

Author, Year Country Research Design Total Sample Size Level of Evidence	Population (Inclusion and exclusion criteria)	Definition of cases (nominator) and source population (denominator) used to calculate incidence	Incidence / Prevalence (In Total Sample / By Injury Classification)
MacKinnon et al. (1993) Canada Case Series N=22 Level of Evidence: 4	Five Canadian regional neonatal tertiary care centers Time-period soon after birth SCI apparent after birth as neonate	Cases w/ lesions above the fourth cervical vertebrae / Total SCI cases Cases w/ lesions at the fourth cervical to the fourth thoracic vertebrae / Total SCI cases Cases w/ lesions at the thoracolumbar region / Total SCI cases	64% 27% 9%
Mohseni et al. (2011) USA Case Series N= 240,647 Level of Evidence: 4	January 2002 through December 2006 Pediatric patients admitted following blunt trauma Less than 18 years of age Review of National Trauma Data Bank Cervical spinal cord injury diagnoses	CSI cases stratified by age group / Total patients that meet inclusion criteria CSI level [C1-C4] vs lower [C5-C7] / CSI cases stratified by age CSI cases / Patients that meet inclusion criteria	Infants/toddlers = 0.4% Preschool/young children = 0.4% Preadolescents = 0.8% Adolescents = 2.6% Infants and toddlers, 70% vs 25% Preschool/young children, 74% vs 17% Preadolescents, 52% vs 37% Adolescents, 40% vs 45% 1.3%
Patel et al. (2001) USA Case Series N= 75,172 Level of Evidence: 4	10-year period Children with cervical spine injury in the National Pediatric Trauma Registry	CSI cases / All injured children	1.5%, n=1,098
Piatt and Imperato (2018) USA Case Series N= 75,172 Level of Evidence: 4	Discharges coded for spinal injury were extracted from the Kids' Inpatient Database 1997, 2000, 2003, 2006, 2009, and 2012 Patients younger than 18 years of age	SCI cases / Child population	25 per million in 1997 and 14 per million in 2012 MVC injuries = 31.9% in children and 50% in adolescents

<p>Piatt (2015) USA Case Series N=Not Specified Level of Evidence: 4</p>	<p>Admissions for spinal fracture without or with spinal cord injury (SCI), spinal dislocation, and SCI without radiographic abnormality Kids' Inpatient Database (KID) and the National Trauma Data Bank (NTDB) registry During 2009 Patients younger than 21 years of age</p>	<p>Patients admitted to hospital for Spinal injury / Total children in population SCI cases / Total children in population Black patients with spinal injury due to firearm / Black patients with spinal injury White patients with spinal injury due to firearm / White patients with spinal injury</p>	<p>170 per 1 million in the population under 21 years of age 24 per 1 million 23.9% 1%</p>
<p>Poorman et al. (2019) USA Case Series N=11,196 Level of Evidence: 4</p>	<p>Kids' Inpatient Database (KID) Trauma cases from 2003 to 2012 Cervical fracture patients Patients younger than 18 years of age</p>	<p>Cervical fracture cases / Total trauma patients MVC cases / Total trauma cases</p>	<p>2003 vs 2012, 2.39% vs 3.12% 50.5%</p>
<p>Shin et al. (2016) USA Case Series N=Not Specified Level of Evidence: 4</p>	<p>KID 2000 to 2012 Using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes Patients younger than 18 years of age</p>	<p>Cases of traumatic pediatric CSI / Cases of PCSI PCSI cases due to transportation accidents / Traumatic PCSI cases</p>	<p>2.07% 57.51%</p>
<p>Vitale et al. (2006) USA Case Series N₁₉₉₇=1.9 million, N₂₀₀₀=2.5 million Level of Evidence: 4</p>	<p>The Kids' Inpatient Database (KID) and the National Trauma Data Bank (NTDB) Diagnosis of pediatric SCI Patients younger than 18 years of age</p>	<p>Cases of PedSCI in African Americans / Total cases of PedSCI Cases of PedSCI in Native Americans / Total cases of PedSCI Cases of PedSCI in Hispanics / Total cases of PedSCI</p>	<p>1.53 cases/100,000 children 1.00 cases/100,000 children 0.87 cases/100,000 children 0.36 cases/100,000 children 2.79 cases/100,000 children</p>

		<p>Cases of PedSCI in Asians / Total cases of PedSCI</p> <p>Cases of PedSCI in males / Total cases of PedSCI</p> <p>Cases of PedSCI in females / Total cases of PedSCI</p> <p>Total cases of PedSCI / All children</p>	<p>1.15 cases/100,000 children</p> <p>1.99 cases/100,000 children</p>
<p>Saunders et al. (2015) USA Case Series N=Not Specified Level of Evidence: 4</p>	<p>Children and adolescents (0-21 years) with SCI Identified through the South Carolina SCI Surveillance Registry using hospital discharge records from 1998 to 2012</p>	<p>Child and adolescent cases of SCI / Total number of children and adolescents</p>	<p>Overall age-adjusted incidence rate was 26.9 per million population</p>
<p>Kewalramani et al. (1980) USA (18 counties in Northern California) Case Series N=1589228 Level of Evidence: 4</p>	<p>Review of the diagnosis of spinal cord injury by attending physician Patients aged between 1 – 15 years of age Resident of 1 of 18 Northern California counties Between 1970 and 1971 Systematic review of records, files, reports from hospital and coroner's offices in each county and records of the State of California's Department of Health</p>	<p>Cases of SCI in children 1 – 15 years of age / Total number of children</p>	<p>Number and average annual incidence rate of acute spinal cord lesions in children in 18 Northern California counties 18.2 / million</p>
<p>Durkin et al. (1998) USA (Northern Manhattan) Case Series N=Not Specified Level of Evidence: 4</p>	<p>Pediatric deaths and hospital admissions secondary to neurological trauma Patients younger than 18 years of age Northern Manhattan Injury Surveillance System from 1983 to 1992 were linked to census counts to compute incidence rates</p>	<p>Pediatric cases of neurological injuries resulting in hospitalization or death / Total number of children</p>	<p>Incidence of neurological injuries resulting in hospitalization or death was 155 incidents per 100,000 population per year</p>