	2,739 (25.1)	1,487 (20.8)	851 (16.3)	607 (15.0)	395 (14.2)	247 (12.8)	156 (8.9)	64 (6.9)	8 (5.1)	12,242
Worker's compensation	1,264 (7.2)	680 (6.2)	444 (6.2)	336 (6.5)	260 (6.4)	160 (5.8)	94 (4.9)	83 (4.8)	34 (3.7)	5 (3.2)	3,360
Veterans administration	166 (1.0)	129 (1.2)	91 (1.3)	81 (1.6)	58 (1.4)	47 (1.7)	40 (2.1)	33 (1.9)	13 (1.4)	4 (2.6)	662
Other government	332 (1.9)	123 (1.1)	41 (0.6)	40 (0.8)	24 (0.6)	15 (0.5)	8 (0.4)	7 (0.4)	2 (0.2)	1 (0.6)	593
No pay	257 (1.5)	56 (0.5)	38 (0.5)	38 (0.7)	32 (0.8)	17 (0.6)	16 (0.8)	8 (0.5)	7 (0.8)	0 (0.0)	469
Private funds	347 (2.0)	221 (2.0)	118 (1.6)	91 (1.7)	62 (1.5)	59 (2.1)	13 (0.7)	18 (1.0)	4 (0.4)	0 (0.0)	933
Other	130 (0.7)	48 (0.4)	44 (0.6)	29 (0.6)	20 (0.5)	14 (0.5)	8 (0.4)	6 (0.3)	2 (0.2)	0 (0.0)	301
Total	17,440	10,923	7,166	5,206	4,040	2,777	1,932	1,747	931	156	52,318

Footnote 1: This variable was not collected between 2006 and 2011. Excludes 20,522 records coded as 'unknown/decline.'

Table 51. Family Household Income at Time of Injury

	Family Household Income							
n (%)	**<$25,000**	**$25,000-$49,999**	**$50,000-$74,999**	**$75,000 or more**	**Participant doesn't know**	**Declined**	**Unkn**	**Total**
Total	1,607 (22.5)	1,444 (20.2)	1,001 (14.0)	1,630 (22.8)	696 (9.7)	546 (7.6)	232 (3.2)	7,156

Footnote 1: Data were required for all admissions to System since October 1, 2011.

Table 52. Family Household Income by Post-Injury Year

	Post-Injury Year										
Family Household Income n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**Total**
<$25,000	3,408 (39.3)	2,575 (41.5)	1,896 (40.7)	1,590 (39.9)	1,489 (42.6)	1,052 (40.8)	697 (37.2)	556 (31.8)	259 (28.1)	29 (18.7)	13,551
$25,000-$49,999	1,775 (20.5)	1,223 (19.7)	1,039 (22.3)	886 (22.2)	712 (20.3)	493 (19.1)	364 (19.4)	384 (22.0)	209 (22.6)	35 (22.6)	7,120
$50,000-$74,999	1,006 (11.6)	688 (11.1)	539 (11.6)	498 (12.5)	416 (11.9)	329 (12.8)	221 (11.8)	209 (12.0)	122 (13.2)	20 (12.9)	4,048
$75,000 or more	1,500 (17.3)	1,066 (17.2)	737 (15.8)	694 (17.4)	664 (19.0)	533 (20.7)	449 (24.0)	440 (25.2)	239 (25.9)	52 (33.5)	6,374
Participant doesn't know	604 (7.0)	341 (5.5)	192 (4.1)	147 (3.7)	67 (1.9)	56 (2.2)	34 (1.8)	30 (1.7)	17 (1.8)	4 (2.6)	1,492
Declined	368 (4.2)	312 (5.0)	261 (5.6)	173 (4.3)	151 (4.3)	114 (4.4)	108 (5.8)	127 (7.3)	77 (8.3)	15 (9.7)	1,706
Total	8,661	6,205	4,664	3,988	3,499	2,577	1,873	1,746	923	155	34,291

Footnote 1: Form IIs entered into the database since January 1, 1996.
Footnote 2: This variable was not collected between 2006 and 2011. Excludes 16,553 'unknown' records.
Footnote 3: 'Participant doesn't know/Declined' was added in October 2011.

Table 53. Vertebral Injury

	Vertebral Injury			
n (%)	**No**	**Yes**	**Unkn**	**Total**
Total	2,159 (20.0)	8,630 (79.8)	32 (0.3)	10,821

Footnote 1: Data were required for all admissions to System since October 1, 2006.

Table 54. Associated Injury

	Associated Injury			
n (%)	**No**	**Yes**	**Unkn**	**Total**
Total	6,774 (62.6)	3,997 (36.9)	50 (0.5)	10,821

Footnote 1: Data were required for all admissions to System since October 1, 2006.

Table 55. Spinal Surgery

n (%)	Spinal Surgery			
	No	Yes	Unkn	Total
Total	2,079 (19.2)	8,710 (80.5)	32 (0.3)	10,821

Footnote 1: Data were required for all admissions to System since October 1, 2006.

Table 56. Place of Residence at Time of Injury

n (%)	Place of Residence at Time of Injury										
	Private	Hospi-tal	Nursing home	Group living	Correc-tional Instit	Hotel motel	Home-less	Assist-ed living	Other	Unkn	Total
Total	18,057 (97.9)	60 (0.3)	41 (0.2)	114 (0.6)	11 (0.1)	28 (0.2)	91 (0.5)	4 (0.0)	11 (0.1)	29 (0.2)	18,449

Footnote 1: Data required for all admissions to System since December 1, 1995.
Footnote 2: 'Assisted Living' was added in October 2011.

Table 57. Place of Residence at Discharge

n (%)	Place of Residence at Discharge											
	Private	Hospi-tal	Nursing home	Group living	Correc-tional Instit	Hotel motel	Deceas-ed	Home-less	Assisted living	Other	Unkn	Total
Total	31,160 (87.3)	586 (1.6)	2,461 (6.9)	415 (1.2)	50 (0.1)	96 (0.3)	710 (2.0)	17 (0.0)	35 (0.1)	31 (0.1)	114 (0.3)	35,675

Footnote 1: 'Assisted Living' was added in October 2011.

Table 58. Place of Residence by Post-Injury Year

	Post-Injury Year										
Residence n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**Total**
Private residence	24,787 (91.6)	14,496 (93.5)	8,839 (95.4)	6,101 (96.1)	4,631 (96.4)	3,683 (96.8)	2,823 (97.1)	1,973 (97.0)	920 (97.1)	152 (95.6)	68,405
Hospital	129 (0.5)	28 (0.2)	7 (0.1)	7 (0.1)	2 (0.0)	5 (0.1)	1 (0.0)	2 (0.1)	0 (0.0)	0 (0.0)	181
Nursing home	1,066 (3.9)	466 (3.0)	245 (2.6)	133 (2.1)	96 (2.0)	56 (1.5)	51 (1.8)	29 (1.4)	12 (1.3)	2 (1.3)	2,156
Group living situation	329 (1.2)	191 (1.2)	50 (0.5)	25 (0.4)	15 (0.3)	10 (0.3)	6 (0.2)	3 (0.1)	1 (0.1)	1 (0.6)	631
Correctional institution	34 (0.1)	17 (0.1)	9 (0.1)	6 (0.1)	4 (0.1)	2 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	72
Hotel/motel	63 (0.2)	9 (0.1)	6 (0.1)	1 (0.0)	4 (0.1)	0 (0.0)	2 (0.1)	3 (0.1)	0 (0.0)	0 (0.0)	88
Homeless	23 (0.1)	10 (0.1)	4 (0.0)	3 (0.0)	1 (0.0)	2 (0.1)	1 (0.0)	2 (0.1)	1 (0.1)	0 (0.0)	47
Assisted living	60 (0.2)	46 (0.3)	15 (0.2)	15 (0.2)	11 (0.2)	11 (0.3)	12 (0.4)	8 (0.4)	7 (0.7)	3 (1.9)	188
Other	42 (0.2)	11 (0.1)	6 (0.1)	7 (0.1)	6 (0.1)	4 (0.1)	4 (0.1)	7 (0.3)	4 (0.4)	0 (0.0)	91
Unkn	537 (2.0)	223 (1.4)	88 (0.9)	52 (0.8)	34 (0.7)	30 (0.8)	8 (0.3)	6 (0.3)	2 (0.2)	1 (0.6)	981
Total	27,070	15,497	9,269	6,350	4,804	3,803	2,908	2,033	947	159	72,840

Footnote 1: 'Assisted Living' was added in October 2011.

Table 59. Median Days from Injury to Admission by Year of Injury

	Year of Injury									
median (n)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Overall**
Total	20.0 (4,563)	15.0 (4,949)	2.0 (3,843)	1.0 (3,295)	1.0 (3,623)	5.0 (3,443)	8.0 (3,606)	8.0 (3,650)	9.0 (4,703)	7.0 (35,675)

Footnote 1: Eligibility criteria changed in 1987 and 2000.
Footnote 3: September 2021: Trend data for 2010-2014 & 2015-2020 was updated.

Table 60. Median Days Hospitalized in the System's Acute Care Unit by Year of Injury (Day-1s Only)

	Year of Injury									
median (n)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Overall**
Total	24.0 (1,224)	23.0 (1,627)	19.0 (1,747)	15.0 (1,877)	13.0 (1,900)	13.0 (1,577)	12.0 (1,351)	11.0 (1,283)	12.0 (1,504)	16.0 (14,090)

Footnote 1: In 1995, variable 'Length of Stay' was separated.

Table 61. Median Days Hospitalized in the System's Acute Care Unit by Year of Injury and Neurologic Category (Day-1s Only)

	Year of Injury									
Neurologic Category median (n)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Overall**
Tetraplegia, complete	27.0 (313)	30.0 (348)	24.0 (315)	26.0 (323)	24.0 (313)	24.0 (265)	23.0 (176)	19.0 (137)	21.0 (147)	25.0 (2,337)
Tetraplegia, incomplete	24.0 (323)	22.0 (509)	18.0 (542)	15.0 (483)	10.0 (545)	11.0 (482)	10.0 (487)	10.0 (533)	11.0 (635)	13.0 (4,539)
Tetraplegia, minimal deficit	23.0 (3)	11.0 (5)	11.5 (42)	9.0 (76)	7.0 (59)	8.0 (37)	8.0 (12)	8.5 (12)	7.0 (5)	9.0 (251)
Paraplegia, complete	23.0 (327)	22.0 (402)	19.0 (408)	16.0 (513)	13.0 (482)	15.0 (353)	14.0 (287)	13.0 (241)	14.0 (239)	17.0 (3,252)
Paraplegia, incomplete	21.5 (218)	22.0 (325)	18.0 (381)	13.0 (378)	12.0 (363)	11.0 (271)	10.0 (291)	10.5 (286)	10.0 (278)	13.0 (2,791)
Paraplegia, minimal deficit	0.0 (0)	10.0 (7)	13.0 (29)	10.0 (71)	12.0 (39)	10.5 (26)	11.0 (12)	10.0 (9)	5.0 (3)	11.0 (196)
Normal, minimal deficit	19.0 (36)	18.0 (24)	12.0 (13)	10.0 (8)	10.0 (8)	9.0 (18)	13.0 (6)	9.0 (7)	6.0 (18)	12.5 (138)
Unkn	16.0 (4)	23.0 (7)	24.0 (17)	18.0 (25)	18.0 (91)	16.0 (125)	12.0 (80)	11.0 (58)	13.0 (179)	14.0 (586)
Total	24.0 (1,224)	23.0 (1,627)	19.0 (1,747)	15.0 (1,877)	13.0 (1,900)	13.0 (1,577)	12.0 (1,351)	11.0 (1,283)	12.0 (1,504)	16.0 (14,090)

Footnote 1: Paraplegia and tetraplegia minimal deficit categories were added in 1987. Some records have been updated.
Footnote 2: Neurologic category at discharge was used as the basis of comparison.

Table 62A. Median Days Hospitalized in the System's Rehab Unit by Year of Injury (Day-1s Only)

	Year of Injury									
median (n)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Overall**
Total	98.0 (1,198)	86.0 (1,646)	73.0 (1,743)	58.0 (1,842)	44.0 (1,903)	42.0 (1,449)	38.0 (1,325)	35.0 (1,327)	32.0 (1,610)	51.0 (14,043)

Table 62B. Median Days Hospitalized in the System's Rehab Unit by Year of Injury (All Rehab Admissions)

	Year of Injury									
median (n)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Overall**
Total	91.0 (4,420)	86.0 (4,812)	77.0 (3,723)	59.0 (3,159)	45.0 (3,553)	46.0 (3,228)	44.0 (3,474)	44.0 (3,613)	42.0 (4,649)	58.0 (34,631)

Table 63A. Median Days Hospitalized in the System's Rehab Unit by Year of Injury and Neurologic Category (Day-1s Only)

	Year of Injury									
Neurologic Category median (n)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Overall**
Tetraplegia, complete	142.0 (293)	121.0 (349)	111.0 (289)	99.0 (309)	71.0 (327)	65.5 (244)	62.0 (165)	51.0 (139)	44.0 (152)	93.0 (2,267)
Tetraplegia, incomplete	104.0 (333)	95.0 (526)	85.0 (549)	75.0 (465)	51.0 (544)	44.0 (471)	36.0 (489)	36.0 (549)	34.0 (681)	52.0 (4,607)
Tetraplegia, minimal deficit	0.0 (0)	41.0 (5)	22.0 (41)	25.5 (78)	14.0 (59)	23.0 (29)	17.0 (8)	13.0 (14)	9.0 (3)	22.0 (237)
Paraplegia, complete	84.0 (347)	72.5 (424)	63.0 (429)	52.0 (523)	39.0 (492)	42.0 (338)	40.0 (293)	35.0 (249)	33.0 (262)	51.0 (3,357)
Paraplegia, incomplete	68.0 (218)	63.0 (322)	57.0 (394)	43.0 (378)	31.0 (364)	30.0 (267)	29.0 (296)	30.0 (291)	27.0 (298)	38.0 (2,828)
Paraplegia, minimal deficit	0.0 (0)	19.0 (7)	33.0 (28)	27.0 (66)	19.0 (41)	19.0 (23)	14.0 (12)	11.5 (8)	14.0 (2)	21.0 (187)
Normal, minimal deficit	38.5 (6)	43.0 (9)	10.0 (5)	12.5 (8)	10.0 (9)	15.0 (11)	19.0 (3)	8.5 (8)	11.5 (18)	14.0 (77)
Unkn	132.0 (1)	88.0 (4)	115.0 (8)	36.0 (15)	31.0 (67)	35.5 (66)	44.0 (59)	31.0 (69)	30.0 (194)	34.0 (483)
Total	98.0 (1,198)	86.0 (1,646)	73.0 (1,743)	58.0 (1,842)	44.0 (1,903)	42.0 (1,449)	38.0 (1,325)	35.0 (1,327)	32.0 (1,610)	51.0 (14,043)

Footnote 1: Paraplegia and tetraplegia minimal deficit categories were added in 1987. Some records have been updated.
Footnote 2: Neurologic category at discharge was used as the basis of comparison.

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 63B. Median Days Hospitalized in the System's Rehab Unit by Year of Injury and Neurologic Category (All Rehab Admissions)

	Year of Injury									
Neurologic Category median (n)	**1972-1979**	**1980-1984**	**1985-1989**	**1990-1994**	**1995-1999**	**2000-2004**	**2005-2009**	**2010-2014**	**2015-2021**	**Overall**
Tetraplegia, complete	122.0 (1,097)	114.0 (1,038)	113.0 (683)	98.0 (579)	73.0 (671)	66.0 (609)	64.0 (543)	68.0 (465)	58.0 (524)	92.0 (6,209)
Tetraplegia, incomplete	96.0 (1,261)	94.0 (1,571)	87.0 (1,170)	77.0 (792)	51.0 (1,003)	50.0 (1,071)	45.5 (1,252)	47.0 (1,479)	45.0 (1,901)	61.0 (11,500)
Tetraplegia, minimal deficit	7.0 (1)	57.5 (12)	29.0 (60)	28.0 (110)	19.0 (89)	23.5 (50)	26.0 (42)	16.0 (23)	19.0 (30)	24.0 (417)
Paraplegia, complete	80.5 (1,252)	71.0 (1,221)	64.0 (948)	52.0 (929)	39.0 (968)	44.0 (772)	42.0 (744)	42.0 (659)	41.0 (831)	54.0 (8,324)
Paraplegia, incomplete	68.0 (794)	63.0 (922)	57.0 (792)	44.0 (627)	32.0 (627)	34.0 (540)	34.0 (692)	35.0 (681)	34.0 (799)	43.0 (6,474)
Paraplegia, minimal deficit	0.0 (0)	19.0 (17)	33.5 (48)	28.0 (87)	19.5 (54)	17.0 (49)	21.0 (37)	14.5 (16)	24.0 (14)	22.0 (322)
Normal, minimal deficit	36.0 (11)	34.0 (17)	10.0 (7)	14.0 (11)	15.5 (18)	17.0 (17)	12.0 (9)	9.0 (13)	13.0 (27)	15.0 (130)
Unkn	100.0 (4)	89.5 (14)	67.0 (15)	30.0 (24)	37.0 (123)	38.5 (120)	47.0 (155)	36.0 (277)	39.0 (523)	39.0 (1,255)
Total	91.0 (4,420)	86.0 (4,812)	77.0 (3,723)	59.0 (3,159)	45.0 (3,553)	46.0 (3,228)	44.0 (3,474)	44.0 (3,613)	42.0 (4,649)	58.0 (34,631)

Footnote 1: Paraplegia and tetraplegia minimal deficit categories were added in 1987. Some records have been updated.
Footnote 2: Neurologic category at discharge was used as the basis of comparison.

Table 64. Neurologic Level of Injury at Discharge -Cervical Lesions

	Cervical Neurologic Level									
(% of all lesions)	**C01**	**C02**	**C03**	**C04**	**C05**	**C06**	**C07**	**C08**	**C Unkn**	**Sub-Total**
Total	429 (1.3)	761 (2.3)	1,197 (3.6)	5,236 (15.7)	5,003 (15.0)	3,329 (10.0)	1,643 (4.9)	629 (1.9)	84 (0.3)	18,311 (54.7)

Footnote 1: The neurologic level of injury is the most rostral (highest) sensory and motor level, left and right at discharge.
Footnote 2: (%) are calculated on Total of all levels (Cervical, Thoracic, Lumbar, Sacral) for each center.

Table 65. Neurologic Level of Injury at Discharge -Thoracic Lesions

	Thoracic Neurologic Level													
n (% of all lesions)	T01	T02	T03	T04	T05	T06	T07	T08	T09	T10	T11	T12	T Unkn	Sub-Total
Total	510 (1.5)	424 (1.3)	702 (2.1)	1,306 (3.9)	872 (2.6)	929 (2.8)	688 (2.1)	876 (2.6)	669 (2.0)	1,424 (4.3)	1,190 (3.6)	2,004 (6.0)	33 (0.1)	11,627 (34.8)

Footnote 1: The neurologic level of injury is the most rostral (highest) sensory and motor level, left and right at discharge.
Footnote 2: (%) are calculated on Total of all levels (Cervical, Thoracic, Lumbar, Sacral) for each center.

Table 66. Neurologic Level of Injury at Discharge-Lumbar Lesions

	Lumbar Neurologic Level						
n (% of all lesions)	L01	L02	L03	L04	L05	L Unkn	Sub-Total
Total	1,570 (4.7)	865 (2.6)	567 (1.7)	262 (0.8)	115 (0.3)	9 (0.0)	3,388 (10.1)

Footnote 1: The neurologic level of injury is the most rostral (highest) sensory and motor level, left and right at discharge.
Footnote 2: (%) are calculated on Total of all levels (Cervical, Thoracic, Lumbar, Sacral) for each center.

Table 67. Neurologic Level of Injury at Discharge -Sacral Lesions

	Sacral Neurologic Level						
n (% of all lesions)	S01	S02	S03	S04	S05	S Unkn	Sub-Total
Total	58 (0.2)	36 (0.1)	8 (0.0)	12 (0.0)	11 (0.0)	1 (0.0)	126 (0.4)

Footnote 1: The neurologic level of injury is the most rostral (highest) sensory and motor level, left and right at discharge.
Footnote 2: (%) are calculated on Total of all levels (Cervical, Thoracic, Lumbar, Sacral) for each center

Table 68. Neurologic Category at Discharge

	Neurologic Category at Discharge								
n (%)	Tetra Comp	Tetra Incomp	Tetra MinDef	Para Comp	Para Incomp	Para MinDef	Norm, MinDef	Unkn	Total
Total	6,500 (18.2)	11,732 (32.9)	447 (1.3)	8,434 (23.6)	6,573 (18.4)	340 (1.0)	207 (0.6)	1,442 (4.0)	35,675

Footnote 1: Paraplegia and tetraplegia minimal deficit categories were added in 1987. Some records have been updated.

Table 69. Neurologic Category at Discharge by Grouped Etiology

	Neurologic Category at Discharge								
Etiology n (%)	Tetra Comp	Tetra Incomp	Tetra MinDef	Para Comp	Para Incomp	Para MinDef	Norm, MinDef	Unkn	Total
Vehicular	2,989 (20.1)	4,962 (33.3)	194 (1.3)	3,606 (24.2)	2,422 (16.3)	113 (0.8)	85 (0.6)	526 (3.5)	14,897
Violence	902 (14.9)	801 (13.2)	37 (0.6)	2,520 (41.5)	1,474 (24.3)	80 (1.3)	11 (0.2)	243 (4.0)	6,068
Sports	1,241 (34.8)	1,713 (48.1)	42 (1.2)	208 (5.8)	243 (6.8)	16 (0.4)	20 (0.6)	81 (2.3)	3,564
Falls	1,044 (12.6)	3,524 (42.6)	150 (1.8)	1,408 (17.0)	1,525 (18.5)	98 (1.2)	72 (0.9)	442 (5.3)	8,263
Med/surg	43 (4.2)	235 (23.0)	7 (0.7)	170 (16.6)	477 (46.7)	11 (1.1)	9 (0.9)	70 (6.8)	1,022
Other	270 (14.9)	472 (26.0)	17 (0.9)	518 (28.6)	430 (23.7)	22 (1.2)	10 (0.6)	73 (4.0)	1,812
Unkn	11 (22.4)	25 (51.0)	0 (0.0)	4 (8.2)	2 (4.1)	0 (0.0)	0 (0.0)	7 (14.3)	49
Total	6,500 (18.2)	11,732 (32.9)	447 (1.3)	8,434 (23.6)	6,573 (18.4)	340 (1.0)	207 (0.6)	1,442 (4.0)	35,675

Footnote 1: Paraplegia and tetraplegia minimal deficit categories were added in 1987. Some records have been updated.
Footnote 2: Vehicular=codes 1-9; Violence=codes 10-15; Sports=codes 20-29, 70-78; Falls=code 30; Medical/surgical complication=code 50.

Table 70. Trend in Neurologic Category at Discharge by Year of Injury

	Year of Injury									
Neurologic Category n (%)	1972-1979	1980-1984	1985-1989	1990-1994	1995-1999	2000-2004	2005-2009	2010-2014	2015-2021	Total
Tetraplegia, complete	1,155 (25.3)	1,085 (21.9)	729 (19.0)	624 (18.9)	684 (18.9)	643 (18.7)	575 (15.9)	470 (12.9)	535 (11.4)	6,500
Tetraplegia, incomplete	1,282 (28.1)	1,598 (32.3)	1,198 (31.2)	821 (24.9)	1,020 (28.2)	1,119 (32.5)	1,279 (35.5)	1,494 (40.9)	1,921 (40.8)	11,732
Tetraplegia, minimal deficit	4 (0.1)	13 (0.3)	62 (1.6)	115 (3.5)	89 (2.5)	61 (1.8)	48 (1.3)	23 (0.6)	32 (0.7)	447
Paraplegia, complete	1,265 (27.7)	1,231 (24.9)	960 (25.0)	946 (28.7)	972 (26.8)	799 (23.2)	758 (21.0)	666 (18.2)	837 (17.8)	8,434
Paraplegia, incomplete	804 (17.6)	948 (19.2)	802 (20.9)	640 (19.4)	636 (17.6)	551 (16.0)	702 (19.5)	684 (18.7)	806 (17.1)	6,573
Paraplegia, minimal deficit	0 (0.0)	19 (0.4)	50 (1.3)	95 (2.9)	54 (1.5)	52 (1.5)	38 (1.1)	17 (0.5)	15 (0.3)	340
Normal	45 (1.0)	38 (0.8)	16 (0.4)	13 (0.4)	19 (0.5)	24 (0.7)	12 (0.3)	13 (0.4)	27 (0.6)	207
Unkn	8 (0.2)	17 (0.3)	26 (0.7)	41 (1.2)	149 (4.1)	194 (5.6)	194 (5.4)	283 (7.8)	530 (11.3)	1,442
Total	4,563	4,949	3,843	3,295	3,623	3,443	3,606	3,650	4,703	35,675

Footnote 1: Paraplegia and tetraplegia minimal deficit categories were added in 1987. Some records have been updated.

Table 71. Neurologic Category at 1 Year Post-Injury

	Neurologic Category								
n (%)	Tetra Comp	Tetra Incomp	Tetra MinDef	Para Comp	Para Incomp	Para MinDef	Norm, MinDef	Unkn	Total
Total	3,488 (12.9)	5,660 (20.9)	363 (1.3)	4,851 (17.9)	3,653 (13.5)	295 (1.1)	288 (1.1)	8,472 (31.3)	27,070

Footnote 1: Paraplegia and tetraplegia minimal deficit categories were added in 1987. Some records have been updated.

Table 72. ASIA Impairment Scale at Discharge

	ASIA Impairment Scale						
n (%)	Complete (A)	Sensory Only (B)	Non-functional Motor (C)	Functional Motor (D)	Recovered (E)	Unkn	Total
Total	14,934 (41.9)	3,828 (10.7)	4,435 (12.4)	10,474 (29.4)	207 (0.6)	1,797 (5.0)	35,675

Table 73. ASIA Impairment Scale at Acute Admission, Rehabilitation Admission, and System Discharge (Day-1s Only)

AIS n (%)	Acute Admit	Rehab Admit	System Discharge
Complete (A)	6,398 (43.4)	2,182 (15.5)	5,899 (40.0)
Sensory only (B)	1,739 (11.8)	669 (4.7)	1,451 (9.8)
Non-functional motor (C)	2,039 (13.8)	1,018 (7.2)	1,735 (11.8)
Functional motor (D)	2,768 (18.8)	1,668 (11.8)	4,748 (32.2)
Recovered (E)	0 (0.0)	3 (0.0)	142 (1.0)
Unkn	1,805 (12.2)	8,561 (60.7)	774 (5.3)
Total	14,749	14,101	14,749

Footnote 1: Rehabilitation admission data were required after October 31, 2000.

Table 74. ASIA Impairment Scale by Neurologic Level at Discharge - Cervical

	Neurologic Level at Discharge									
AIS n (%)	**C01**	**C02**	**C03**	**C04**	**C05**	**C06**	**C07**	**C08**	**C Unkn**	**Total**
Complete (A)	154 (35.9)	254 (33.4)	382 (31.9)	1,982 (37.9)	1,619 (32.4)	1,228 (36.9)	569 (34.6)	186 (29.6)	21 (25.0)	6,395 (34.9)
Sensory only (B)	15 (3.5)	49 (6.4)	91 (7.6)	664 (12.7)	635 (12.7)	563 (16.9)	262 (15.9)	106 (16.9)	10 (11.9)	2,395 (13.1)
Non-functional motor (C)	59 (13.8)	92 (12.1)	194 (16.2)	805 (15.4)	619 (12.4)	416 (12.5)	207 (12.6)	72 (11.4)	9 (10.7)	2,473 (13.5)
Functional motor (D)	200 (46.6)	358 (47.0)	512 (42.8)	1,736 (33.2)	2,070 (41.4)	1,091 (32.8)	580 (35.3)	258 (41.0)	23 (27.4)	6,828 (37.3)
Unkn	1 (0.2)	8 (1.1)	18 (1.5)	49 (0.9)	60 (1.2)	31 (0.9)	25 (1.5)	7 (1.1)	21 (25.0)	220 (1.2)
Total	429	761	1,197	5,236	5,003	3,329	1,643	629	84	18,311

Table 75. ASIA Impairment Scale by Neurologic Level at Discharge - Thoracic

	Neurologic Level at Discharge													
AIS n (%)	**T01**	**T02**	**T03**	**T04**	**T05**	**T06**	**T07**	**T08**	**T09**	**T10**	**T11**	**T12**	**T Unkn**	**Total**
Complete (A)	269 (52.7)	296 (69.8)	543 (77.4)	972 (74.4)	683 (78.3)	684 (73.6)	490 (71.2)	638 (72.8)	503 (75.2)	1,025 (72.0)	776 (65.2)	844 (42.1)	14 (42.4)	7,737 (66.5)
Sensory only (B)	69 (13.5)	41 (9.7)	62 (8.8)	121 (9.3)	61 (7.0)	86 (9.3)	63 (9.2)	67 (7.6)	37 (5.5)	65 (4.6)	103 (8.7)	218 (10.9)	3 (9.1)	996 (8.6)
Non-functional motor (C)	47 (9.2)	33 (7.8)	44 (6.3)	87 (6.7)	53 (6.1)	60 (6.5)	46 (6.7)	64 (7.3)	51 (7.6)	138 (9.7)	149 (12.5)	357 (17.8)	2 (6.1)	1,131 (9.7)
Functional motor (D)	121 (23.7)	53 (12.5)	49 (7.0)	120 (9.2)	71 (8.1)	95 (10.2)	86 (12.5)	103 (11.8)	75 (11.2)	188 (13.2)	154 (12.9)	565 (28.2)	4 (12.1)	1,684 (14.5)
Unkn	4 (0.8)	1 (0.2)	4 (0.6)	6 (0.5)	4 (0.5)	4 (0.4)	3 (0.4)	4 (0.5)	3 (0.4)	8 (0.6)	8 (0.7)	20 (1.0)	10 (30.3)	79 (0.7)
Total	510	424	702	1,306	872	929	688	876	669	1,424	1,190	2,004	33	11,627

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 76. ASIA Impairment Scale by Neurologic Level at Discharge - Lumbar

	Neurologic Level at Discharge						
AIS n (%)	L01	L02	L03	L04	L05	L Unkn	Total
Complete (A)	367 (23.4)	104 (12.0)	86 (15.2)	18 (6.9)	10 (8.7)	1 (11.1)	586 (17.3)
Sensory only (B)	182 (11.6)	103 (11.9)	64 (11.3)	19 (7.3)	9 (7.8)	0 (0.0)	377 (11.1)
Non-functional motor (C)	407 (25.9)	168 (19.4)	133 (23.5)	29 (11.1)	9 (7.8)	0 (0.0)	746 (22.0)
Functional motor (D)	595 (37.9)	476 (55.0)	271 (47.8)	191 (72.9)	87 (75.7)	5 (55.6)	1,625 (48.0)
Unkn	19 (1.2)	14 (1.6)	13 (2.3)	5 (1.9)	0 (0.0)	3 (33.3)	54 (1.6)
Total	1,570	865	567	262	115	9	3,388

Table 77. ASIA Impairment Scale at 1 Year Post-Injury

	AIS						
n (%)	Complete (A)	Sensory Only (B)	Non-functional Motor (C)	Functional Motor (D)	Recovered (E)	Unkn	Total
Total	8,339 (30.8)	1,907 (7.0)	1,866 (6.9)	5,695 (21.0)	288 (1.1)	8,975 (33.2)	27,070

Table 78. ASIA Motor Index Score Total (Mean) at Acute Admission, Rehabilitation Admission and System Discharge (Day-1s Only)

Mean (n)	ASIA Motor Score Totals		
	Acute Admit	Rehab Admit	System Discharge
Total	44.3 (6,690)	48.4 (7,564)	56.2 (7,671)

Footnote 1: Form I Day-1s entered to the database since October 1, 1993.
Footnote 2: Motor Index Scores Totals range from 0 to 100.

Table 79. ASIA Motor Index Score Total at 1 Year Post-Injury

	ASIA Motor Score Total				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	6,936	57.2	28.0	0	100

Footnote 1: Form IIs entered to the database since October 1, 1993.
Footnote 2: Motor Index Score Totals range from 0 to 100.

Table 80. Sensory Score for Light Touch Total (Mean) at Rehabilitation Admission and System Discharge

Mean (n)	Sensory Score for Light Touch Total	
	Rehab Admit	System Discharge
Total	65.2 (6,386)	70.6 (6,156)

Footnote 1: Data were required for all admissions to System since October 1, 2011.
Footnote 2: Sensory Score Light Touch Total ranges from 0 to 112.

Table 81. Sensory Score for Pin Prick Total (Mean) at Rehabilitation Admission and System Discharge

Mean (n)	Sensory Score for Pin Prick Total	
	Rehab Admit	System Discharge
Total	57.0 (6,387)	61.9 (6,163)

Footnote 1: Data were required for all admissions to System since October 1, 2011.
Footnote 2: Sensory Score Pin Prick Total ranges from 0 to 112.

Table 82. Sensory Score for Light Touch Total at 1 Year Post-Injury

	Sensory Score for Light Touch Total				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	1,905	69.1	33.1	0	112

Footnote 1: Form IIs entered into the database since January 1, 2012.
Footnote 2: Sensory Score Light Touch Total ranges from 0 to 112.

Table 83. Sensory Score for Pin Prick Total at 1 Year Post-Injury

	Sensory Score for Pin Prick Total				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	1,838	64.3	32.4	0	112

Footnote 1: Form IIs entered into the database since January 1, 2012.
Footnote 2: Sensory Score Pin Prick Total ranges from 0 to 112.

Table 84. Respirator Use (Para) at Rehabilitation Admission and System Discharge

	Respirator Use at Rehab Admit				Respirator Use at System Discharge			
n (%)	No	Yes	Unkn	Total	No	Yes	Unkn	Total
Total	13,493 (88.8)	799 (5.3)	911 (6.0)	15,203	15,236 (99.3)	66 (0.4)	45 (0.3)	15,347

Footnote 1: To determine paraplegia level, Neuro Category at Discharge was used.
Footnote 2: Paraplegia group includes complete, incomplete and minimal deficit categories.
Footnote 3: All three codes (plus the conversion code) for 'mechanical vent use' were included in the 'Yes' column. Continuous positive airway pressure for sleep apnea was included in the 'No' column.

Table 85. Respirator Use (Tetra) at Rehabilitation Admission and System Discharge

	Respirator Use at Rehab Admit				Respirator Use at System Discharge			
n (%)	No	Yes	Unkn	Total	No	Yes	Unkn	Total
Total	13,641 (74.7)	3,539 (19.4)	1,092 (6.0)	18,272	17,528 (93.8)	1,021 (5.5)	130 (0.7)	18,679

Footnote 1: To determine tetraplegia level, Neuro Category at Discharge was used.
Footnote 2: Tetraplegia group includes complete, incomplete and minimal deficit categories.
Footnote 3: All three codes (plus the conversion code) for 'mechanical vent use' were included in the 'Yes' column. Continuous positive airway pressure for sleep apnea was included in the 'No' column.

Table 86. Respirator Use (Paraplegia and Tetraplegia) at 1 Year Post-Injury

n (%)	Respirator Use - Tetraplegia				Respirator Use – Paraplegia			
	No	Yes	Unkn	Total	No	Yes	Unkn	Total
Total	8,940 (94.0)	327 (3.4)	244 (2.6)	9,511	8,562 (97.3)	19 (0.2)	218 (2.5)	8,799

Footnote 1: Paraplegia and tetraplegia groups include complete, incomplete and minimal deficit categories.
Footnote 2: All three codes (plus the conversion code) for 'mechanical vent use' were included in the 'Yes' column. Continuous positive airway pressure for sleep apnea was included in the 'No' column.

Table 87. FIM Motor Total (Mean) at Rehabilitation Admission and Discharge

Mean (n)	FIM Motor Total	
	Rehab Admit	Rehab Discharge
Total	24.9 (20,289)	53.9 (20,029)

Footnote 1: Form Is entered to the database from October 1988 to October 2018.
Footnote 2: FIM Motor Score Total ranges from 13 to 91

Table 88. FIM Motor Total (Mean) at Rehabilitation Admission and Discharge by Neurologic Category

Neurologic Category at Discharge Mean (n)	FIM Motor Total	
	Rehab Admit	Rehab Discharge
Tetraplegia, complete	15.0 (3,236)	28.4 (3,191)
Tetraplegia, incomplete	20.4 (7,005)	49.3 (6,928)
Tetraplegia, minimal deficit	35.9 (350)	77.4 (354)
Paraplegia, complete	29.9 (4,667)	64.1 (4,604)
Paraplegia, incomplete	33.5 (3,747)	68.7 (3,723)
Paraplegia, minimal deficit	41.1 (257)	78.0 (257)
Normal, minimal deficit	44.3 (80)	76.0 (81)
Unkn	24.0 (947)	48.1 (891)
Total	24.9 (20,289)	53.9 (20,029)

Footnote 1: Form Is entered to the database from October 1988 to October 2018.
Footnote 2: FIM Motor Score Total ranges from 13 to 91.

Table 89. Method of Bladder Management at Discharge– Male

(Continued)

n (%)	Bladder Management at Discharge							
	None (diapers, etc.)	Indwelling Cath	Indwelling Cath, stoma*	Catheter free with ext collector, no sphincterotomy*	Catheter free with ext collector and sphincterotomy*	Catheter free with ext collector, sphincterotomy unk	reflex stim, crede, external pressure	ICP only*
Total	588 (2.1)	4,055 (14.1)	19 (0.1)	338 (1.2)	10 (0.0)	2,802 (9.8)	573 (2.0)	7,030 (24.5)

n (%)	Bladder Management at Discharge								
	ICP with external collector*	ICP after augmentation or continent diversion*	ICP-external collector, augmentation or continent diversion unknown	Conduit	Suprapubic Cystostomy	Normal Micturition	Other	Unkn	Total
Total	375 (1.3)	7 (0.0)	5,488 (19.1)	18 (0.1)	1,893 (6.6)	5,027 (17.5)	87 (0.3)	354 (1.2)	28,664

Footnote 1: Codes were added in November 1995.*

Table 90. Method of Bladder Management at Discharge– Female

(Continued)

	Bladder Management at Discharge					
n (%)	None (diapers, etc.)	Indwelling Cath	Indwelling Cath, stoma*	reflex stim, crede, external pressure	ICP only*	ICP-external collector, augmentation or continent diversion unkn
Total	242 (3.5)	1,875 (26.8)	4 (0.1)	161 (2.3)	1,582 (22.6)	1,225 (17.5)

	Bladder Management at Discharge					
n (%)	Conduit	Suprapubic Cystostomy	Normal Micturition	Other	Unkn	Total
Total	4 (0.1)	306 (4.4)	1,504 (21.5)	11 (0.2)	91 (1.3)	7,005

*Footnote 1: *Codes were added in November 1995.*

Table 91. Method of Bladder Management by Post-Injury Year – Male

	Post-Injury Year									
Bladder Management n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
None	519 (2.4)	270 (2.2)	145 (2.0)	88 (1.7)	53 (1.4)	28 (0.9)	14 (0.6)	15 (0.9)	12 (1.6)	1 (0.8)
Indwelling catheter	2,003 (9.2)	972 (7.8)	660 (9.0)	446 (8.8)	325 (8.5)	242 (8.0)	219 (9.4)	176 (10.9)	85 (11.6)	16 (13.1)
Indwelling catheter after augmentation*	39 (0.2)	50 (0.4)	50 (0.7)	66 (1.3)	49 (1.3)	38 (1.3)	41 (1.8)	23 (1.4)	11 (1.5)	1 (0.8)
Catheter free with external collector, no sphincterotomy*	420 (1.9)	356 (2.9)	358 (4.9)	349 (6.9)	342 (8.9)	308 (10.1)	182 (7.8)	102 (6.3)	38 (5.2)	7 (5.7)
Catheter free with external collector, with sphincterotomy*	25 (0.1)	68 (0.5)	81 (1.1)	110 (2.2)	119 (3.1)	133 (4.4)	113 (4.9)	70 (4.3)	42 (5.7)	8 (6.6)
Catheter free with external collector, sphincterotomy unkn	2,996 (13.8)	1,912 (15.4)	797 (10.9)	251 (5.0)	73 (1.9)	43 (1.4)	37 (1.6)	34 (2.1)	17 (2.3)	8 (6.6)
Crede, reflex stimulation, external pressure	468 (2.1)	231 (1.9)	98 (1.3)	69 (1.4)	50 (1.3)	48 (1.6)	32 (1.4)	28 (1.7)	11 (1.5)	2 (1.6)
ICP only*	4,214 (19.4)	2,604 (21.0)	1,768 (24.1)	1,314 (26.0)	968 (25.2)	711 (23.4)	487 (21.0)	332 (20.6)	152 (20.8)	19 (15.6)
ICP with external collector*	484 (2.2)	275 (2.2)	204 (2.8)	182 (3.6)	140 (3.6)	134 (4.4)	111 (4.8)	89 (5.5)	32 (4.4)	5 (4.1)
ICP after augmentation or continent diversion*	19 (0.1)	30 (0.2)	38 (0.5)	46 (0.9)	35 (0.9)	38 (1.3)	33 (1.4)	17 (1.1)	4 (0.5)	2 (1.6)
ICP unkn	2,862 (13.1)	874 (7.1)	310 (4.2)	107 (2.1)	33 (0.9)	19 (0.6)	23 (1.0)	15 (0.9)	2 (0.3)	0 (0.0)
Conduit	14 (0.1)	48 (0.4)	49 (0.7)	35 (0.7)	39 (1.0)	46 (1.5)	28 (1.2)	24 (1.5)	14 (1.9)	5 (4.1)
Suprapubic cystotomy	1,947 (8.9)	1,784 (14.4)	1,216 (16.6)	995 (19.7)	873 (22.7)	693 (22.8)	550 (23.7)	387 (24.0)	182 (24.9)	31 (25.4)
Normal micturition	5,118 (23.5)	2,554 (20.6)	1,383 (18.9)	862 (17.1)	656 (17.1)	492 (16.2)	404 (17.4)	268 (16.6)	115 (15.7)	14 (11.5)
Other	76 (0.3)	54 (0.4)	39 (0.5)	27 (0.5)	25 (0.7)	22 (0.7)	25 (1.1)	14 (0.9)	5 (0.7)	1 (0.8)
Unkn	568 (2.6)	304 (2.5)	137 (1.9)	98 (1.9)	58 (1.5)	42 (1.4)	23 (1.0)	20 (1.2)	10 (1.4)	2 (1.6)
Total	21,772	12,386	7,333	5,045	3,838	3,037	2,322	1,614	732	122

*Footnote 1: * Codes were added in November 1995.*

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 92. Method of Bladder Management by Post-Injury Year – Female

	Post-Injury Year									
Bladder Management n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
None	245 (4.6)	147 (4.7)	69 (3.6)	43 (3.3)	28 (2.9)	20 (2.6)	16 (2.7)	12 (2.9)	6 (2.8)	0 (0.0)
Indwelling catheter	1,128 (21.3)	646 (20.8)	363 (18.8)	241 (18.5)	190 (19.7)	153 (20.0)	127 (21.7)	96 (22.9)	41 (19.1)	8 (21.6)
Indwelling catheter after augmentation*	17 (0.3)	27 (0.9)	27 (1.4)	25 (1.9)	17 (1.8)	12 (1.6)	15 (2.6)	8 (1.9)	8 (3.7)	3 (8.1)
Crede, reflex stimulation, external pressure	128 (2.4)	82 (2.6)	37 (1.9)	25 (1.9)	25 (2.6)	14 (1.8)	16 (2.7)	21 (5.0)	12 (5.6)	3 (8.1)
ICP only*	921 (17.4)	579 (18.6)	461 (23.8)	367 (28.1)	319 (33.0)	259 (33.8)	190 (32.4)	130 (31.0)	64 (29.8)	9 (24.3)
ICP after augmentation or continent diversion*	13 (0.2)	32 (1.0)	39 (2.0)	39 (3.0)	25 (2.6)	24 (3.1)	17 (2.9)	12 (2.9)	5 (2.3)	2 (5.4)
ICP unkn	775 (14.6)	303 (9.7)	128 (6.6)	46 (3.5)	11 (1.1)	9 (1.2)	5 (0.9)	2 (0.5)	0 (0.0)	0 (0.0)
Conduit	12 (0.2)	30 (1.0)	29 (1.5)	24 (1.8)	16 (1.7)	13 (1.7)	11 (1.9)	10 (2.4)	10 (4.7)	2 (5.4)
Suprapubic cystotomy	376 (7.1)	343 (11.0)	245 (12.7)	161 (12.3)	117 (12.1)	101 (13.2)	62 (10.6)	43 (10.3)	27 (12.6)	5 (13.5)
Normal micturition	1,531 (28.9)	834 (26.8)	479 (24.8)	300 (23.0)	197 (20.4)	146 (19.1)	110 (18.8)	77 (18.4)	35 (16.3)	3 (8.1)
Other	15 (0.3)	21 (0.7)	15 (0.8)	16 (1.2)	9 (0.9)	4 (0.5)	11 (1.9)	3 (0.7)	2 (0.9)	0 (0.0)
Unkn	133 (2.5)	65 (2.1)	43 (2.2)	18 (1.4)	12 (1.2)	11 (1.4)	6 (1.0)	5 (1.2)	5 (2.3)	2 (5.4)
Total	5,294	3,109	1,935	1,305	966	766	586	419	215	37

*Footnote 1: *Codes were added in November 1995.*

Source: National Spinal Cord Injury Statistical Center, University of Alabama at Birmingham, 2021 Annual Statistical Report – Complete Public Version

Table 93. Reason for Change in Bladder Management by Post-Injury Year

	Post-Injury Year									
Reason for Change n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No change	3,965 (68.0)	3,141 (73.4)	2,474 (75.9)	1,950 (78.1)	1,500 (74.3)	1,251 (74.6)	1,228 (73.1)	1,336 (75.5)	724 (76.5)	134 (84.3)
Regained bladder control	586 (10.0)	163 (3.8)	74 (2.3)	35 (1.4)	36 (1.8)	19 (1.1)	31 (1.8)	15 (0.8)	6 (0.6)	0 (0.0)
Completed ICP training	47 (0.8)	12 (0.3)	6 (0.2)	5 (0.2)	0 (0.0)	2 (0.1)	2 (0.1)	6 (0.3)	1 (0.1)	0 (0.0)
Medical complication/condition	194 (3.3)	202 (4.7)	139 (4.3)	105 (4.2)	86 (4.3)	80 (4.8)	105 (6.3)	133 (7.5)	75 (7.9)	8 (5.0)
Physician/nurse recommendation	174 (3.0)	74 (1.7)	53 (1.6)	35 (1.4)	31 (1.5)	33 (2.0)	43 (2.6)	27 (1.5)	16 (1.7)	2 (1.3)
Old method no longer effective	45 (0.8)	46 (1.1)	37 (1.1)	26 (1.0)	33 (1.6)	34 (2.0)	43 (2.6)	41 (2.3)	20 (2.1)	6 (3.8)
Accommodate work	3 (0.1)	5 (0.1)	2 (0.1)	3 (0.1)	3 (0.1)	2 (0.1)	1 (0.1)	2 (0.1)	2 (0.2)	0 (0.0)
Accommodate lifestyle	82 (1.4)	72 (1.7)	33 (1.0)	20 (0.8)	24 (1.2)	12 (0.7)	23 (1.4)	19 (1.1)	13 (1.4)	0 (0.0)
Personal choice	112 (1.9)	56 (1.3)	38 (1.2)	19 (0.8)	29 (1.4)	14 (0.8)	22 (1.3)	18 (1.0)	14 (1.5)	1 (0.6)
Other	25 (0.4)	18 (0.4)	12 (0.4)	10 (0.4)	10 (0.5)	11 (0.7)	17 (1.0)	4 (0.2)	3 (0.3)	0 (0.0)
Participant doesn't know	17 (0.3)	14 (0.3)	8 (0.2)	9 (0.4)	9 (0.4)	4 (0.2)	4 (0.2)	6 (0.3)	2 (0.2)	0 (0.0)
Unkn	583 (10.0)	477 (11.1)	382 (11.7)	281 (11.2)	258 (12.8)	216 (12.9)	160 (9.5)	162 (9.2)	71 (7.5)	8 (5.0)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 94. Body Mass Index (Mean) during Rehabilitation

	BMI (kg/m^2)				
	N	**Mean**	**Standard Deviation**	**Minimum**	**Maximum**
Total	10,463	26.7	6.5	10.48	94.31

Footnote 1: Data required for all admissions to System since October 1, 2006.

Table 95. Body Mass Index (Mean) by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	26.1 (3,465)	26.9 (1,135)	26.5 (695)	26.6 (493)	26.0 (416)	26.5 (359)	25.6 (243)	25.6 (146)	26.3 (63)	27.1 (5)

Footnote 1: Form II entered to the database since January, 2007.

Table 96. Diabetes Diagnosis Prior to Injury

	Diabetes Diagnosis				
n (%)	No	Yes	Declined	Unkn	Total
Total	6,340 (88.6)	754 (10.5)	11 (0.2)	51 (0.7)	7,156

Footnote 1: Data were required for all admissions to System since October 1, 2011.

Table 97. Diabetes Diagnosis by Post-Injury Year

	Post-Injury Year									
Diabetes n (%)	1	5	10	15	20	25	30	35	40	45
No	5,081 (87.1)	3,649 (85.3)	2,795 (85.8)	2,160 (86.5)	1,741 (86.2)	1,433 (85.4)	1,417 (84.4)	1,522 (86.0)	823 (86.9)	131 (82.4)
Yes	599 (10.3)	479 (11.2)	373 (11.4)	246 (9.8)	224 (11.1)	204 (12.2)	229 (13.6)	214 (12.1)	110 (11.6)	26 (16.4)
Declined	18 (0.3)	24 (0.6)	13 (0.4)	19 (0.8)	14 (0.7)	7 (0.4)	7 (0.4)	6 (0.3)	0 (0.0)	0 (0.0)
Unkn	135 (2.3)	128 (3.0)	77 (2.4)	73 (2.9)	40 (2.0)	34 (2.0)	26 (1.5)	27 (1.5)	14 (1.5)	2 (1.3)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 98. Urinary Tract Infection Requiring Antibiotic Treatment in Past 12 Months by Post-Injury Year

	Post-Injury Year									
UTI n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	2,489 (42.7)	2,125 (49.6)	1,580 (48.5)	1,169 (46.8)	952 (47.2)	741 (44.2)	767 (45.7)	774 (43.8)	392 (41.4)	77 (48.4)
1 to 2 times*	792 (13.6)	546 (12.8)	414 (12.7)	345 (13.8)	247 (12.2)	271 (16.2)	175 (10.4)	264 (14.9)	234 (24.7)	46 (28.9)
3 to 5 times*	445 (7.6)	282 (6.6)	209 (6.4)	175 (7.0)	118 (5.8)	116 (6.9)	96 (5.7)	111 (6.3)	94 (9.9)	21 (13.2)
> 5 times*	301 (5.2)	210 (4.9)	166 (5.1)	125 (5.0)	101 (5.0)	80 (4.8)	52 (3.1)	86 (4.9)	61 (6.4)	12 (7.5)
UTI number unkn	1,603 (27.5)	952 (22.2)	791 (24.3)	584 (23.4)	538 (26.6)	417 (24.9)	553 (32.9)	499 (28.2)	140 (14.8)	0 (0.0)
Declined	23 (0.4)	30 (0.7)	12 (0.4)	19 (0.8)	14 (0.7)	9 (0.5)	6 (0.4)	7 (0.4)	3 (0.3)	1 (0.6)
Unkn	180 (3.1)	135 (3.2)	86 (2.6)	81 (3.2)	49 (2.4)	44 (2.6)	30 (1.8)	28 (1.6)	23 (2.4)	2 (1.3)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.
*Footnote 2: * codes were added in October 2016.*

Table 99. Pressure Ulcer Occurrence in Past 12 Months by Post-Injury Year

	Post-Injury Year									
Pressure Ulcer n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	4,185 (71.7)	3,028 (70.7)	2,236 (68.6)	1,733 (69.4)	1,348 (66.8)	1,088 (64.8)	1,129 (67.2)	1,149 (65.0)	583 (61.6)	94 (59.1)
Yes	1,472 (25.2)	1,105 (25.8)	921 (28.3)	676 (27.1)	613 (30.4)	544 (32.4)	519 (30.9)	590 (33.4)	344 (36.3)	63 (39.6)
Declined	24 (0.4)	22 (0.5)	15 (0.5)	14 (0.6)	12 (0.6)	5 (0.3)	3 (0.2)	5 (0.3)	1 (0.1)	0 (0.0)
Unkn	152 (2.6)	125 (2.9)	86 (2.6)	75 (3.0)	46 (2.3)	41 (2.4)	28 (1.7)	25 (1.4)	19 (2.0)	2 (1.3)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 100. Patients Rehospitalized by Post-Injury Year

	Post-Injury Year									
Total Number of Rehospitalizations n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
0	17,163 (63.4)	10,664 (68.8)	6,600 (71.2)	4,592 (72.3)	3,466 (72.1)	2,756 (72.5)	2,063 (70.9)	1,396 (68.7)	640 (67.6)	102 (64.2)
1	5,949 (22.0)	2,869 (18.5)	1,614 (17.4)	1,069 (16.8)	828 (17.2)	658 (17.3)	534 (18.4)	396 (19.5)	195 (20.6)	36 (22.6)
2	1,870 (6.9)	813 (5.2)	470 (5.1)	305 (4.8)	246 (5.1)	180 (4.7)	158 (5.4)	118 (5.8)	54 (5.7)	9 (5.7)
3	643 (2.4)	313 (2.0)	167 (1.8)	107 (1.7)	87 (1.8)	78 (2.1)	60 (2.1)	52 (2.6)	23 (2.4)	5 (3.1)
4	232 (0.9)	121 (0.8)	71 (0.8)	42 (0.7)	45 (0.9)	36 (0.9)	24 (0.8)	20 (1.0)	8 (0.8)	2 (1.3)
5	117 (0.4)	56 (0.4)	14 (0.2)	18 (0.3)	16 (0.3)	10 (0.3)	7 (0.2)	7 (0.3)	2 (0.2)	0 (0.0)
6	55 (0.2)	24 (0.2)	19 (0.2)	6 (0.1)	10 (0.2)	6 (0.2)	7 (0.2)	1 (0.0)	1 (0.1)	0 (0.0)
> 6	44 (0.2)	16 (0.1)	10 (0.1)	13 (0.2)	5 (0.1)	5 (0.1)	8 (0.3)	6 (0.3)	0 (0.0)	0 (0.0)
Yes, Unkn # of rehospitalizations	65 (0.2)	44 (0.3)	26 (0.3)	15 (0.2)	7 (0.1)	3 (0.1)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Unkn	932 (3.4)	577 (3.7)	278 (3.0)	183 (2.9)	94 (2.0)	71 (1.9)	46 (1.6)	37 (1.8)	24 (2.5)	5 (3.1)
Total	27,070	15,497	9,269	6,350	4,804	3,803	2,908	2,033	947	159

Table 101. Total Days Rehospitalized (Mean) by Post-Injury Year

	Post-Injury Year									
mean (n)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Total	23.0 (8,424)	19.7 (3,982)	20.0 (2,243)	20.3 (1,479)	19.1 (1,179)	20.9 (937)	20.2 (777)	22.8 (587)	20.1 (279)	23.3 (51)

Footnote 1: Exclude those with unknown number of days rehospitalized or with no/unknown rehospitalizations.

Table 102. Cause of Rehospitalization by Post-Injury Year

Cause of Rehospitalization n (%)	Post-Injury Year									
	1	5	10	15	20	25	30	35	40	45
Infectious and parasitic diseases	271 (4.4)	153 (4.5)	132 (5.4)	86 (4.9)	86 (5.4)	63 (4.3)	26 (2.1)	32 (3.4)	9 (2.2)	5 (6.6)
Cancer	37 (0.6)	21 (0.6)	19 (0.8)	20 (1.1)	14 (0.9)	16 (1.1)	10 (0.8)	8 (0.9)	7 (1.7)	0 (0.0)
Endocrine/nutrition diseases	43 (0.7)	42 (1.2)	18 (0.7)	9 (0.5)	11 (0.7)	16 (1.1)	15 (1.2)	12 (1.3)	2 (0.5)	3 (3.9)
Diseases of the blood	117 (1.9)	60 (1.8)	45 (1.8)	32 (1.8)	26 (1.6)	22 (1.5)	21 (1.7)	20 (2.1)	13 (3.1)	2 (2.6)
Mental disorders	102 (1.7)	63 (1.9)	36 (1.5)	20 (1.1)	12 (0.8)	23 (1.6)	12 (1.0)	8 (0.9)	1 (0.2)	0 (0.0)
Diseases of the nervous system	151 (2.5)	70 (2.1)	48 (2.0)	16 (0.9)	32 (2.0)	15 (1.0)	23 (1.8)	8 (0.9)	11 (2.7)	1 (1.3)
Diseases of the circulatory system	398 (6.5)	169 (5.0)	119 (4.9)	85 (4.8)	72 (4.5)	67 (4.6)	71 (5.7)	64 (6.8)	27 (6.5)	8 (10.5)
Diseases of the respiratory system	495 (8.1)	237 (7.0)	174 (7.1)	100 (5.7)	111 (7.0)	116 (8.0)	93 (7.4)	65 (6.9)	49 (11.8)	4 (5.3)
Diseases of the digestive system	301 (4.9)	271 (8.0)	172 (7.0)	105 (6.0)	134 (8.4)	113 (7.8)	102 (8.2)	81 (8.6)	30 (7.2)	1 (1.3)
Diseases of the genitourinary system	1,832 (30.0)	967 (28.6)	614 (25.1)	504 (28.6)	406 (25.4)	392 (27.0)	322 (25.8)	221 (23.5)	105 (25.3)	25 (32.9)
Childbirth and/or complications of childbirth	25 (0.4)	42 (1.2)	41 (1.7)	33 (1.9)	14 (0.9)	5 (0.3)	3 (0.2)	1 (0.1)	0 (0.0)	0 (0.0)
Diseases of the skin	696 (11.4)	484 (14.3)	415 (17.0)	342 (19.4)	333 (20.9)	282 (19.4)	244 (19.5)	180 (19.1)	69 (16.6)	20 (26.3)
Disease of the musculoskeletal system	309 (5.1)	176 (5.2)	157 (6.4)	92 (5.2)	78 (4.9)	88 (6.1)	93 (7.4)	88 (9.4)	37 (8.9)	2 (2.6)
Congenital anomalies	2 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	3 (0.2)	4 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Symptoms and ill-defined conditions	161 (2.6)	76 (2.2)	46 (1.9)	32 (1.8)	26 (1.6)	26 (1.8)	19 (1.5)	17 (1.8)	5 (1.2)	1 (1.3)
Injuries and poisonings	239 (3.9)	163 (4.8)	135 (5.5)	78 (4.4)	79 (4.9)	86 (5.9)	80 (6.4)	59 (6.3)	25 (6.0)	2 (2.6)
Inpatient rehab services	302 (4.9)	76 (2.2)	27 (1.1)	25 (1.4)	23 (1.4)	27 (1.9)	29 (2.3)	31 (3.3)	10 (2.4)	2 (2.6)
Other, unclassified	628 (10.3)	314 (9.3)	243 (10.0)	184 (10.4)	137 (8.6)	92 (6.3)	87 (7.0)	45 (4.8)	15 (3.6)	0 (0.0)
Total rehospitalization episodes	6,109 (100.0)	3,385 (100.0)	2,442 (100.0)	1,763 (100.0)	1,597 (100.0)	1,453 (100.0)	1,250 (100.0)	940 (100.0)	415 (100.0)	76 (100.0)
Total Participants	3,701	2,159	1,557	1,146	1,026	931	787	589	281	51

Footnote 1: Form IIs entered into the database since March 1, 2001.
Footnote 2: Those with no/unknown rehospitalizations are excluded.
Footnote 3: Total rehospitalization episodes includes each episode of rehospitalization (up to 8) per participant.

Table 103. Anxiety Diagnosis Prior to Injury

	Anxiety Diagnosis							
n (%)	No	Post-traumatic stress disorder	Panic disorder	Generalized anxiety disorder	Multiple diagnoses, first diagnosis unk	Declined	Unkn	Total
Total	6,244 (87.3)	233 (3.3)	34 (0.5)	469 (6.6)	61 (0.9)	18 (0.3)	97 (1.4)	7,156

Footnote 1: Data were required for all Admissions to System since October 1, 2011.
Footnote 2: If more than 1 disorder, the first diagnosis was coded.

Table 104. Depression Diagnosis Prior to Injury

	Depression Diagnosis				
n (%)	No	Yes	Declined	Unkn	Total
Total	6,012 (84.0)	1,023 (14.3)	24 (0.3)	97 (1.4)	7,156

Footnote 1: Data were required for all admissions to System since October 1, 2011.

Table 105. Major Depressive Syndrome by Post-Injury Year

	Post-Injury Year									
Depressive Syndrome n (%)	1	5	10	15	20	25	30	35	40	45
No depressive syndrome	5,801 (49.9)	4,239 (54.3)	3,078 (52.9)	2,531 (56.3)	2,202 (56.2)	2,244 (61.7)	1,437 (49.4)	882 (43.4)	530 (56.0)	133 (83.6)
Major depressive syndrome	822 (7.1)	452 (5.8)	333 (5.7)	218 (4.8)	174 (4.4)	172 (4.7)	112 (3.9)	65 (3.2)	44 (4.6)	10 (6.3)
Other depressive syndrome	780 (6.7)	441 (5.6)	325 (5.6)	227 (5.1)	201 (5.1)	211 (5.8)	179 (6.2)	99 (4.9)	63 (6.7)	9 (5.7)
Declined	120 (1.0)	95 (1.2)	69 (1.2)	64 (1.4)	50 (1.3)	30 (0.8)	28 (1.0)	32 (1.6)	20 (2.1)	4 (2.5)
Unkn /interview not done/under18	4,105 (35.3)	2,579 (33.0)	2,013 (34.6)	1,455 (32.4)	1,289 (32.9)	980 (26.9)	1,152 (39.6)	955 (47.0)	290 (30.6)	3 (1.9)
Total	11,628	7,806	5,818	4,495	3,916	3,637	2,908	2,033	947	159

Footnote 1: Form IIs entered into the database since March 1, 2001.
Footnote 2: PHQ-9 was not collected between 2011 and 2016.

Table 106. PHQ-9 Severity of Depression Score by Post-Injury Year

	Post-Injury Year									
mean (n)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Total	6.6 (7,503)	6.3 (5,215)	6.2 (3,793)	5.9 (3,036)	5.6 (2,620)	5.1 (2,652)	5.7 (1,753)	6.8 (1,077)	7.2 (655)	6.3 (155)

Footnote 1: Form IIs entered into the database since March 1, 2001.
Footnote 2: Total ranges from 0 to 27.
Footnote 3: PHQ-9 was not collected between 2011 and 2016.

Table 107. Severity of Pain Score by Post-Injury Year

	Post-Injury Year									
mean (n)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Total	4.3 (10,561)	4.4 (7,307)	4.5 (5,471)	4.4 (4,222)	4.4 (3,704)	4.3 (3,487)	4.3 (2,835)	4.2 (1,979)	4.2 (906)	4.0 (152)

Footnote 1: Form IIs entered into the database since March 1, 2001.
Footnote 2: Total ranges from 0 to 10.

Table 108. Pain Interfering with Work by Post-Injury Year

	Post-Injury Year									
Pain Interference n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Not at all	2,344 (17.7)	1,656 (19.0)	1,384 (21.6)	1,257 (24.0)	1,140 (25.8)	1,058 (27.8)	787 (27.1)	526 (25.9)	233 (24.6)	34 (21.4)
A little bit	2,854 (21.6)	1,942 (22.2)	1,376 (21.5)	1,097 (20.9)	948 (21.4)	751 (19.7)	582 (20.0)	446 (21.9)	205 (21.6)	44 (27.7)
Moderately	1,964 (14.9)	1,415 (16.2)	996 (15.6)	797 (15.2)	666 (15.1)	589 (15.5)	483 (16.6)	344 (16.9)	171 (18.1)	25 (15.7)
Quite a bit	1,714 (13.0)	1,136 (13.0)	850 (13.3)	658 (12.5)	503 (11.4)	456 (12.0)	375 (12.9)	266 (13.1)	109 (11.5)	20 (12.6)
Extremely	878 (6.6)	637 (7.3)	437 (6.8)	327 (6.2)	258 (5.8)	202 (5.3)	148 (5.1)	112 (5.5)	49 (5.2)	6 (3.8)
Don't know	24 (0.2)	11 (0.1)	6 (0.1)	9 (0.2)	9 (0.2)	2 (0.1)	4 (0.1)	1 (0.0)	1 (0.1)	0 (0.0)
Refuses	109 (0.8)	55 (0.6)	51 (0.8)	64 (1.2)	31 (0.7)	21 (0.6)	5 (0.2)	7 (0.3)	3 (0.3)	0 (0.0)
N/A, no pain	1,739 (13.2)	1,111 (12.7)	798 (12.5)	649 (12.4)	597 (13.5)	585 (15.4)	451 (15.5)	287 (14.1)	140 (14.8)	26 (16.4)
Unkn/not done/under 18	1,595 (12.1)	766 (8.8)	505 (7.9)	386 (7.4)	272 (6.1)	139 (3.7)	73 (2.5)	44 (2.2)	36 (3.8)	4 (2.5)
Total	13,221	8,729	6,403	5,244	4,424	3,803	2,908	2,033	947	159

Footnote 1: Form IIs entered into the database since January 1, 1998.

Table 109. Self-Perceived Health Status by Post-Injury Year

	Post-Injury Year									
Self-Perceived Health n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Excellent	1,412 (9.9)	1,138 (12.0)	789 (11.4)	674 (11.9)	607 (12.9)	486 (12.8)	359 (12.3)	220 (10.8)	90 (9.5)	18 (11.3)
Very good	3,219 (22.5)	2,320 (24.5)	1,746 (25.3)	1,509 (26.7)	1,270 (27.0)	1,073 (28.2)	817 (28.1)	526 (25.9)	260 (27.5)	45 (28.3)
Good	4,594 (32.1)	3,153 (33.4)	2,308 (33.5)	1,975 (35.0)	1,617 (34.4)	1,342 (35.3)	1,016 (34.9)	733 (36.1)	323 (34.1)	56 (35.2)
Fair	2,444 (17.1)	1,596 (16.9)	1,198 (17.4)	897 (15.9)	787 (16.7)	622 (16.4)	485 (16.7)	398 (19.6)	188 (19.9)	28 (17.6)
Poor	786 (5.5)	435 (4.6)	308 (4.5)	197 (3.5)	173 (3.7)	136 (3.6)	153 (5.3)	116 (5.7)	54 (5.7)	9 (5.7)
Don't know	37 (0.3)	26 (0.3)	13 (0.2)	10 (0.2)	8 (0.2)	4 (0.1)	6 (0.2)	0 (0.0)	5 (0.5)	0 (0.0)
Refuses	120 (0.8)	62 (0.7)	50 (0.7)	64 (1.1)	28 (0.6)	21 (0.6)	3 (0.1)	5 (0.2)	1 (0.1)	0 (0.0)
Unkn/not done/under 18	1,686 (11.8)	723 (7.6)	481 (7.0)	322 (5.7)	212 (4.5)	119 (3.1)	69 (2.4)	35 (1.7)	26 (2.7)	3 (1.9)
Total	14,298	9,453	6,893	5,648	4,702	3,803	2,908	2,033	947	159

Footnote 1: Form IIs entered into the database since January 1, 1996.

Table 110. 'Compared to one year ago, how would you rate your Health?' by Post-Injury Year

	Post-Injury Year									
Rate Health n (%)	1	5	10	15	20	25	30	35	40	45
Much better	4,338 (32.8)	1,045 (12.0)	555 (8.7)	472 (9.0)	410 (9.3)	356 (9.4)	304 (10.5)	215 (10.6)	111 (11.7)	21 (13.2)
Somewhat better	3,160 (23.9)	1,597 (18.3)	910 (14.2)	627 (12.0)	544 (12.3)	474 (12.5)	368 (12.7)	240 (11.8)	131 (13.8)	21 (13.2)
About the same	2,498 (18.9)	4,176 (47.8)	3,436 (53.7)	2,934 (55.9)	2,406 (54.4)	2,135 (56.1)	1,571 (54.0)	1,019 (50.1)	437 (46.1)	76 (47.8)
Somewhat worse	989 (7.5)	915 (10.5)	830 (13.0)	648 (12.4)	639 (14.4)	576 (15.1)	493 (17.0)	423 (20.8)	194 (20.5)	31 (19.5)
Much worse	513 (3.9)	198 (2.3)	148 (2.3)	136 (2.6)	135 (3.1)	106 (2.8)	99 (3.4)	87 (4.3)	40 (4.2)	6 (3.8)
Don't know	18 (0.1)	18 (0.2)	11 (0.2)	9 (0.2)	8 (0.2)	5 (0.1)	1 (0.0)	4 (0.2)	3 (0.3)	1 (0.6)
Refuses	125 (0.9)	66 (0.8)	57 (0.9)	68 (1.3)	36 (0.8)	25 (0.7)	2 (0.1)	6 (0.3)	3 (0.3)	0 (0.0)
Unkn/not done/under 18	1,580 (12.0)	714 (8.2)	456 (7.1)	350 (6.7)	246 (5.6)	126 (3.3)	70 (2.4)	39 (1.9)	28 (3.0)	3 (1.9)
Total	13,221	8,729	6,403	5,244	4,424	3,803	2,908	2,033	947	159

Footnote 1: Form IIs entered into the database since January 1, 1998.

Table 111. Alcohol Use Prior to Injury– How Often Having a Drink

	How Often Having a Drink							
n (%)	None	Once a month or less	2 to 4 times a month	2 to 3 times a week	4 or more times a week	Declined	Unkn /under 18	Total
Total	1,772 (24.8)	1,321 (18.5)	1,517 (21.2)	1,214 (17.0)	986 (13.8)	66 (0.9)	280 (3.9)	7,156

Footnote 1: Data were required for all admissions to System since October 1, 2011.

Table 112. Alcohol Use by Post-Injury Year – How Often Having a Drink

	Post-Injury Year									
Alcohol Use n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
None	2,596 (44.5)	1,618 (37.8)	1,287 (39.5)	954 (38.2)	769 (38.1)	665 (39.6)	670 (39.9)	664 (37.5)	346 (36.5)	60 (37.7)
Once a month or less	1,139 (19.5)	979 (22.9)	782 (24.0)	618 (24.7)	518 (25.7)	381 (22.7)	387 (23.0)	394 (22.3)	216 (22.8)	36 (22.6)
2 to 4 times a month	877 (15.0)	767 (17.9)	515 (15.8)	401 (16.1)	328 (16.2)	259 (15.4)	251 (14.9)	266 (15.0)	146 (15.4)	25 (15.7)
2 to 3 times a week	504 (8.6)	429 (10.0)	317 (9.7)	220 (8.8)	170 (8.4)	174 (10.4)	183 (10.9)	235 (13.3)	102 (10.8)	17 (10.7)
4 or more times a week	307 (5.3)	261 (6.1)	189 (5.8)	183 (7.3)	146 (7.2)	134 (8.0)	147 (8.8)	170 (9.6)	107 (11.3)	17 (10.7)
Declined	58 (1.0)	37 (0.9)	30 (0.9)	26 (1.0)	29 (1.4)	6 (0.4)	6 (0.4)	8 (0.5)	4 (0.4)	0 (0.0)
Unkn/under 18	352 (6.0)	189 (4.4)	138 (4.2)	96 (3.8)	59 (2.9)	59 (3.5)	35 (2.1)	32 (1.8)	26 (2.7)	4 (2.5)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 113. Alcohol Use Prior to Injury– Typical Number of Drinks a Day When Drinking

	Typical Number of Drinks a Day When Drinking								
n (%)	**None**	**1 or 2**	**3 or 4**	**5 or 6**	**7 or 9**	**10 or more**	**Declined**	**Unkn /under 18**	**Total**
Total	1,909 (26.7)	2,665 (37.2)	1,336 (18.7)	527 (7.4)	180 (2.5)	159 (2.2)	94 (1.3)	286 (4.0)	7,156

Footnote 1: Data were required for all admissions to System since October 1, 2011.

Table 114. Alcohol Use by Post-Injury Year – Typical Number of Drinks a Day When Drinking

	Post-Injury Year									
Drinks per n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
None	2,652 (45.5)	1,681 (39.3)	1,323 (40.6)	991 (39.7)	795 (39.4)	688 (41.0)	698 (41.6)	690 (39.0)	363 (38.3)	64 (40.3)
1 or 2	1,994 (34.2)	1,634 (38.2)	1,255 (38.5)	981 (39.3)	762 (37.7)	633 (37.7)	671 (40.0)	781 (44.1)	433 (45.7)	77 (48.4)
3 or 4	564 (9.7)	522 (12.2)	360 (11.0)	267 (10.7)	241 (11.9)	201 (12.0)	205 (12.2)	179 (10.1)	92 (9.7)	10 (6.3)
5 or 6	133 (2.3)	141 (3.3)	112 (3.4)	99 (4.0)	95 (4.7)	66 (3.9)	44 (2.6)	51 (2.9)	20 (2.1)	3 (1.9)
7 to 9	51 (0.9)	43 (1.0)	19 (0.6)	22 (0.9)	19 (0.9)	14 (0.8)	11 (0.7)	13 (0.7)	5 (0.5)	1 (0.6)
10 or more	23 (0.4)	29 (0.7)	17 (0.5)	19 (0.8)	17 (0.8)	11 (0.7)	9 (0.5)	12 (0.7)	4 (0.4)	0 (0.0)
Declined	63 (1.1)	41 (1.0)	34 (1.0)	24 (1.0)	31 (1.5)	8 (0.5)	6 (0.4)	12 (0.7)	4 (0.4)	0 (0.0)
Unkn/under 18	353 (6.1)	189 (4.4)	138 (4.2)	95 (3.8)	59 (2.9)	57 (3.4)	35 (2.1)	31 (1.8)	26 (2.7)	4 (2.5)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 115. Alcohol Use Prior to Injury– How Often Having 6 or More Drinks on One Occasion

	How Often Having 6 or More Drinks on One Occasion							
n (%)	None	Less than monthly	Monthly	Weekly	Daily or almost daily	Declined	Unkn /under 18	Total
Total	4,156 (58.1)	1,242 (17.4)	670 (9.4)	530 (7.4)	165 (2.3)	98 (1.4)	295 (4.1)	7,156

Footnote 1: Data were required for all admissions to System since October 1, 2011.

Table 116. Alcohol Use by Post-Injury Year – How Often Having 6 or More Drinks on One Occasion

	Post-Injury Year									
6 or More Drinks n (%)	1	5	10	15	20	25	30	35	40	45
None	4,667 (80.0)	3,322 (77.6)	2,538 (77.9)	1,967 (78.7)	1,558 (77.2)	1,348 (80.3)	1,397 (83.2)	1,492 (84.3)	821 (86.7)	141 (88.7)
Less than monthly	470 (8.1)	476 (11.1)	360 (11.0)	251 (10.0)	222 (11.0)	150 (8.9)	146 (8.7)	138 (7.8)	58 (6.1)	10 (6.3)
Monthly	190 (3.3)	151 (3.5)	110 (3.4)	94 (3.8)	82 (4.1)	60 (3.6)	47 (2.8)	55 (3.1)	16 (1.7)	2 (1.3)
Weekly	63 (1.1)	73 (1.7)	60 (1.8)	51 (2.0)	47 (2.3)	41 (2.4)	34 (2.0)	40 (2.3)	13 (1.4)	2 (1.3)
Daily or almost daily	27 (0.5)	27 (0.6)	17 (0.5)	14 (0.6)	21 (1.0)	12 (0.7)	13 (0.8)	5 (0.3)	8 (0.8)	0 (0.0)
Declined	62 (1.1)	42 (1.0)	34 (1.0)	25 (1.0)	29 (1.4)	9 (0.5)	7 (0.4)	9 (0.5)	4 (0.4)	0 (0.0)
Unkn/under 18	354 (6.1)	189 (4.4)	139 (4.3)	96 (3.8)	60 (3.0)	58 (3.5)	35 (2.1)	30 (1.7)	27 (2.9)	4 (2.5)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 117. Satisfaction with Life Scale – Total Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	19.4 (12,178)	21.0 (8,458)	21.6 (6,236)	22.2 (5,153)	22.7 (4,354)	23.0 (3,619)	23.2 (2,799)	23.5 (1,959)	24.1 (898)	24.8 (152)

Footnote 1: Form IIs entered into the database since January 1, 1996.
Footnote 2: Total ranges from 5 to 35.

Table 118. CHART Physical Independence Subscale Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	71.9 (12,677)	77.4 (8,727)	78.4 (6,417)	80.9 (5,276)	83.0 (4,477)	82.8 (3,664)	84.5 (2,840)	86.0 (1,978)	86.7 (906)	84.5 (149)

Footnote 1: Form IIs entered into the database since January 1, 1996.
Footnote 2: Total ranges from 0 to 100.

Table 119. CHART Mobility Subscale Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	73.1 (12,594)	77.0 (8,681)	77.2 (6,379)	78.2 (5,264)	78.0 (4,464)	77.7 (3,650)	76.1 (2,832)	75.3 (1,968)	74.1 (889)	67.3 (153)

Footnote 1: Form IIs entered into the database since January 1, 1996.
Footnote 2: Total ranges from 0 to 100.

Table 120. CHART Occupation Subscale Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	49.1 (12,477)	58.0 (8,619)	59.2 (6,357)	61.5 (5,229)	62.7 (4,440)	64.1 (3,642)	62.8 (2,808)	59.9 (1,968)	57.4 (905)	50.3 (151)

Footnote 1: Form IIs entered into the database since January 1, 1996.
Footnote 2: Total ranges from 0 to 100.

Table 121. CHART Social Integration Subscale Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	86.6 (12,392)	86.2 (8,553)	85.8 (6,342)	86.6 (5,220)	86.4 (4,421)	86.5 (3,618)	85.9 (2,805)	86.3 (1,966)	84.6 (898)	85.6 (151)

Footnote 1: Form IIs entered into the database since January 1, 1996.
Footnote 2: Total ranges from 0 to 100.

Table 122. Ambulation Ability-Walk for 150 Feet by Post-Injury Year

	Post-Injury Year									
Walk 150 Feet n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	5,619 (55.8)	4,133 (60.2)	3,403 (66.3)	2,767 (70.0)	2,439 (74.1)	2,475 (78.4)	2,321 (80.1)	1,639 (80.6)	758 (80.0)	138 (86.8)
Yes	3,864 (38.4)	2,450 (35.7)	1,554 (30.3)	1,013 (25.6)	718 (21.8)	584 (18.5)	521 (18.0)	368 (18.1)	170 (18.0)	20 (12.6)
Unkn/not done	580 (5.8)	288 (4.2)	174 (3.4)	171 (4.3)	136 (4.1)	96 (3.0)	56 (1.9)	26 (1.3)	19 (2.0)	1 (0.6)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004

Table 123. Ambulation Ability-Walk for 1 Street Block by Post-Injury Year

	Post-Injury Year									
Walk 1 Street Block n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	6,137 (61.0)	4,444 (64.7)	3,635 (70.8)	2,906 (73.6)	2,534 (77.0)	2,539 (80.5)	2,380 (82.1)	1,693 (83.3)	796 (84.1)	140 (88.1)
Yes	3,337 (33.2)	2,133 (31.0)	1,320 (25.7)	868 (22.0)	623 (18.9)	518 (16.4)	462 (15.9)	313 (15.4)	132 (13.9)	18 (11.3)
Unkn/not done	589 (5.9)	294 (4.3)	176 (3.4)	177 (4.5)	136 (4.1)	98 (3.1)	56 (1.9)	27 (1.3)	19 (2.0)	1 (0.6)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 124. Ambulation Ability-Walk Up 1 Flight of Stairs by Post-Injury Year

	Post-Injury Year									
Walk 1 Fight n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	6,173 (61.3)	4,409 (64.2)	3,553 (69.2)	2,849 (72.1)	2,485 (75.5)	2,506 (79.4)	2,348 (81.0)	1,683 (82.8)	779 (82.3)	138 (86.8)
Yes	3,294 (32.7)	2,167 (31.5)	1,402 (27.3)	923 (23.4)	670 (20.3)	553 (17.5)	492 (17.0)	323 (15.9)	148 (15.6)	20 (12.6)
Unkn/not done	596 (5.9)	295 (4.3)	176 (3.4)	179 (4.5)	138 (4.2)	96 (3.0)	58 (2.0)	27 (1.3)	20 (2.1)	1 (0.6)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 125. Type of Mobility Aid by Post-Injury Year

	Post-Injury Year									
Type of Mobility Aid n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
None	1,802 (17.9)	1,114 (16.2)	764 (14.9)	449 (11.4)	289 (8.8)	242 (7.7)	212 (7.3)	121 (6.0)	43 (4.5)	11 (6.9)
Straight cane	942 (9.4)	658 (9.6)	481 (9.4)	306 (7.7)	256 (7.8)	212 (6.7)	194 (6.7)	151 (7.4)	78 (8.2)	14 (8.8)
Quad cane	183 (1.8)	114 (1.7)	57 (1.1)	40 (1.0)	29 (0.9)	16 (0.5)	19 (0.7)	19 (0.9)	2 (0.2)	1 (0.6)
Walker	1,249 (12.4)	711 (10.3)	413 (8.0)	221 (5.6)	133 (4.0)	102 (3.2)	97 (3.3)	77 (3.8)	45 (4.8)	3 (1.9)
Crutches	332 (3.3)	245 (3.6)	167 (3.3)	152 (3.8)	127 (3.9)	107 (3.4)	116 (4.0)	78 (3.8)	37 (3.9)	5 (3.1)
Ankle-foot orthotic	409 (4.1)	241 (3.5)	193 (3.8)	161 (4.1)	128 (3.9)	99 (3.1)	98 (3.4)	84 (4.1)	49 (5.2)	6 (3.8)
Knee-ankle-foot orthotic	315 (3.1)	185 (2.7)	118 (2.3)	80 (2.0)	59 (1.8)	65 (2.1)	50 (1.7)	39 (1.9)	15 (1.6)	2 (1.3)
Other	141 (1.4)	100 (1.5)	81 (1.6)	63 (1.6)	37 (1.1)	35 (1.1)	18 (0.6)	26 (1.3)	23 (2.4)	5 (3.1)
N/A, patient not ambulatory	5,193 (51.6)	3,831 (55.8)	3,110 (60.6)	2,598 (65.8)	2,326 (70.6)	2,362 (74.9)	2,219 (76.6)	1586 (78.0)	730 (77.1)	126 (79.2)
Unkn/not done	586 (5.8)	293 (4.3)	173 (3.4)	173 (4.4)	136 (4.1)	102 (3.2)	60 (2.1)	27 (1.3)	17 (1.8)	1 (0.6)
Total Participants	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Percentages may total more than 100% because some participants used more than one mobility aid.

Footnote 2: Form IIs entered into the database since May 1, 2004.

Table 126. Wheelchair or Scooter Use by Post-Injury Year

	Post-Injury Year									
Wheelchair or Scooter Use n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	3,536 (35.1)	2,248 (32.7)	1,471 (28.7)	992 (25.1)	737 (22.4)	606 (19.2)	540 (18.6)	438 (21.5)	219 (23.1)	32 (20.1)
Yes	5,960 (59.2)	4,358 (63.4)	3,490 (68.0)	2,796 (70.8)	2,421 (73.5)	2,457 (77.9)	2,304 (79.5)	1,570 (77.2)	711 (75.1)	126 (79.2)
Unkn/not done	567 (5.6)	265 (3.9)	170 (3.3)	163 (4.1)	135 (4.1)	92 (2.9)	54 (1.9)	25 (1.2)	17 (1.8)	1 (0.6)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 127. Type of Wheelchair or Scooter Used Most Often by Post-Injury Year

	Post-Injury Year									
Type Wheelchair Used Most n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Manual wheelchair	3,476 (34.5)	2,406 (35.0)	1,952 (38.0)	1,652 (41.8)	1,468 (44.6)	1,507 (47.8)	1,354 (46.7)	912 (44.9)	385 (40.7)	59 (37.1)
Power wheelchair	2,324 (23.1)	1,818 (26.5)	1,420 (27.7)	1,077 (27.3)	888 (27.0)	894 (28.3)	877 (30.3)	605 (29.8)	295 (31.2)	59 (37.1)
Power-assist wheelchair	111 (1.1)	92 (1.3)	70 (1.4)	45 (1.1)	36 (1.1)	35 (1.1)	43 (1.5)	37 (1.8)	27 (2.9)	6 (3.8)
Scooter	19 (0.2)	23 (0.3)	31 (0.6)	18 (0.5)	19 (0.6)	18 (0.6)	25 (0.9)	11 (0.5)	4 (0.4)	2 (1.3)
Hoveround*	0 (0.0)	1 (0.0)	0 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Other	5 (0.0)	5 (0.1)	3 (0.1)	1 (0.0)	2 (0.1)	0 (0.0)	1 (0.0)	1 (0.0)	0 (0.0)	0 (0.0)
Non-user	3,536 (35.1)	2,248 (32.7)	1,471 (28.7)	992 (25.1)	737 (22.4)	606 (19.2)	540 (18.6)	438 (21.5)	219 (23.1)	32 (20.1)
Unkn/not done	592 (5.9)	278 (4.0)	184 (3.6)	165 (4.2)	142 (4.3)	95 (3.0)	58 (2.0)	29 (1.4)	17 (1.8)	1 (0.6)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.
*Footnote 2: * code was added in October 2016.*

Table 128. Computer Use by Post-Injury Year

	Post-Injury Year									
Computer Use n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	2,000 (19.9)	1,153 (16.8)	853 (16.6)	608 (15.4)	543 (16.5)	560 (17.7)	514 (17.7)	325 (16.0)	110 (11.6)	10 (6.3)
Home only	2,958 (29.4)	2,037 (29.6)	1,566 (30.5)	1,195 (30.2)	981 (29.8)	1,022 (32.4)	1,004 (34.6)	604 (29.7)	228 (24.1)	36 (22.6)
Outside home only	281 (2.8)	196 (2.9)	148 (2.9)	105 (2.7)	105 (3.2)	86 (2.7)	76 (2.6)	49 (2.4)	17 (1.8)	4 (2.5)
Both	4,073 (40.5)	3,159 (46.0)	2,363 (46.1)	1,862 (47.1)	1,530 (46.5)	1,384 (43.9)	1,245 (43.0)	1,031 (50.7)	575 (60.7)	109 (68.6)
Unkn/not done	751 (7.5)	326 (4.7)	201 (3.9)	181 (4.6)	134 (4.1)	103 (3.3)	59 (2.0)	24 (1.2)	17 (1.8)	0 (0.0)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 129. Computer Use with Assistance from Another Person by Post-Injury Year

	Post-Injury Year									
Computer Use with Assistance n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No assistance	4,170 (71.5)	3,207 (74.9)	2,492 (76.5)	1,943 (77.8)	1,551 (76.8)	1,298 (77.4)	1,278 (76.1)	1,375 (77.7)	756 (79.8)	139 (87.4)
With assistance	579 (9.9)	375 (8.8)	265 (8.1)	174 (7.0)	157 (7.8)	104 (6.2)	116 (6.9)	116 (6.6)	73 (7.7)	12 (7.5)
N/A, doesn't use computer	819 (14.0)	549 (12.8)	405 (12.4)	304 (12.2)	260 (12.9)	228 (13.6)	252 (15.0)	256 (14.5)	101 (10.7)	8 (5.0)
Unkn/not done	265 (4.5)	149 (3.5)	96 (2.9)	77 (3.1)	51 (2.5)	48 (2.9)	33 (2.0)	22 (1.2)	17 (1.8)	0 (0.0)
Total	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 130. Utilization of Assistive Devices for Computer Use by Post-Injury Year

	Post-Injury Year									
Type of Assistive Device n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No assistive device(s)	3,838 (65.8)	2,936 (68.6)	2,272 (69.7)	1,723 (69.0)	1,429 (70.8)	1,159 (69.1)	1,116 (66.5)	1,176 (66.5)	643 (67.9)	113 (71.1)
Brace or splint	257 (4.4)	156 (3.6)	131 (4.0)	104 (4.2)	80 (4.0)	69 (4.1)	71 (4.2)	97 (5.5)	50 (5.3)	8 (5.0)
Modified or onscreen keyboard	71 (1.2)	63 (1.5)	62 (1.9)	46 (1.8)	29 (1.4)	26 (1.5)	22 (1.3)	27 (1.5)	17 (1.8)	4 (2.5)
Adapted mouse	125 (2.1)	100 (2.3)	76 (2.3)	57 (2.3)	32 (1.6)	35 (2.1)	39 (2.3)	27 (1.5)	15 (1.6)	5 (3.1)
Trackball	79 (1.4)	66 (1.5)	86 (2.6)	71 (2.8)	65 (3.2)	62 (3.7)	75 (4.5)	82 (4.6)	47 (5.0)	12 (7.5)
Bluetooth joystick	42 (0.7)	31 (0.7)	18 (0.6)	22 (0.9)	8 (0.4)	6 (0.4)	4 (0.2)	3 (0.2)	2 (0.2)	0 (0.0)
Speech recognition	406 (7.0)	285 (6.7)	214 (6.6)	151 (6.0)	96 (4.8)	72 (4.3)	103 (6.1)	101 (5.7)	71 (7.5)	17 (10.7)
Head pointing infrared device/tech	33 (0.6)	26 (0.6)	26 (0.8)	19 (0.8)	15 (0.7)	10 (0.6)	8 (0.5)	7 (0.4)	4 (0.4)	0 (0.0)
Other	247 (4.2)	165 (3.9)	105 (3.2)	100 (4.0)	78 (3.9)	83 (4.9)	115 (6.8)	102 (5.8)	55 (5.8)	8 (5.0)
Eye tracking device*	24 (0.4)	4 (0.1)	2 (0.1)	4 (0.2)	1 (0.0)	3 (0.2)	1 (0.1)	2 (0.1)	1 (0.1)	1 (0.6)
N/A, doesn't use computer	871 (14.9)	584 (13.6)	422 (13.0)	317 (12.7)	272 (13.5)	239 (14.2)	254 (15.1)	269 (15.2)	111 (11.7)	13 (8.2)
Unkn/not done	263 (4.5)	156 (3.6)	98 (3.0)	79 (3.2)	49 (2.4)	47 (2.8)	32 (1.9)	26 (1.5)	17 (1.8)	3 (1.9)
Total Participants	5,833	4,280	3,258	2,498	2,019	1,678	1,679	1,769	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.
Footnote 2: Percentage may total more than 100% because some participants used more than one assistive device.
*Footnote 3: * code was added in October 2016.*

Table 131. Internet or Email Usage by Post-Injury Year

	Post-Injury Year									
Internet/Email Use n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Owns computer only	197 (2.0)	149 (2.2)	102 (2.0)	84 (2.1)	85 (2.6)	86 (2.7)	59 (2.0)	27 (1.3)	22 (2.3)	1 (0.6)
Daily	5,642 (56.1)	4,292 (62.5)	3,192 (62.2)	2,539 (64.3)	2,058 (62.5)	1,980 (62.8)	1,888 (65.1)	1,404 (69.1)	700 (73.9)	124 (78.0)
Weekly	1,054 (10.5)	685 (10.0)	571 (11.1)	361 (9.1)	335 (10.2)	302 (9.6)	255 (8.8)	188 (9.2)	64 (6.8)	20 (12.6)
Monthly	383 (3.8)	256 (3.7)	192 (3.7)	148 (3.7)	119 (3.6)	112 (3.5)	114 (3.9)	60 (3.0)	33 (3.5)	4 (2.5)
N/A, doesn't own computer	2,013 (20.0)	1,153 (16.8)	869 (16.9)	633 (16.0)	557 (16.9)	569 (18.0)	521 (18.0)	328 (16.1)	110 (11.6)	10 (6.3)
Unkn/not done	774 (7.7)	336 (4.9)	205 (4.0)	186 (4.7)	139 (4.2)	106 (3.4)	61 (2.1)	26 (1.3)	18 (1.9)	0 (0.0)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 132. Type of Modified Vehicle by Post-Injury Year

Type Modified Vehicle n (%)	Post-Injury Year									
	1	5	10	15	20	25	30	35	40	45
Doesn't own	6,725 (66.8)	3,594 (52.3)	2,452 (47.8)	1,703 (43.1)	1,298 (39.4)	1,105 (35.0)	948 (32.7)	649 (31.9)	275 (29.0)	39 (24.5)
Car	747 (7.4)	871 (12.7)	764 (14.9)	622 (15.7)	580 (17.6)	611 (19.4)	509 (17.6)	362 (17.8)	153 (16.2)	25 (15.7)
Van	1,602 (15.9)	1,648 (24.0)	1,389 (27.1)	1,144 (29.0)	1,015 (30.8)	1,087 (34.5)	1,114 (38.4)	802 (39.4)	402 (42.4)	80 (50.3)
Other	254 (2.5)	350 (5.1)	237 (4.6)	223 (5.6)	194 (5.9)	187 (5.9)	175 (6.0)	117 (5.8)	61 (6.4)	10 (6.3)
Combination	28 (0.3)	54 (0.8)	70 (1.4)	67 (1.7)	62 (1.9)	58 (1.8)	90 (3.1)	73 (3.6)	34 (3.6)	4 (2.5)
Unkn/not done	707 (7.0)	354 (5.2)	219 (4.3)	192 (4.9)	144 (4.4)	107 (3.4)	62 (2.1)	30 (1.5)	22 (2.3)	1 (0.6)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 133. Driving Modified Vehicle by Post-Injury Year

Drive Modified Vehicle n (%)	Post-Injury Year									
	1	5	10	15	20	25	30	35	40	45
No	1,548 (15.4)	1,152 (16.8)	828 (16.1)	569 (14.4)	461 (14.0)	475 (15.1)	455 (15.7)	317 (15.6)	157 (16.6)	31 (19.5)
Yes, from wheelchair	133 (1.3)	299 (4.4)	334 (6.5)	274 (6.9)	279 (8.5)	337 (10.7)	361 (12.5)	259 (12.7)	149 (15.7)	30 (18.9)
Yes, not from wheelchair	940 (9.3)	1,465 (21.3)	1,295 (25.2)	1,205 (30.5)	1,107 (33.6)	1,128 (35.8)	1,070 (36.9)	777 (38.2)	343 (36.2)	58 (36.5)
N/A, doesn't own	6,725 (66.8)	3,594 (52.3)	2,452 (47.8)	1,703 (43.1)	1,298 (39.4)	1,105 (35.0)	948 (32.7)	649 (31.9)	275 (29.0)	39 (24.5)
Unkn/not done	717 (7.1)	361 (5.3)	222 (4.3)	200 (5.1)	148 (4.5)	110 (3.5)	64 (2.2)	31 (1.5)	23 (2.4)	1 (0.6)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 134. Cell Phone Usage by Post-Injury Year

	Post-Injury Year									
Cell Phone Use n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No	1,184 (11.8)	875 (12.7)	737 (14.4)	559 (14.1)	503 (15.3)	547 (17.3)	502 (17.3)	300 (14.8)	101 (10.7)	23 (14.5)
Yes	8,188 (81.4)	5,690 (82.8)	4,206 (82.0)	3,220 (81.5)	2,658 (80.7)	2,507 (79.5)	2,341 (80.8)	1,712 (84.2)	831 (87.8)	136 (85.5)
Unkn/not done	691 (6.9)	306 (4.5)	188 (3.7)	172 (4.4)	132 (4.0)	101 (3.2)	55 (1.9)	21 (1.0)	15 (1.6)	0 (0.0)
Total	10,063	6,871	5,131	3,951	3,293	3,155	2,898	2,033	947	159

Footnote 1: Form IIs entered into the database since May 1, 2004.

Table 135. Source for Health and Disability Information by Post-Injury Year

	Post-Injury Year									
Primary Source n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Newspaper	1,051 (12.1)	805 (13.3)	650 (14.1)	487 (13.8)	425 (15.6)	470 (17.6)	503 (19.1)	355 (17.5)	130 (13.7)	23 (14.5)
TV	2,560 (29.4)	2,101 (34.6)	1,772 (38.3)	1,297 (36.8)	1,034 (37.9)	1,135 (42.5)	1,216 (46.2)	800 (39.4)	290 (30.6)	39 (24.5)
Radio	557 (6.4)	467 (7.7)	442 (9.6)	326 (9.3)	270 (9.9)	288 (10.8)	324 (12.3)	213 (10.5)	72 (7.6)	15 (9.4)
Internet	4,297 (49.3)	3,275 (54.0)	2,495 (54.0)	1,943 (55.2)	1,510 (55.4)	1,431 (53.6)	1,453 (55.2)	1,201 (59.1)	587 (62.0)	111 (69.8)
Other print	1,626 (18.7)	1,290 (21.3)	990 (21.4)	762 (21.6)	611 (22.4)	562 (21.1)	567 (21.5)	525 (25.8)	261 (27.6)	49 (30.8)
Educational video, DVD/CDs	315 (3.6)	207 (3.4)	154 (3.3)	115 (3.2)	82 (3.0)	99 (3.7)	70 (2.7)	71 (3.5)	47 (5.0)	9 (5.7)
Others	1,627 (18.7)	958 (15.8)	670 (14.5)	504 (14.3)	366 (13.4)	343(12.9)	359 (13.6)	138 (6.8)	27 (2.9)	3 (1.9)
Conversations with family or friends*	2,541 (29.2)	1,644 (27.1)	1,115 (24.1)	877 (24.9)	688 (25.2)	576 (21.6)	564 (21.4)	708 (34.8)	387 (40.9)	62 (39.0)
Conversations with health professionals*	3,932 (45.2)	2,563 (42.2)	1,785 (38.6)	1,423 (40.4)	1,085 (39.7)	952 (35.7)	929 (35.3)	1,021 (50.2)	605 (63.9)	109 (68.6)
Health related app**	196 (2.3)	149 (2.5)	105 (2.3)	67 (1.9)	75 (2.7)	40 (1.5)	43 (1.6)	68 (3.3)	52 (5.5)	17 (10.7)
No access	303 (3.5)	247 (4.1)	232 (5.0)	178 (5.1)	147 (5.4)	115 (4.3)	109 (4.1)	102 (5.0)	74 (7.8)	13 (8.2)
Unkn	551 (6.3)	298 (4.9)	189 (4.1)	156 (4.4)	98 (3.6)	85 (3.2)	57 (2.2)	40 (2.0)	37 (3.9)	6 (3.8)
Total Participants	8,708	6,067	4,624	3,522	2,728	2,669	2,633	2,033	947	159

Footnote 1: Percentages may total more than 100% because some participants used more than one source.
Footnote 2: Form IIs entered into the database since January 1, 2007.
*Footnote 3: *Codes were added in October 2011. **Code was added in October 2016.*

Table 136. Health Literacy at the Time of Injury –Confidence filling out medical forms by yourself

	Confidence filling out medical forms by yourself						
n (%)	Not at all	A little	Somewhat	Quite a bit	Extremely	Unkn/not done/under 18	Total
Total	322 (9.3)	309 (8.9)	511 (14.7)	741 (21.3)	1,412 (40.6)	181 (5.2)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 137. Health Literacy at the Time of Injury–Difficulty understanding written medical information

	Difficulty understanding written medical information						
n (%)	Never	Rarely	Sometimes	Often	Always	Unkn/not done/under 18	Total
Total	1,794 (51.6)	664 (19.1)	588 (16.9)	139 (4.0)	101 (2.9)	190 (5.5)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 138. Health Literacy at the Time of Injury–help reading hospital materials

	Help reading hospital materials						
n (%)	Never	Rarely	Sometimes	Often	Always	Unkn/not done/under 18	Total
Total	1,490 (42.9)	577 (16.6)	641 (18.4)	303 (8.7)	275 (7.9)	190 (5.5)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 139. SCI QoL Resilience at Initial Rehabilitation– I had a positive attitude

	I had a positive attitude							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/not done/under 18	Total
Total	21 (0.6)	59 (1.7)	480 (13.8)	1,201 (34.6)	1,546 (44.5)	22 (0.6)	147 (4.2)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 140. SCI QoL Resilience by Post-Injury Year – I had a positive attitude

	Post-Injury Year									
I had a positive attitude n (%)	1	5	10	15	20	25	30	35	40	45
Never	18 (0.6)	10 (0.5)	11 (0.7)	6 (0.5)	6 (0.6)	1 (0.1)	5 (0.8)	8 (1.0)	2 (0.3)	0 (0.0)
Rarely	88 (3.1)	71 (3.3)	43 (2.7)	42 (3.2)	29 (3.0)	18 (2.1)	18 (3.0)	23 (2.7)	17 (2.5)	6 (3.8)
Sometimes	478 (17.0)	372 (17.1)	287 (17.9)	180 (13.8)	147 (15.4)	161 (19.1)	96 (15.8)	110 (13.1)	104 (15.3)	14 (8.8)
Often	1,019 (36.2)	803 (36.9)	600 (37.5)	511 (39.2)	373 (39.1)	309 (36.7)	215 (35.5)	321 (38.2)	263 (38.6)	73 (45.9)
Always	953 (33.8)	765 (35.1)	527 (32.9)	485 (37.2)	335 (35.1)	306 (36.4)	245 (40.4)	350 (41.7)	268 (39.4)	63 (39.6)
Declined	36 (1.3)	24 (1.1)	20 (1.3)	17 (1.3)	18 (1.9)	7 (0.8)	1 (0.2)	4 (0.5)	5 (0.7)	1 (0.6)
Unkn/not done/under 18	225 (8.0)	134 (6.1)	112 (7.0)	62 (4.8)	47 (4.9)	39 (4.6)	26 (4.3)	24 (2.9)	22 (3.2)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 141. SCI QoL Resilience at Initial Rehabilitation – I felt good about how I coped with my injury

	I felt good about how I have coped with my injury							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/not done/under 18	Total
Total	44 (1.3)	113 (3.3)	667 (19.2)	1,156 (33.3)	1,328 (38.2)	21 (0.6)	147 (4.2)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 142. SCI QoL Resilience by Post-Injury Year – I felt good about how I have coped with my injury

	Post-Injury Year									
I felt good about how I have coped with my injury n (%)	1	5	10	15	20	25	30	35	40	45
Never	44 (1.6)	33 (1.5)	27 (1.7)	13 (1.0)	5 (0.5)	4 (0.5)	5 (0.8)	8 (1.0)	4 (0.6)	0 (0.0)
Rarely	128 (4.5)	109 (5.0)	57 (3.6)	42 (3.2)	28 (2.9)	25 (3.0)	18 (3.0)	17 (2.0)	12 (1.8)	6 (3.8)
Sometimes	601 (21.3)	390 (17.9)	286 (17.9)	199 (15.3)	148 (15.5)	116 (13.8)	86 (14.2)	96 (11.4)	89 (13.1)	17 (10.7)
Often	934 (33.2)	707 (32.4)	512 (32.0)	416 (31.9)	312 (32.7)	264 (31.4)	184 (30.4)	250 (29.8)	208 (30.5)	44 (27.7)
Always	848 (30.1)	780 (35.8)	582 (36.4)	553 (42.4)	391 (40.9)	383 (45.5)	284 (46.9)	439 (52.3)	332 (48.8)	89 (56.0)
Declined	36 (1.3)	25 (1.1)	24 (1.5)	18 (1.4)	24 (2.5)	9 (1.1)	3 (0.5)	5 (0.6)	11 (1.6)	1 (0.6)
Unkn/not done/under 18	226 (8.0)	135 (6.2)	112 (7.0)	62 (4.8)	47 (4.9)	40 (4.8)	26 (4.3)	25 (3.0)	25 (3.7)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 143. SCI QoL Resilience at Initial Rehabilitation – I used positive ways to cope with my injury

	I used positive ways to cope with my injury							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/ not done/ under 18	Total
Total	26 (0.7)	55 (1.6)	435 (12.5)	1,151 (33.1)	1,639 (47.2)	21 (0.6)	149 (4.3)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 144. SCI QoL Resilience by Post-Injury Year – I used positive ways to cope with my injury

	Post-Injury Year									
I used positive ways to cope with my injury n (%)	1	5	10	15	20	25	30	35	40	45
Never	37 (1.3)	25 (1.1)	23 (1.4)	10 (0.8)	12 (1.3)	5 (0.6)	11 (1.8)	11 (1.3)	13 (1.9)	3 (1.9)
Rarely	91 (3.2)	63 (2.9)	53 (3.3)	31 (2.4)	28 (2.9)	24 (2.9)	19 (3.1)	24 (2.9)	13 (1.9)	4 (2.5)
Sometimes	456 (16.2)	365 (16.8)	262 (16.4)	197 (15.1)	145 (15.2)	104 (12.4)	82 (13.5)	96 (11.4)	88 (12.9)	21 (13.2)
Often	937 (33.3)	732 (33.6)	503 (31.4)	418 (32.1)	283 (29.6)	273 (32.5)	179 (29.5)	247 (29.4)	211 (31.0)	43 (27.0)
Always	1,027 (36.5)	830 (38.1)	620 (38.8)	561 (43.1)	411 (43.0)	385 (45.8)	285 (47.0)	425 (50.6)	319 (46.8)	84 (52.8)
Declined	41 (1.5)	27 (1.2)	25 (1.6)	22 (1.7)	26 (2.7)	10 (1.2)	4 (0.7)	9 (1.1)	12 (1.8)	2 (1.3)
Unkn/not done/under 18	228 (8.1)	137 (6.3)	114 (7.1)	64 (4.9)	50 (5.2)	40 (4.8)	26 (4.3)	28 (3.3)	25 (3.7)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 145. SCI QoL Resilience at Initial Rehabilitation – I felt I can get through difficult times

	I felt I can get through difficult times							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/ not done/ under 18	Total
Total	16 (0.5)	79 (2.3)	557 (16.0)	1,047 (30.1)	1,604 (46.1)	21 (0.6)	152 (4.4)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 146. SCI QoL Resilience by Post-Injury Year – I felt I can get through difficult times

	Post-Injury Year									
I felt I can get through difficult times n (%)	1	5	10	15	20	25	30	35	40	45
Never	19 (0.7)	9 (0.4)	12 (0.8)	4 (0.3)	5 (0.5)	3 (0.4)	4 (0.7)	5 (0.6)	1 (0.1)	2 (1.3)
Rarely	95 (3.4)	77 (3.5)	51 (3.2)	32 (2.5)	37 (3.9)	16 (1.9)	22 (3.6)	12 (1.4)	12 (1.8)	2 (1.3)
Sometimes	523 (18.6)	360 (16.5)	270 (16.9)	189 (14.5)	151 (15.8)	134 (15.9)	100 (16.5)	120 (14.3)	79 (11.6)	22 (13.8)
Often	871 (30.9)	723 (33.2)	499 (31.2)	404 (31.0)	282 (29.5)	265 (31.5)	200 (33.0)	234 (27.9)	240 (35.2)	51 (32.1)
Always	1,046 (37.1)	850 (39.0)	633 (39.6)	594 (45.6)	411 (43.0)	373 (44.4)	250 (41.3)	437 (52.0)	317 (46.5)	79 (49.7)
Declined	37 (1.3)	26 (1.2)	22 (1.4)	17 (1.3)	20 (2.1)	10 (1.2)	3 (0.5)	7 (0.8)	8 (1.2)	1 (0.6)
Unkn/not done/under 18	226 (8.0)	134 (6.1)	113 (7.1)	63 (4.8)	49 (5.1)	40 (4.8)	27 (4.5)	25 (3.0)	24 (3.5)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 147. SCI QoL Resilience at Initial Rehabilitation – I tried to see the positive side of things

	I tried to see the positive side of things							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/not done/ under 18	Total
Total	16 (0.5)	79 (2.3)	557 (16.0)	1,047 (30.1)	1,604 (46.1)	21 (0.6)	152 (4.4)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 148. SCI QoL Resilience by Post-Injury Year – I tried to see the positive side of things

	Post-Injury Year									
I tried to see the positive side of things n (%)	1	5	10	15	20	25	30	35	40	45
Never	12 (0.4)	9 (0.4)	11 (0.7)	3 (0.2)	3 (0.3)	2 (0.2)	2 (0.3)	4 (0.5)	3 (0.4)	2 (1.3)
Rarely	61 (2.2)	56 (2.6)	41 (2.6)	28 (2.1)	22 (2.3)	11 (1.3)	15 (2.5)	15 (1.8)	9 (1.3)	3 (1.9)
Sometimes	414 (14.7)	254 (11.7)	225 (14.1)	145 (11.1)	116 (12.1)	119 (14.1)	80 (13.2)	89 (10.6)	85 (12.5)	10 (6.3)
Often	873 (31.0)	739 (33.9)	512 (32.0)	438 (33.6)	300 (31.4)	277 (32.9)	176 (29.0)	253 (30.1)	221 (32.5)	57 (35.8)
Always	1,193 (42.4)	960 (44.1)	677 (42.3)	606 (46.5)	448 (46.9)	382 (45.4)	303 (50.0)	449 (53.5)	333 (48.9)	84 (52.8)
Declined	37 (1.3)	25 (1.1)	21 (1.3)	19 (1.5)	18 (1.9)	10 (1.2)	3 (0.5)	6 (0.7)	7 (1.0)	1 (0.6)
Unkn/not done/under 18	227 (8.1)	136 (6.2)	113 (7.1)	64 (4.9)	48 (5.0)	40 (4.8)	27 (4.5)	24 (2.9)	23 (3.4)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 149. SCI QoL Resilience at Initial Rehabilitation – I was confident that I could overcome my limitations

	I was confident that I could overcome my limitations							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/ not done/ under 18	Total
Total	24 (0.7)	67 (1.9)	627 (18.0)	1,003 (28.9)	1,582 (45.5)	24 (0.7)	149 (4.3)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 150. SCI QoL Resilience by Post-Injury Year – I was confident that I could overcome my limitations

	Post-Injury Year									
I was confident that I could overcome my limitations n (%)	1	5	10	15	20	25	30	35	40	45
Never	28 (1.0)	41 (1.9)	29 (1.8)	19 (1.5)	11 (1.2)	11 (1.3)	7 (1.2)	21 (2.5)	9 (1.3)	4 (2.5)
Rarely	114 (4.0)	106 (4.9)	77 (4.8)	65 (5.0)	50 (5.2)	24 (2.9)	27 (4.5)	28 (3.3)	34 (5.0)	7 (4.4)
Sometimes	619 (22.0)	413 (19.0)	297 (18.6)	244 (18.7)	165 (17.3)	145 (17.2)	98 (16.2)	129 (15.4)	129 (18.9)	22 (13.8)
Often	843 (29.9)	674 (30.9)	504 (31.5)	386 (29.6)	303 (31.7)	273 (32.5)	192 (31.7)	242 (28.8)	211 (31.0)	61 (38.4)
Always	946 (33.6)	783 (35.9)	557 (34.8)	508 (39.0)	359 (37.6)	337 (40.1)	249 (41.1)	386 (46.0)	265 (38.9)	62 (39.0)
Declined	40 (1.4)	28 (1.3)	23 (1.4)	19 (1.5)	19 (2.0)	11 (1.3)	5 (0.8)	9 (1.1)	10 (1.5)	1 (0.6)
Unkn/not done/under 18	227 (8.1)	134 (6.1)	113 (7.1)	62 (4.8)	48 (5.0)	40 (4.8)	28 (4.6)	25 (3.0)	23 (3.4)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016
Footnote 2: Participants must be at least 18 years old.

Table 151. SCI QoL Resilience at Initial Rehabilitation – I took action to improve my life

	I took action to improve my life							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/ not done/ under 18	Total
Total	25 (0.7)	44 (1.3)	372 (10.7)	1,000 (28.8)	1,849 (53.2)	32 (0.9)	154 (4.4)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 152. SCI QoL Resilience by Post-Injury Year – I took action to improve my life

	Post-Injury Year									
I took action to improve my life n (%)	1	5	10	15	20	25	30	35	40	45
Never	22 (0.8)	16 (0.7)	18 (1.1)	10 (0.8)	9 (0.9)	14 (1.7)	3 (0.5)	7 (0.8)	12 (1.8)	0 (0.0)
Rarely	79 (2.8)	79 (3.6)	66 (4.1)	46 (3.5)	47 (4.9)	30 (3.6)	23 (3.8)	31 (3.7)	26 (3.8)	4 (2.5)
Sometimes	403 (14.3)	369 (16.9)	295 (18.4)	240 (18.4)	175 (18.3)	133 (15.8)	122 (20.1)	138 (16.4)	136 (20.0)	32 (20.1)
Often	888 (31.5)	703 (32.3)	497 (31.1)	403 (30.9)	270 (28.3)	268 (31.9)	168 (27.7)	262 (31.2)	196 (28.8)	55 (34.6)
Always	1,159 (41.1)	845 (38.8)	586 (36.6)	515 (39.5)	384 (40.2)	347 (41.3)	257 (42.4)	367 (43.7)	275 (40.4)	65 (40.9)
Declined	40 (1.4)	31 (1.4)	25 (1.6)	24 (1.8)	22 (2.3)	8 (1.0)	6 (1.0)	9 (1.1)	12 (1.8)	1 (0.6)
Unkn/not done/under 18	226 (8.0)	136 (6.2)	113 (7.1)	65 (5.0)	48 (5.0)	41 (4.9)	27 (4.5)	26 (3.1)	24 (3.5)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 153. SCI QoL Resilience at Initial Rehabilitation – I found new things to enjoy

	I found new things to enjoy							
n (%)	Never	Rarely	Sometimes	Often	Always	Declined	Unkn/ not done/ under 18	Total
Total	213 (6.1)	389 (11.2)	844 (24.3)	809 (23.3)	1,036 (29.8)	29 (0.8)	156 (4.5)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 154. SCI QoL Resilience by Post-Injury Year – I found new things to enjoy

	Post-Injury Year									
I found new things to enjoy n (%)	1	5	10	15	20	25	30	35	40	45
Never	22 (0.8)	16 (0.7)	18 (1.1)	10 (0.8)	9 (0.9)	14 (1.7)	3 (0.5)	7 (0.8)	12 (1.8)	0 (0.0)
Rarely	79 (2.8)	79 (3.6)	66 (4.1)	46 (3.5)	47 (4.9)	30 (3.6)	23 (3.8)	31 (3.7)	26 (3.8)	4 (2.5)
Sometimes	403 (14.3)	369 (16.9)	295 (18.4)	240 (18.4)	175 (18.3)	133 (15.8)	122 (20.1)	138 (16.4)	136 (20.0)	32 (20.1)
Often	888 (31.5)	703 (32.3)	497 (31.1)	403 (30.9)	270 (28.3)	268 (31.9)	168 (27.7)	262 (31.2)	196 (28.8)	55 (34.6)
Always	1,159 (41.1)	845 (38.8)	586 (36.6)	515 (39.5)	384 (40.2)	347 (41.3)	257 (42.4)	367 (43.7)	275 (40.4)	65 (40.9)
Declined	40 (1.4)	31 (1.4)	25 (1.6)	24 (1.8)	22 (2.3)	8 (1.0)	6 (1.0)	9 (1.1)	12 (1.8)	1 (0.6)
Unkn/ not done/under 18	226 (8.0)	136 (6.2)	113 (7.1)	65 (5.0)	48 (5.0)	41 (4.9)	27 (4.5)	26 (3.1)	24 (3.5)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 155. SCI QoL Resilience T Score at Initial Rehabilitation

	SCI QoL Resilience T Score				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	3,261	53.0	8.7	16.40	66.40

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 156. SCI QoL Resilience T Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	51.3 (2,538)	51.6 (1,993)	51.5 (1,450)	52.5 (1,203)	52.3 (867)	52.5 (783)	52.6 (567)	53.4 (792)	52.7 (632)	53.0 (154)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 157. PHQ at Initial Rehabilitation – Major Depressive Syndrome

	Major Depressive Syndrome					
n (%)	No depressive syndrome	Major depressive syndrome	Other depressive syndrome	Decline	Unkn/not done/under 18	Total
Total	2,875 (82.7)	120 (3.5)	237 (6.8)	60 (1.7)	184 (5.3)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 158. PHQ at Initial Rehabilitation – Severity of Depression Score

	Severity of Depression Score				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	3,289	5.7	11.0	0.00	77.00

Footnote 1: Form Is admitted to the System since January 1, 2016.
Footnote 2: PHQ score ranges from 0 to 27.
Footnote 3: Participants must be at least 18 years old.

Table 159. Number of Pregnancies Prior to Injury

	Number of Pregnancies				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	712	1.8	1.9	0.00	11.00

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Woman ≥ 15 years old.

Table 160. Number of Pregnancies by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	1.8 (581)	1.9 (396)	1.7 (350)	1.9 (269)	2.1 (213)	1.8 (161)	1.7 (123)	1.7 (149)	1.7 (140)	1.8 (36)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Woman ≥ 15 years old.

Table 161. Number of Live Births Prior to Injury

	Number of Live Births				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	714	1.5	1.6	0.00	12.00

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Woman ≥ 15 years old.

Table 162. Number of Live Births by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	1.4 (584)	1.5 (400)	1.3 (353)	1.5 (269)	1.5 (215)	1.4 (160)	1.2 (124)	1.2 (148)	1.2 (141)	1.2 (36)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Woman ≥ 15 years old.

Table 163. Hypertension Diagnosis Prior to Injury

	Hypertension Diagnosis				
n (%)	No	Yes	Declined	Unkn	Total
Total	2,563 (73.7)	880 (25.3)	5 (0.1)	28 (0.8)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 164. Hypertension Diagnosis by Post-Injury Year

	Post-Injury Year									
Hypertension n (%)	1	5	10	15	20	25	30	35	40	45
No	2,104 (74.7)	1,675 (76.9)	1,247 (77.9)	1,008 (77.4)	729 (76.3)	635 (75.5)	422 (69.6)	589 (70.1)	470 (69.0)	100 (62.9)
Yes	601 (21.3)	400 (18.4)	281 (17.6)	228 (17.5)	186 (19.5)	183 (21.8)	168 (27.7)	225 (26.8)	194 (28.5)	57 (35.8)
Declined	11 (0.4)	17 (0.8)	11 (0.7)	18 (1.4)	13 (1.4)	4 (0.5)	3 (0.5)	5 (0.6)	4 (0.6)	0 (0.0)
Unkn	101 (3.6)	87 (4.0)	61 (3.8)	49 (3.8)	27 (2.8)	19 (2.3)	13 (2.1)	21 (2.5)	13 (1.9)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 165. Hyperlipidemia Diagnosis Prior to Injury

	Hyperlipidemia Diagnosis				
n (%)	No	Yes	Declined	Unkn	Total
Total	2,806 (80.7)	630 (18.1)	10 (0.3)	30 (0.9)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 166. Hyperlipidemia Diagnosis by Post-Injury Year

	Post-Injury Year									
Hyperlipidemia n (%)	1	5	10	15	20	25	30	35	40	45
No	2,255 (80.0)	1,756 (80.6)	1,282 (80.1)	1,049 (80.5)	759 (79.5)	683 (81.2)	467 (77.1)	624 (74.3)	521 (76.5)	114 (71.7)
Yes	425 (15.1)	294 (13.5)	236 (14.8)	182 (14.0)	147 (15.4)	125 (14.9)	114 (18.8)	179 (21.3)	137 (20.1)	41 (25.8)
Declined	33 (1.2)	38 (1.7)	15 (0.9)	24 (1.8)	19 (2.0)	14 (1.7)	9 (1.5)	15 (1.8)	9 (1.3)	1 (0.6)
Unkn	104 (3.7)	91 (4.2)	67 (4.2)	48 (3.7)	30 (3.1)	19 (2.3)	16 (2.6)	22 (2.6)	14 (2.1)	3 (1.9)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 167. Arthritis Diagnosis Prior to Injury

	Arthritis Diagnosis				
n (%)	No	Yes	Declined	Unkn	Total
Total	2,795 (80.4)	636 (18.3)	13 (0.4)	32 (0.9)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 168. Arthritis Diagnosis by Post-Injury Year

	Post-Injury Year									
Arthritis n (%)	1	5	10	15	20	25	30	35	40	45
No	2,073 (73.6)	1,561 (71.6)	1,135 (70.9)	896 (68.8)	624 (65.3)	570 (67.8)	358 (59.1)	476 (56.7)	333 (48.9)	85 (53.5)
Yes	617 (21.9)	499 (22.9)	382 (23.9)	328 (25.2)	282 (29.5)	243 (28.9)	229 (37.8)	333 (39.6)	330 (48.5)	71 (44.7)
Declined	18 (0.6)	27 (1.2)	15 (0.9)	28 (2.1)	17 (1.8)	7 (0.8)	5 (0.8)	9 (1.1)	4 (0.6)	1 (0.6)
Unkn	109 (3.9)	92 (4.2)	68 (4.3)	51 (3.9)	32 (3.4)	21 (2.5)	14 (2.3)	22 (2.6)	14 (2.1)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 169. Sleep Problems in the Last 12 Months by Post-Injury Year

	Post-Injury Year									
Sleep problems n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Never or less than monthly	1,086 (38.6)	813 (37.3)	593 (37.1)	530 (40.7)	344 (36.0)	351 (41.7)	230 (38.0)	333 (39.6)	255 (37.4)	58 (36.5)
Monthly (3 days a month or less)	382 (13.6)	288 (13.2)	221 (13.8)	162 (12.4)	148 (15.5)	97 (11.5)	82 (13.5)	102 (12.1)	106 (15.6)	27 (17.0)
Weekly (1 to 4 days a week)	474 (16.8)	396 (18.2)	310 (19.4)	222 (17.0)	175 (18.3)	145 (17.2)	117 (19.3)	169 (20.1)	137 (20.1)	32 (20.1)
Daily or almost daily (5 to 7 days a week)	682 (24.2)	545 (25.0)	384 (24.0)	320 (24.6)	239 (25.0)	210 (25.0)	153 (25.2)	211 (25.1)	159 (23.3)	40 (25.2)
Unkn, Interview not done	193 (6.9)	137 (6.3)	92 (5.8)	69 (5.3)	49 (5.1)	38 (4.5)	24 (4.0)	25 (3.0)	24 (3.5)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 170. Falls in the Last 12 Months by Post-Injury Year

	Post-Injury Year									
Fall n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
None	1,086 (38.6)	813 (37.3)	593 (37.1)	530 (40.7)	344 (36.0)	351 (41.7)	230 (38.0)	333 (39.6)	255 (37.4)	58 (36.5)
1 to 2 times	382 (13.6)	288 (13.2)	221 (13.8)	162 (12.4)	148 (15.5)	97 (11.5)	82 (13.5)	102 (12.1)	106 (15.6)	27 (17.0)
3 to 5 times	474 (16.8)	396 (18.2)	310 (19.4)	222 (17.0)	175 (18.3)	145 (17.2)	117 (19.3)	169 (20.1)	137 (20.1)	32 (20.1)
More than 5 times	682 (24.2)	545 (25.0)	384 (24.0)	320 (24.6)	239 (25.0)	210 (25.0)	153 (25.2)	211 (25.1)	159 (23.3)	40 (25.2)
Unknown, Interview not done	193 (6.9)	137 (6.3)	92 (5.8)	69 (5.3)	49 (5.1)	38 (4.5)	24 (4.0)	25 (3.0)	24 (3.5)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 171. Frequency of Bladder Incontinence at Initial Rehabilitation

n (%)	Frequency of Bladder Incontinence						
	No	Daily	Weekly	Monthly	NA	Unkn	Total
Total	1,950 (56.1)	410 (11.8)	490 (14.1)	511 (14.7)	29 (0.8)	86 (2.5)	3,476

Footnote 1: Form IIs obtained since October 1, 2016.

Table 172. Frequency of Bladder Incontinence in the Last 4 Weeks by Post-Injury Year

Bladder Incontinence n (%)	Post-Injury Year									
	1	5	10	15	20	25	30	35	40	45
None	1,648 (58.5)	1,318 (60.5)	975 (60.9)	779 (59.8)	557 (58.3)	505 (60.0)	374 (61.7)	526 (62.6)	390 (57.3)	88 (55.3)
Daily	296 (10.5)	219 (10.1)	160 (10.0)	142 (10.9)	105 (11.0)	107 (12.7)	70 (11.6)	90 (10.7)	85 (12.5)	14 (8.8)
Weekly	301 (10.7)	200 (9.2)	160 (10.0)	129 (9.9)	118 (12.4)	68 (8.1)	54 (8.9)	80 (9.5)	65 (9.5)	25 (15.7)
Monthly	388 (13.8)	283 (13.0)	187 (11.7)	174 (13.4)	121 (12.7)	101 (12.0)	70 (11.6)	100 (11.9)	94 (13.8)	20 (12.6)
NA	34 (1.2)	28 (1.3)	31 (1.9)	15 (1.2)	8 (0.8)	23 (2.7)	11 (1.8)	15 (1.8)	22 (3.2)	9 (5.7)
Unkn	150 (5.3)	131 (6.0)	87 (5.4)	64 (4.9)	46 (4.8)	37 (4.4)	27 (4.5)	29 (3.5)	25 (3.7)	3 (1.9)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 173. Method of Bowel Management at Initial Rehabilitation

(Continued)

	Method of Bowel Management						
n (%)	No defecation since rehab admit	Normal defecation	Straining bearing down to empty	Digital ano-rectal stimulation	Supposi-tories	Digital evacuation	Mini enema (Clysma, <150 mL)
Total	23 (0.7)	750 (21.6)	36 (1.0)	610 (17.5)	1,551 (44.6)	94 (2.7)	116 (3.3)

	Method of Bowel Management						
n (%)	Enema (>150 mL), including transanal irrigation	Colostomy (ileostomy)	Sacral anterior root stimulation	Other (pad, brief, disposable underwear, etc)	NA	Unkn	Total
Total	115 (3.3)	111 (3.2)	1 (0.0)	18 (0.5)	1 (0.0)	50 (1.4)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 174. Method of Bowel Management in the Last 4 Weeks by Post-Injury Year

	Post-Injury Year									
Bowel Management n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No defecation in last 4 weeks	39 (1.4)	16 (0.7)	18 (1.1)	8 (0.6)	13 (1.4)	8 (1.0)	6 (1.0)	6 (0.7)	3 (0.4)	0 (0.0)
Normal defecation	986 (35.0)	720 (33.0)	493 (30.8)	382 (29.3)	280 (29.3)	212 (25.2)	157 (25.9)	183 (21.8)	179 (26.3)	30 (18.9)
Straining/bearing down to empty	58 (2.1)	64 (2.9)	56 (3.5)	35 (2.7)	27 (2.8)	27 (3.2)	19 (3.1)	28 (3.3)	31 (4.6)	7 (4.4)
Digital ano-rectal stimulation	444 (15.8)	419 (19.2)	337 (21.1)	288 (22.1)	188 (19.7)	199 (23.7)	160 (26.4)	217 (25.8)	174 (25.6)	36 (22.6)
Suppositories	741 (26.3)	508 (23.3)	316 (19.8)	258 (19.8)	202 (21.2)	158 (18.8)	109 (18.0)	173 (20.6)	124 (18.2)	35 (22.0)
Digital evacuation	138 (4.9)	94 (4.3)	52 (3.3)	62 (4.8)	44 (4.6)	46 (5.5)	30 (5.0)	65 (7.7)	47 (6.9)	11 (6.9)
Mini enema (Clysma, < 150 mL)	94 (3.3)	68 (3.1)	62 (3.9)	63 (4.8)	33 (3.5)	44 (5.2)	18 (3.0)	13 (1.5)	13 (1.9)	4 (2.5)
Enema (>150 mL), including transanal irrigation	55 (2.0)	37 (1.7)	42 (2.6)	32 (2.5)	23 (2.4)	25 (3.0)	11 (1.8)	17 (2.0)	11 (1.6)	4 (2.5)
Colostomy (ileostomy)	126 (4.5)	133 (6.1)	134 (8.4)	99 (7.6)	88 (9.2)	82 (9.8)	67 (11.1)	108 (12.9)	69 (10.1)	26 (16.4)
Sacral anterior root stimulation	0 (0.0)	4 (0.2)	2 (0.1)	1 (0.1)	1 (0.1)	0 (0.0)	1 (0.2)	0 (0.0)	1 (0.1)	0 (0.0)
Other (pad, brief, disposable underwear, etc)	76 (2.7)	37 (1.7)	34 (2.1)	26 (2.0)	23 (2.4)	13 (1.5)	7 (1.2)	7 (0.8)	9 (1.3)	1 (0.6)
NA	3 (0.1)	1 (0.0)	1 (0.1)	4 (0.3)	0 (0.0)	1 (0.1)	3 (0.5)	2 (0.2)	1 (0.1)	0 (0.0)
Unkn	57 (2.0)	78 (3.6)	53 (3.3)	45 (3.5)	33 (3.5)	26 (3.1)	18 (3.0)	21 (2.5)	19 (2.8)	5 (3.1)
Total	2,817 (23.5)	2,179 (18.2)	1,600 (13.4)	1,303 (10.9)	955 (8.0)	841 (7.0)	606 (5.1)	840 (7.0)	681 (5.7)	159 (1.3)

Footnote 1: Form IIs obtained since October 1, 2016.

Table 175. Frequency of Emptying Bowel at Initial Rehabilitation

	Frequency of Emptying Bowel							
n (%)	**No defecation since rehab admit**	**Once a week or less**	**2 to 6 times a week**	**Once a day or more**	**Declined**	**NA**	**Unkn**	**Total**
Total	14 (0.4)	113 (3.3)	800 (23.0)	2,368 (68.1)	4 (0.1)	114 (3.3)	63 (1.8)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 176. Frequency of Emptying Bowel in the Last 4 Weeks by Post-Injury Year

	Post-Injury Year									
Frequency of Emptying Bowel n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No defecation in the past 4 weeks	6 (0.2)	4 (0.2)	5 (0.3)	0 (0.0)	2 (0.2)	1 (0.1)	3 (0.5)	1 (0.1)	1 (0.1)	0 (0.0)
Once a week or less	96 (3.4)	82 (3.8)	71 (4.4)	64 (4.9)	44 (4.6)	34 (4.0)	23 (3.8)	31 (3.7)	26 (3.8)	6 (3.8)
2 to 6 times a week	1,059 (37.6)	925 (42.5)	731 (45.7)	629 (48.3)	433 (45.3)	416 (49.5)	300 (49.5)	418 (49.8)	349 (51.2)	82 (51.6)
Once or more a day	1,397 (49.6)	919 (42.2)	574 (35.9)	447 (34.3)	346 (36.2)	274 (32.6)	186 (30.7)	253 (30.1)	217 (31.9)	43 (27.0)
Declined	8 (0.3)	15 (0.7)	10 (0.6)	5 (0.4)	10 (1.0)	4 (0.5)	1 (0.2)	4 (0.5)	1 (0.1)	0 (0.0)
Not applicable (i.e. ileo- or colostomy)	130 (4.6)	134 (6.1)	135 (8.4)	104 (8.0)	89 (9.3)	83 (9.9)	71 (11.7)	113 (13.5)	69 (10.1)	26 (16.4)
Unkn	121 (4.3)	100 (4.6)	74 (4.6)	54 (4.1)	31 (3.2)	29 (3.4)	22 (3.6)	20 (2.4)	18 (2.6)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 177. Average Time to Empty Bowel at Initial Rehabilitation

	Average Time to Empty Bowel							
n (%)	**No defecation since rehab admit**	**0 to 30 minutes**	**31 to 60 minutes**	**> 60 minutes**	**Declined**	**NA**	**Unkn**	**Total**
Total	41 (1.2)	1,922 (55.3)	919 (26.4)	361 (10.4)	13 (0.4)	115 (3.3)	105 (3.0)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 178. Average Time to Empty Bowel in the Last 4 Weeks by Post-Injury Year

	Post-Injury Year									
Average Time to Empty Bowel n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No defecation in the past 4 weeks	42 (1.5)	32 (1.5)	25 (1.6)	17 (1.3)	19 (2.0)	7 (0.8)	9 (1.5)	15 (1.8)	9 (1.3)	1 (0.6)
0 to 30 minutes	1,583 (56.2)	1,179 (54.1)	827 (51.7)	666 (51.1)	492 (51.5)	436 (51.8)	300 (49.5)	410 (48.8)	346 (50.8)	64 (40.3)
31 to 60 minutes	623 (22.1)	488 (22.4)	348 (21.8)	269 (20.6)	179 (18.7)	156 (18.5)	112 (18.5)	148 (17.6)	133 (19.5)	37 (23.3)
More than 60 minutes	249 (8.8)	206 (9.5)	147 (9.2)	175 (13.4)	125 (13.1)	118 (14.0)	85 (14.0)	128 (15.2)	99 (14.5)	28 (17.6)
Declined	34 (1.2)	22 (1.0)	23 (1.4)	9 (0.7)	15 (1.6)	7 (0.8)	4 (0.7)	6 (0.7)	4 (0.6)	0 (0.0)
NA	132 (4.7)	135 (6.2)	136 (8.5)	104 (8.0)	90 (9.4)	83 (9.9)	71 (11.7)	113 (13.5)	70 (10.3)	26 (16.4)
Unkn	154 (5.5)	117 (5.4)	94 (5.9)	63 (4.8)	35 (3.7)	34 (4.0)	25 (4.1)	20 (2.4)	20 (2.9)	3 (1.9)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 179. Frequency of Bowel Incontinence at Initial Rehabilitation

	Frequency of Bowel Incontinence						
n (%)	**Less than once a month or Never**	**1 to 4 times a month**	**1 to 6 times a week**	**Daily**	**NA**	**Unkn**	**Total**
Total	2,110 (60.7)	727 (20.9)	356 (10.2)	145 (4.2)	46 (1.3)	92 (2.6)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 180. Frequency of Bowel Incontinence in the Last 4 Weeks by Post-Injury Year

	Post-Injury Year									
Frequency of Bowel Incontinence n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Less than once a month or Never	2,151 (76.4)	1,704 (78.2)	1,226 (76.6)	1,018 (78.1)	724 (75.8)	624 (74.2)	470 (77.6)	646 (76.9)	516 (75.8)	111 (69.8)
1 to 4 times a month	281 (10.0)	199 (9.1)	163 (10.2)	125 (9.6)	92 (9.6)	104 (12.4)	62 (10.2)	104 (12.4)	94 (13.8)	28 (17.6)
1 to 6 times a week	80 (2.8)	53 (2.4)	29 (1.8)	25 (1.9)	30 (3.1)	25 (3.0)	19 (3.1)	26 (3.1)	23 (3.4)	2 (1.3)
Daily	46 (1.6)	23 (1.1)	18 (1.1)	16 (1.2)	14 (1.5)	10 (1.2)	3 (0.5)	8 (1.0)	5 (0.7)	6 (3.8)
Declined	26 (0.9)	19 (0.9)	14 (0.9)	12 (0.9)	16 (1.7)	10 (1.2)	6 (1.0)	7 (0.8)	4 (0.6)	0 (0.0)
NA	88 (3.1)	62 (2.8)	63 (3.9)	44 (3.4)	32 (3.4)	35 (4.2)	21 (3.5)	26 (3.1)	13 (1.9)	10 (6.3)
Unkn	145 (5.1)	119 (5.5)	87 (5.4)	63 (4.8)	47 (4.9)	33 (3.9)	25 (4.1)	23 (2.7)	26 (3.8)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 181. Substance Use in the 3 Months Prior to Injury – Tobacco

	Tobacco							
n (%)	**Never**	**Once or twice**	**Monthly**	**Weekly**	**Daily or almost daily**	**Declined**	**Unkn**	**Total**
Total	2,170 (62.4)	93 (2.7)	67 (1.9)	115 (3.3)	880 (25.3)	13 (0.4)	138 (4.0)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 182. Substance Use in the Last 3 Months by Post-Injury Year –Tobacco

	Post-Injury Year									
Tobacco n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Never	2,045 (72.6)	1,573 (72.2)	1,091 (68.2)	929 (71.3)	672 (70.4)	610 (72.5)	442 (72.9)	664 (79.0)	558 (81.9)	132 (83.0)
Once or twice in last 3 months	65 (2.3)	45 (2.1)	48 (3.0)	23 (1.8)	22 (2.3)	15 (1.8)	13 (2.1)	17 (2.0)	14 (2.1)	3 (1.9)
Monthly	30 (1.1)	29 (1.3)	20 (1.3)	12 (0.9)	10 (1.0)	9 (1.1)	5 (0.8)	9 (1.1)	5 (0.7)	0 (0.0)
Weekly	67 (2.4)	42 (1.9)	33 (2.1)	25 (1.9)	17 (1.8)	15 (1.8)	12 (2.0)	7 (0.8)	7 (1.0)	3 (1.9)
Daily or almost daily	409 (14.5)	366 (16.8)	295 (18.4)	239 (18.3)	171 (17.9)	154 (18.3)	109 (18.0)	111 (13.2)	78 (11.5)	16 (10.1)
Declined	30 (1.1)	14 (0.6)	24 (1.5)	19 (1.5)	20 (2.1)	4 (0.5)	1 (0.2)	5 (0.6)	0 (0.0)	1 (0.6)
Unkn	171 (6.1)	110 (5.0)	89 (5.6)	56 (4.3)	43 (4.5)	34 (4.0)	24 (4.0)	27 (3.2)	19 (2.8)	4 (2.5)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 183. Substance Use in the 3 Months Prior to Injury – Cannabis

	Cannabis							
n (%)	**Never**	**Once or twice**	**Monthly**	**Weekly**	**Daily or almost daily**	**Declined**	**Unkn**	**Total**
Total	2,376 (68.4)	157 (4.5)	110 (3.2)	205 (5.9)	476 (13.7)	16 (0.5)	136 (3.9)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 184. Substance Use in the Last 3 Months by Post-Injury Year – Cannabis

	Post-Injury Year									
Cannabis n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Never	1,820 (64.6)	1,402 (64.3)	1,084 (67.8)	912 (70.0)	650 (68.1)	597 (71.0)	464 (76.6)	657 (78.2)	508 (74.6)	115 (72.3)
Once or twice in last 3 months	113 (4.0)	90 (4.1)	57 (3.6)	49 (3.8)	39 (4.1)	28 (3.3)	28 (4.6)	26 (3.1)	30 (4.4)	10 (6.3)
Monthly	90 (3.2)	65 (3.0)	30 (1.9)	32 (2.5)	28 (2.9)	16 (1.9)	9 (1.5)	12 (1.4)	13 (1.9)	3 (1.9)
Weekly	152 (5.4)	107 (4.9)	76 (4.8)	70 (5.4)	39 (4.1)	51 (6.1)	21 (3.5)	29 (3.5)	32 (4.7)	7 (4.4)
Daily or almost daily	414 (14.7)	371 (17.0)	222 (13.9)	159 (12.2)	130 (13.6)	106 (12.6)	56 (9.2)	82 (9.8)	73 (10.7)	18 (11.3)
Declined	36 (1.3)	16 (0.7)	26 (1.6)	22 (1.7)	21 (2.2)	6 (0.7)	0 (0.0)	7 (0.8)	4 (0.6)	2 (1.3)
Unkn	192 (6.8)	128 (5.9)	105 (6.6)	59 (4.5)	48 (5.0)	37 (4.4)	28 (4.6)	27 (3.2)	21 (3.1)	4 (2.5)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 185. Substance Use in the 3 Months Prior to Injury – Cocaine

	Cocaine							
n (%)	**Never**	**Once or twice**	**Monthly**	**Weekly**	**Daily or almost daily**	**Declined**	**Unkn**	**Total**
Total	3,197 (92.0)	45 (1.3)	45 (1.3)	31 (0.9)	8 (0.2)	12 (0.3)	138 (4.0)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 186. Substance Use in the Last 3 Months by Post-Injury Year – Cocaine

	Post-Injury Year									
Cocaine n (%)	1	5	10	15	20	25	30	35	40	45
Never	2,556 (90.7)	2,018 (92.6)	1,457 (91.1)	1,209 (92.8)	882 (92.4)	797 (94.8)	574 (94.7)	805 (95.8)	657 (96.5)	154 (96.9)
Once or twice in last 3 months	12 (0.4)	14 (0.6)	13 (0.8)	12 (0.9)	5 (0.5)	1 (0.1)	1 (0.2)	1 (0.1)	1 (0.1)	0 (0.0)
Monthly	8 (0.3)	5 (0.2)	1 (0.1)	3 (0.2)	1 (0.1)	1 (0.1)	1 (0.2)	2 (0.2)	0 (0.0)	0 (0.0)
Weekly	3 (0.1)	0 (0.0)	1 (0.1)	1 (0.1)	0 (0.0)	1 (0.1)	3 (0.5)	1 (0.1)	2 (0.3)	0 (0.0)
Daily or almost daily	2 (0.1)	0 (0.0)	1 (0.1)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Declined	33 (1.2)	15 (0.7)	21 (1.3)	19 (1.5)	19 (2.0)	4 (0.5)	0 (0.0)	5 (0.6)	1 (0.1)	1 (0.6)
Unkn	203 (7.2)	127 (5.8)	106 (6.6)	59 (4.5)	47 (4.9)	37 (4.4)	27 (4.5)	26 (3.1)	20 (2.9)	4 (2.5)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 187. Substance Use in the 3 Months Prior to Injury – Amphetamine-type Stimulants

	Amphetamine-type Stimulants							
n (%)	Never	Once or twice	Monthly	Weekly	Daily or almost daily	Declined	Unkn	Total
Total	3,247 (93.4)	30 (0.9)	10 (0.3)	15 (0.4)	25 (0.7)	12 (0.3)	137 (3.9)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 188. Substance Use in the Last 3 Months by Post-Injury Year – Amphetamine-type Stimulants

	Post-Injury Year									
Amphetamine-type Stimulants n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Never	2,566 (91.1)	2,023 (92.8)	1,458 (91.1)	1,217 (93.4)	877 (91.8)	794 (94.4)	577 (95.2)	806 (96.0)	656 (96.3)	152 (95.6)
Once or twice in last 3 months	7 (0.2)	5 (0.2)	9 (0.6)	3 (0.2)	6 (0.6)	1 (0.1)	0 (0.0)	2 (0.2)	2 (0.3)	0 (0.0)
Monthly	4 (0.1)	3 (0.1)	1 (0.1)	2 (0.2)	1 (0.1)	2 (0.2)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)
Weekly	1 (0.0)	1 (0.0)	1 (0.1)	2 (0.2)	1 (0.1)	2 (0.2)	0 (0.0)	1 (0.1)	1 (0.1)	0 (0.0)
Daily or almost daily	3 (0.1)	4 (0.2)	3 (0.2)	0 (0.0)	2 (0.2)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)
Declined	33 (1.2)	15 (0.7)	22 (1.4)	19 (1.5)	20 (2.1)	4 (0.5)	0 (0.0)	5 (0.6)	2 (0.3)	1 (0.6)
Unkn	203 (7.2)	128 (5.9)	106 (6.6)	60 (4.6)	48 (5.0)	37 (4.4)	28 (4.6)	26 (3.1)	20 (2.9)	5 (3.1)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 189. Substance Use in the 3 Months Prior to Injury – Inhalants

	Inhalants							
n (%)	**Never**	**Once or twice**	**Monthly**	**Weekly**	**Daily or almost daily**	**Declined**	**Unkn**	**Total**
Total	3,316 (95.4)	8 (0.2)	1 (0.0)	1 (0.0)	2 (0.1)	11 (0.3)	137 (3.9)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 190. Substance Use in the Last 3 Months by Post-Injury Year – Inhalants

	Post-Injury Year									
Inhalants n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Never	2,578 (91.5)	2,034 (93.3)	1,471 (91.9)	1,223 (93.9)	886 (92.8)	799 (95.0)	575 (94.9)	808 (96.2)	659 (96.8)	154 (96.9)
Once or twice in last 3 months	3 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)
Monthly	0 (0.0)	1 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)
Weekly	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)
Daily or almost daily	3 (0.1)	1 (0.0)	0 (0.0)	0 (0.0)	2 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Declined	31 (1.1)	15 (0.7)	21 (1.3)	19 (1.5)	19 (2.0)	4 (0.5)	0 (0.0)	5 (0.6)	0 (0.0)	1 (0.6)
Unkn	202 (7.2)	128 (5.9)	107 (6.7)	61 (4.7)	47 (4.9)	38 (4.5)	29 (4.8)	27 (3.2)	21 (3.1)	4 (2.5)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 191. Substance Use in the 3 Months Prior to Injury – Sedatives/Sleeping

	Sedatives/Sleeping							
n (%)	**Never**	**Once or twice**	**Monthly**	**Weekly**	**Daily or almost daily**	**Declined**	**Unkn**	**Total**
Total	3,280 (94.4)	14 (0.4)	14 (0.4)	13 (0.4)	8 (0.2)	11 (0.3)	136 (3.9)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 192. Substance Use in the Last 3 Months by Post-Injury Year – Sedatives/Sleeping

	Post-Injury Year									
Sedatives/Sleeping n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Never	2,398 (85.1)	1,859 (85.3)	1,380 (86.3)	1,152 (88.4)	815 (85.3)	743 (88.3)	536 (88.4)	759 (90.4)	642 (94.3)	144 (90.6)
Once or twice in last 3 months	14 (0.5)	23 (1.1)	11 (0.7)	8 (0.6)	6 (0.6)	4 (0.5)	2 (0.3)	10 (1.2)	7 (1.0)	3 (1.9)
Monthly	10 (0.4)	13 (0.6)	3 (0.2)	5 (0.4)	8 (0.8)	3 (0.4)	4 (0.7)	5 (0.6)	3 (0.4)	1 (0.6)
Weekly	41 (1.5)	26 (1.2)	14 (0.9)	15 (1.2)	11 (1.2)	14 (1.7)	5 (0.8)	11 (1.3)	1 (0.1)	1 (0.6)
Daily or almost daily	118 (4.2)	114 (5.2)	65 (4.1)	44 (3.4)	48 (5.0)	35 (4.2)	32 (5.3)	22 (2.6)	6 (0.9)	4 (2.5)
Declined	31 (1.1)	14 (0.6)	21 (1.3)	19 (1.5)	19 (2.0)	4 (0.5)	0 (0.0)	6 (0.7)	0 (0.0)	1 (0.6)
Unkn	205 (7.3)	130 (6.0)	106 (6.6)	60 (4.6)	48 (5.0)	38 (4.5)	27 (4.5)	27 (3.2)	22 (3.2)	5 (3.1)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 193. Substance Use in the 3 Months Prior to Injury – Hallucinogens

	Hallucinogens							
n (%)	**Never**	**Once or twice**	**Monthly**	**Weekly**	**Daily or almost daily**	**Declined**	**Unkn**	**Total**
Total	3,255 (93.6)	48 (1.4)	16 (0.5)	3 (0.1)	3 (0.1)	11 (0.3)	140 (4.0)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 194. Substance Use in the Last 3 Months by Post-Injury Year – Hallucinogens

	Post-Injury Year									
Hallucinogens n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Never	2,560 (90.9)	2,016 (92.5)	1,455 (90.9)	1,214 (93.2)	883 (92.5)	797 (94.8)	578 (95.4)	809 (96.3)	656 (96.3)	154 (96.9)
Once or twice in last 3 months	15 (0.5)	17 (0.8)	14 (0.9)	5 (0.4)	2 (0.2)	3 (0.4)	0 (0.0)	0 (0.0)	3 (0.4)	0 (0.0)
Monthly	4 (0.1)	1 (0.0)	1 (0.1)	5 (0.4)	2 (0.2)	0 (0.0)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)
Weekly	1 (0.0)	2 (0.1)	1 (0.1)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Daily or almost daily	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Declined	31 (1.1)	15 (0.7)	21 (1.3)	19 (1.5)	19 (2.0)	4 (0.5)	0 (0.0)	5 (0.6)	0 (0.0)	1 (0.6)
Unkn	205 (7.3)	128 (5.9)	108 (6.8)	59 (4.5)	48 (5.0)	37 (4.4)	27 (4.5)	26 (3.1)	22 (3.2)	4 (2.5)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 195. Substance Use in the 3 Months Prior to Injury – Opioids

	Opioids							
n (%)	**Never**	**Once or twice**	**Monthly**	**Weekly**	**Daily or almost daily**	**Declined**	**Unkn**	**Total**
Total	3,261 (93.8)	12 (0.3)	12 (0.3)	11 (0.3)	30 (0.9)	12 (0.3)	138 (4.0)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 196. Substance Use in the Last 3 Months by Post-Injury Year – Opioids

	Post-Injury Year									
Opioids n (%)	1	5	10	15	20	25	30	35	40	45
Never	2,497 (88.6)	1,936 (88.8)	1,406 (87.9)	1,166 (89.5)	836 (87.5)	768 (91.3)	559 (92.2)	798 (95.0)	647 (95.0)	150 (94.3)
Once or twice in last 3 months	7 (0.2)	20 (0.9)	9 (0.6)	7 (0.5)	7 (0.7)	6 (0.7)	3 (0.5)	0 (0.0)	3 (0.4)	1 (0.6)
Monthly	7 (0.2)	1 (0.0)	4 (0.3)	1 (0.1)	3 (0.3)	0 (0.0)	2 (0.3)	0 (0.0)	2 (0.3)	0 (0.0)
Weekly	4 (0.1)	7 (0.3)	4 (0.3)	5 (0.4)	5 (0.5)	1 (0.1)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)
Daily or almost daily	69 (2.4)	73 (3.4)	49 (3.1)	43 (3.3)	35 (3.7)	25 (3.0)	15 (2.5)	10 (1.2)	5 (0.7)	3 (1.9)
Declined	32 (1.1)	15 (0.7)	21 (1.3)	20 (1.5)	20 (2.1)	4 (0.5)	0 (0.0)	5 (0.6)	2 (0.3)	1 (0.6)
Unkn	201 (7.1)	127 (5.8)	107 (6.7)	61 (4.7)	49 (5.1)	37 (4.4)	27 (4.5)	27 (3.2)	21 (3.1)	4 (2.5)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Participants must be at least 18 years old.

Table 197. Substance Use in the 3 Months Prior to Injury – Other

	Other							
n (%)	Never	Once or twice	Monthly	Weekly	Daily or almost daily	Declined	Unkn	Total
Total	3,294 (94.8)	7 (0.2)	3 (0.1)	3 (0.1)	5 (0.1)	11 (0.3)	153 (4.4)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Other (GHB, bath salts, etc. Excludes Alcohol).
Footnote 3: Participants must be at least 18 years old.

Table 198. Substance Use in the Last 3 Months by Post-Injury Year – Other

	Post-Injury Year									
Other n (%)	1	5	10	15	20	25	30	35	40	45
Never	2,567 (91.1)	2,007 (92.1)	1,458 (91.1)	1,205 (92.5)	874 (91.5)	788 (93.7)	571 (94.2)	795 (94.6)	636 (93.4)	145 (91.2)
Once or twice in last 3 months	2 (0.1)	1 (0.0)	0 (0.0)	3 (0.2)	2 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Monthly	0 (0.0)	2 (0.1)	0 (0.0)	1 (0.1)	1 (0.1)	0 (0.0)	2 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)
Weekly	1 (0.0)	3 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Daily or almost daily	2 (0.1)	7 (0.3)	3 (0.2)	3 (0.2)	2 (0.2)	1 (0.1)	1 (0.2)	2 (0.2)	3 (0.4)	1 (0.6)
Declined	31 (1.1)	18 (0.8)	23 (1.4)	22 (1.7)	21 (2.2)	5 (0.6)	0 (0.0)	6 (0.7)	3 (0.4)	2 (1.3)
Unkn	214 (7.6)	141 (6.5)	115 (7.2)	68 (5.2)	54 (5.7)	46 (5.5)	32 (5.3)	37 (4.4)	39 (5.7)	11 (6.9)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Other (GHB, bath salts, etc. Excludes Alcohol).
Footnote 3: Participants must be at least 18 years old.

Table 199. SCI– FI AT Interview Method at Initial Rehabilitation

	Interview Method				
n (%)	NSCISC Web	Desktop	Short Forms	Interview Not Done/ Age < 18/ No System rehab admit	Total
Total	10 (0.3)	311 (8.9)	2,921 (84.0)	234 (6.7)	3,476

Footnote 1: Form Is admitted to the System since October 1, 2016.

Table 200. SCI– FI AT Interview Method by Post-Injury Year

	Post-Injury Year									
Interview Method n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
NSCISC Web	118 (4.2)	61 (2.8)	86 (5.4)	45 (3.5)	38 (4.0)	27 (3.2)	12 (2.0)	10 (1.2)	11 (1.6)	3 (1.9)
Desktop	270 (9.6)	275 (12.6)	198 (12.4)	207 (15.9)	127 (13.3)	83 (9.9)	55 (9.1)	70 (8.3)	61 (9.0)	11 (6.9)
Short Forms	2,150 (76.3)	1,653 (75.9)	1,181 (73.8)	961 (73.8)	721 (75.5)	680 (80.9)	508 (83.8)	722 (86.0)	578 (84.9)	141 (88.7)
Interview not done, age < 18	279 (9.9)	190 (8.7)	135 (8.4)	90 (6.9)	69 (7.2)	51 (6.1)	31 (5.1)	38 (4.5)	31 (4.6)	4 (2.5)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Table 201. SCI–FI Basic Mobility T Score at Initial Rehabilitation

	Basic Mobility T Score				
	N	**Mean**	**Standard Deviation**	**Minimum**	**Maximum**
Total	3,209	48.1	10.1	0.48	74.98

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 202. SCI–FI Basic Mobility T Score by Post-Injury Year

	Post-Injury Year									
mean (n)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Total	52.5 (2,505)	53.7 (1,974)	52.7 (1,452)	52.9 (1,201)	53.2 (878)	52.8 (788)	52.8 (573)	51.1 (799)	50.8 (645)	49.3 (153)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 203. SCI–FI Self-Care T Score at Initial Rehabilitation

	Self-Care T Score				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	3,201	48.3	11.9	0.50	70.23

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 204. SCI–FI Self-Care T Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	54.1 (2,498)	56.1 (1,967)	55.7 (1,441)	56.4 (1,190)	57.0 (872)	57.0 (786)	57.9 (568)	56.3 (795)	56.2 (641)	54.8 (155)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 205. SCI–FI Fine Motor T Score at Initial Rehabilitation

	Fine Motor T Score				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	3,191	47.2	12.8	0.36	70.09

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 206. SCI–FI Fine Motor T Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	51.0 (2,492)	52.7 (1,971)	52.4 (1,442)	52.6 (1,189)	53.2 (868)	53.4 (783)	53.6 (569)	52.7 (792)	52.5 (640)	51.7 (154)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 207. SCI–FI Ambulation T Score at Initial Rehabilitation

	Ambulation T Score				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	983	58.4	6.5	0.57	81.05

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 208. SCI–FI Ambulation T Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	61.4 (1,112)	61.8 (830)	60.8 (543)	61.1 (397)	60.3 (260)	60.3 (192)	61.1 (121)	60.1 (148)	59.6 (129)	59.4 (21)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 209. SCI–FI Manual Wheelchair Mobility T Score at Initial Rehabilitation

	Manual Wheelchair Mobility T Score				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	1,699	51.9	8.9	0.50	99.99

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 210. SCI–FI Manual Wheelchair Mobility T Score by Post-Injury Year

	Post-Injury Year									
mean (n)	1	5	10	15	20	25	30	35	40	45
Total	54.9 (1,041)	57.3 (825)	57.1 (632)	57.1 (561)	57.4 (456)	58.0 (433)	57.7 (325)	56.3 (440)	55.9 (350)	55.7 (71)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 211. SCI–FI Power Wheelchair Mobility T Score at Initial Rehabilitation

	Power Wheelchair Mobility T Score				
	N	Mean	Standard Deviation	Minimum	Maximum
Total	1,321	40.7	10.0	0.00	64.95

Footnote 1: Form Is admitted to the System since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 212. SCI–FI Power Wheelchair Mobility T Score by Post-Injury Year

	Post-Injury Year									
mean (n)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Total	43.4 (741)	45.5 (597)	46.0 (492)	46.5 (416)	47.5 (283)	46.3 (257)	46.5 (179)	46.6 (275)	47.6 (241)	48.3 (76)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Score ranges from 0 to 100.
Footnote 3: Participants must be at least 18 years old.

Table 213. Internet/Mobile Devices to Access Internet/Email by Post-Injury Year

	Post-Injury Year									
Internet/Mobile Devices to Access Internet/Email n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
No (internet access occurs but not from a mobile device)	704 (11.9)	599 (13.9)	620 (18.9)	471 (18.7)	409 (20.0)	401 (23.6)	462 (26.8)	488 (27.4)	191 (20.2)	36 (22.6)
Cell phone / Smart phone	3,530 (59.9)	2,477 (57.5)	1,787 (54.5)	1,358 (54.0)	1,090 (53.4)	837 (49.2)	756 (43.8)	746 (41.8)	430 (45.4)	85 (53.5)
Portable Media Player (iPod, Kindle Fire, Zune, etc.)	88 (1.5)	59 (1.4)	32 (1.0)	20 (0.8)	17 (0.8)	14 (0.8)	26 (1.5)	18 (1.0)	3 (0.3)	0 (0.0)
Tablet, iPad or laptop used as mobile device	548 (9.3)	476 (11.0)	327 (10.0)	263 (10.4)	198 (9.7)	148 (8.7)	152 (8.8)	220 (12.3)	178 (18.8)	28 (17.6)
PDA	1 (0.0)	2 (0.0)	1 (0.0)	3 (0.1)	1 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)
Other, Unclassified	10 (0.2)	9 (0.2)	6 (0.2)	5 (0.2)	5 (0.2)	9 (0.5)	6 (0.3)	6 (0.3)	1 (0.1)	0 (0.0)
NA, does not access Internet, Email	710 (12.0)	508 (11.8)	387 (11.8)	306 (12.2)	253 (12.4)	227 (13.3)	248 (14.4)	268 (15.0)	120 (12.7)	10 (6.3)
Unknown, Interview not done	303 (5.1)	179 (4.2)	121 (3.7)	91 (3.6)	70 (3.4)	65 (3.8)	75 (4.3)	37 (2.1)	23 (2.4)	0 (0.0)
Total	5,894	4,309	3,281	2,517	2,043	1,702	1,725	1,783	947	159

Footnote 1: Form IIs entered into the database since January 1, 2012.

Table 214. The Number of Employed Weeks in the Last 12 Months by Post-Injury Year

	Post-Injury Year									
mean (n)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Total	27.8 (641)	35.8 (647)	35.3 (493)	39.2 (442)	36.8 (329)	40.6 (262)	46.2 (186)	41.7 (277)	41.7 (207)	35.7 (47)

Footnote 1: Form IIs obtained since October 1, 2016.
Footnote 2: Work includes any civilian work for pay or work without pay on a family-operated farm or business, valid range from1 to 52 weeks.

Table 215. Primary Mode of Transportation by Post-Injury Year

	Post-Injury Year									
Primary Mode of Transportation n (%)	**1**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
None	31 (1.1)	16 (0.7)	12 (0.8)	4 (0.3)	10 (1.0)	6 (0.7)	1 (0.2)	5 (0.6)	5 (0.7)	1 (0.6)
Private car, truck, or van	2,021 (71.7)	1,695 (77.8)	1,245 (77.8)	1,057 (81.1)	740 (77.5)	649 (77.2)	490 (80.9)	697 (83.0)	576 (84.6)	132 (83.0)
Public transportation	118 (4.2)	98 (4.5)	81 (5.1)	60 (4.6)	49 (5.1)	56 (6.7)	35 (5.8)	36 (4.3)	30 (4.4)	3 (1.9)
Taxicab	56 (2.0)	20 (0.9)	12 (0.8)	14 (1.1)	4 (0.4)	6 (0.7)	6 (1.0)	3 (0.4)	8 (1.2)	2 (1.3)
Special transit for people with disabilities	411 (14.6)	207 (9.5)	146 (9.1)	93 (7.1)	80 (8.4)	72 (8.6)	41 (6.8)	62 (7.4)	32 (4.7)	13 (8.2)
Personal mobility device (wheelchair, bike, etc.)	15 (0.5)	18 (0.8)	16 (1.0)	6 (0.5)	12 (1.3)	13 (1.5)	6 (1.0)	6 (0.7)	8 (1.2)	3 (1.9)
Other (ambulance)	29 (1.0)	16 (0.7)	7 (0.4)	11 (0.8)	10 (1.0)	1 (0.1)	4 (0.7)	10 (1.2)	3 (0.4)	3 (1.9)
Walk	10 (0.4)	4 (0.2)	2 (0.1)	1 (0.1)	4 (0.4)	3 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Unkn, Interview not done	126 (4.5)	105 (4.8)	79 (4.9)	57 (4.4)	46 (4.8)	35 (4.2)	23 (3.8)	21 (2.5)	19 (2.8)	2 (1.3)
Total	2,817	2,179	1,600	1,303	955	841	606	840	681	159

Footnote 1: Form IIs obtained since October 1, 2016.

Bibliography

1. Smart, C.N. and Sanders, C.R. (1976) The Costs of Motor Vehicle Related Spinal Cord Injuries. Insurance Institute for Highway Safety, Washington, D.C.

2. DeVivo, M.J., Stover, S.L., Black, K.J. (1992) Prognostic factors for 12-year survival after spinal cord injury. Arch. Phys. Med. Rehabil. 73, 156-162.

3.DeVivo MJ. Estimating Life Expectancy for Use in Determining Lifetime Costs of Care. Top Spinal Cord Inj Rehabil 2002; 7(4):49-58.

4.Strauss D, Shavelle R, Day S, DeVivo MJ. An Analytic Method for Longitudinal Mortality Studies. J Insur Med 2000; 32:217–225.

5. Fine, P.R., Kuhlemeier, K.V., DeVivo, M.J. and Stover, S.L. (1979) Spinal cord injury: an epidemiologic perspective. Paraplegia 17, 237-250.

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