

**Data Brief:   
Sharps Injuries among Hospital Workers in Massachusetts: Findings from the Massachusetts Sharps Injury Surveillance System,**

**2016, 2017, 2018**

Massachusetts Department of Public Health September, 2020

Since April 2001, hospitals licensed by the Massachusetts Department of Public Health (DPH) have been required to report data on sharps injuries among workers to the Department annually (MGL Chapter 111 §53D). Data collected from all DPH licensed hospitals (an average of 97 hospitals annually) have been published since 2002, the first full year of data available. This report includes data on sharps injuries that occurred during 2016, 2017 and 2018.

The Massachusetts Sharps Injury Surveillance System is intended to provide information to assist Massachusetts hospitals and hospital workers in targeting and evaluating efforts to reduce the incidence of sharps injuries and the associated human and economic costs. For a more comprehensive description of the system, please see: <http://www.mass.gov/eohhs/docs/dph/occupational-health/injuries/injuries-hospital-2004.pdf>.

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|  |
| **Data Highlights and Prevention Measures** |
| * The number of sharps injuries reported by all MDPH licensed hospitals in Massachusetts remained steady between 2016 and 2018 with 2,908 sharps injuries (SI) reported in 2016, 3,010 SI reported in 2017, and 2,938 SI reported in 2018. The SI rate for workers in all hospitals fluctuated slightly from 16.1 SI per 100 licensed beds in 2016 to 17.0 per 100 licensed beds in 2017 to 16.6 per 100 licensed beds in 2018. These rates were similar to rates since 2010 (Figure 1). Comparable findings were noted in rates for employees (per full time employee equivalents) in acute care hospitals only (Figure 2). These findings suggest that the earlier observed decline in rates from 2002-2010 is leveling off and underscore the need for a continuing commitment to preventing sharps injuries. Hospitals, in interpreting their own sharps injury rates, need to understand employee reporting practices in their facilities. |
| * In 2018, nurses reported more injuries than any other occupation group (Tables 2 and 10). This is in contrast to 2016 and 2017, where physicians reported more injuries than any other occupation group. It is however, similar to patterns seen from 2002-2010, where nurses accounted for the most injuries. Consistently in all three years, nurses in small and medium sized hospitals reported more injuries than physicians, while in large hospitals physicians account for the greatest number of sharps injuries. This difference by hospital size may reflect differences in types of procedures conducted (e.g., more surgery in larger hospitals). |
| * Consistently across all three years, half of all SI occurred with devices lacking sharps injury prevention features (Table 5). When adjusting for suture needles, the percentage remains high with 37% of injuries involving devices lacking sharps injury prevention features in each of the three years. This distribution varied by device, with suture needles and scalpels accounting for the largest percentage of devices without sharps injury prevention features (Figure 3). Winged steel needles and vacuum tube collection sets had the smallest percentage of injuries with devices lacking sharps injury prevention features (Figure 3). In accordance with 105 CMR 130.1001 *et seq,* hospitals are required to use devices with sharps injury prevention features as a means of minimizing the risk of injury to healthcare workers from needles and other sharps. This high percentage of injuries involving sharps with engineered sharps injury protections (SESIPs) likely reflects high uptake of SESIPs as required, but also underscores the importance of evaluating SESIPs currently being used in order to identify opportunities for using more protective devices as well as the need to use administrative and work practice controls (e.g., using alternative methods to deliver medication). Regular evaluation of devices is necessary in order to select and implement devices that are most effective at preventing injuries. |
| * While injuries in operating and procedure rooms account for the greatest number of injuries in all three years (44% in 2017, 45% in 2016 and 2018), followed by inpatient units (excluding intensive care units) (20%, 21%, 22%), and the emergency department (10%, 9%, 9%) (Tables 2 and 11). Hospitals are encouraged to evaluate the devices used and work-practices in these areas to identify any patterns for targeting prevention efforts. |

**Key Definitions and Methods**

**Sharps injury (also referred to as an exposure incident):**An exposure to blood or other potentially infectious materials as a result of an incident involving a contaminated sharp device that pierces the skin or mucous membranes. An injury with a clean sharp or device (before use) through contaminated gloves or other contaminated mediums is also considered a sharps injury. An injury involving a clean device without any contact with infectious materials is not considered an exposure incident.

**Sharps device:**Any object that can penetrate the skin or any part of the body and result in an exposure incident, including but not limited to needle devices, scalpels, lancets, broken glass, and broken capillary tubes.

**Population under surveillance:**All health care workers in acute and non-acute care hospitals licensed by DPH, as well as any satellite units (e.g., ambulatory care centers) operating under a hospital license.

**Surveillance Period:** Calendar years 2016, 2017 and 2018. For trend analysis, calendar years 2002-2018.

**Sharps injury rates:**Sharps injury rates indicate the probability or risk of a worker sustaining a sharps injury within the surveillance period. Numbers are the counts of sharps injuries. A large hospital may have many workers who sustain sharps injuries but the rate of injury may be low. Conversely, in a smaller hospital, relatively few workers may sustain sharps injuries but the risk may be high. Both rates and numbers of injuries must be considered when targeting and evaluating prevention efforts. The rates presented in this report were calculated by dividing the number of sharps injuries among all workers by the number of licensed beds. Confidence intervals (CI) are presented for each rate. Trends in annual rates were modeled using both negative binomial and joinpoint regressions. Joinpoint regression was used to identify any changes in the trends over the same period. Negative binomial regression was used to model the overall trends of these rates from 2002 to 2018.

**Sharps with engineered sharps injury protections (SESIPs):**Needle devices and non-needle sharps used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with built-in sharps injury prevention features or mechanisms that effectively reduce the risk of an exposure incident.

**Findings**

|  |  |  |  |  |  |  |  |  |  |  |  |
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| **Table 1a.** | | **Number and rate of sharps injuries among hospital workers by hospital characteristics, Massachusetts, 2016** | | | | | | | | | |
|  | |  | | | | | | | | | |
|  | | |  | **Number of Hospitals** | | **Number of sharps injuries** | | **Rate per 100 licensed beds** | | **95% CI** | |
| **Hospital size** | | |  |  |  |  |  |  |  |  |  |
|  | Small (< 100 licensed beds) | | | 29 |  | 194 |  | 11.3 |  | 9.7-12.9 |  |
|  | Medium (101-300 licensed beds) | | | 49 |  | 968 |  | 11.1 |  | 10.4-11.8 |  |
|  | Large (>300 licensed beds) | | | 15 |  | 1,746 |  | 22.9 |  | 21.8-24.0 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Service Type** | | |  |  |  |  |  |  |  |  |  |
|  | Acute care | | | 75 |  | 2,842 |  | 18.7 |  | 18.0-19.4 |  |
|  | Non-acute care\* | | | 18 |  | 66 |  | 2.33 |  | 1.8-2.9 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Teaching Status** | | |  |  |  |  |  |  |  |  |  |
|  | Teaching | | | 16 |  | 1,793 |  | 28.0 |  | 26.7-29.3 |  |
|  | Non-teaching | | | 77 |  | 1,115 |  | 9.6 |  | 9.0-10.1 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Total** | | |  | **93** |  | **2,908** |  | **16.1** |  | **15.5-16.7** |  |
| \*Non-acute care hospitals include chronic care and rehabilitation facilities. | | | | | | | | | | | |
| **Table 1b.** | | **Number and rate of sharps injuries among hospital workers by hospital characteristics, Massachusetts, 2017** | | | | | | | | | |
| **Hospital size** | | |  |  |  |  |  |  |  |  |  |
|  | Small (≤ 100 licensed beds) | | | 29 |  | 201 |  | 12.0 |  | 10.3-13.7 |  |
|  | Medium (101-300 licensed beds) | | | 50 |  | 956 |  | 10.5 |  | 9.9-11.2 |  |
|  | Large (>300 licensed beds) | | | 13 |  | 1853 |  | 26.5 |  | 25.3-27.7 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Service Type** | | |  |  |  |  |  |  |  |  |  |
|  | Acute care | | | 74 |  | 2,944 |  | 19.4 |  | 18.7-20.1 |  |
|  | Non-acute care\* | | | 18 |  | 66 |  | 2.5 |  | 1.9-3.1 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Teaching Status** | | |  |  |  |  |  |  |  |  |  |
|  | Teaching | | | 13 |  | 1,915 |  | 31.9 |  | 30.5-33.3 |  |
|  | Non-teaching | | | 79 |  | 1,095 |  | 9.3 |  | 8.8-9.9 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Total** | | |  | **92** |  | **3,010** |  | **17.0** |  | **16.4-17.6** |  |
| \*Non-acute care hospitals include chronic care and rehabilitation facilities. | | | | | | | | | | | |
| **Table 1c.** | | **Number and rate of sharps injuries among hospital workers by hospital characteristics, Massachusetts, 2018** | | | | | | | | | |
| **Hospital size** | | |  |  |  |  |  |  |  |  |  |
|  | Small (≤ 100 licensed beds) | | | 27 |  | 175 |  | 11.6 |  | 9.9-13.3 |  |
|  | Medium (101-300 licensed beds) | | | 49 |  | 931 |  | 10.6 |  | 9.9-11.3 |  |
|  | Large (>300 licensed beds) | | | 14 |  | 1832 |  | 24.7 |  | 23.6-25.8 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Service Type** | | |  |  |  |  |  |  |  |  |  |
|  | Acute care | | | 72 |  | 2,874 |  | 19.3 |  | 18.6-20.1 |  |
|  | Non-acute care\* | | | 18 |  | 64 |  | 2.3 |  | 1.7-2.8 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Teaching Status** | | |  |  |  |  |  |  |  |  |  |
|  | Teaching | | | 18 |  | 1,906 |  | 27.3 |  | 26.2-28.5 |  |
|  | Non-teaching | | | 72 |  | 1,032 |  | 9.6 |  | 9.1-10.2 |  |
|  | | |  |  |  |  |  |  |  |  |  |
| **Total** | | |  | **90** |  | **2,938** |  | **16.6** |  | **16.0-17.2** |  |

\*Non-acute care hospitals include chronic care and rehabilitation facilities.

**Figure 1. Number and rate of sharps injuries per licensed beds among all workers in acute and non-acute care hospitals, Massachusetts, 2002-2018**

**Sharps injuries per 100 licensed beds**

The sharps injury rate for all hospitals combined decreased significantly between 2002 and 2010. The average annual percent change in the sharps injury rate between 2002 and 2010 was -2.4 (p<0.05). However, the average annual percent change from 2010 to 2018 was 0.63 (p <0.05), indicating that the rate has a statistically significant increase over that time period.

**Figure 2. Number and rate of sharps injuries per licensed beds among all workers in acute care hospitals only, Massachusetts, 2002-2018**

Year

**Sharps injuries per 100 licensed beds**

The sharps injury rate for acute care hospitals decreased significantly between 2002 and 2010. The average annual percent change in the sharps injury rate between 2002 and 2010 was -2.7 (p<0.05). However, the average annual percent change from 2010 to 2018 was 0.37 (p=0.13), indicating that the rate remained relatively steady over that time period.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 2a.** | | **Sharps injuries by worker and incident characteristics and hospital size, Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | | |
|  | | | | | | | | Hospital Size | | | | | | | | | | | |
|  | | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | | 93 hospitals | | | | 29 hospitals | | | | 49 hospitals | | | | 15 hospitals | | | |
|  | | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Work status of injured worker** | | | | **2,908** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  |
|  | Employee | | | 2,469 |  | 85 |  | 177 |  | 91 |  | 790 |  | 82 |  | 1,502 |  | 86 |  |
|  | Non-Employee Practitioner | | | 326 |  | 11 |  | 7 |  | 4 |  | 128 |  | 13 |  | 191 |  | 11 |  |
|  | Student | | | 80 |  | 3 |  | 5 |  | 3 |  | 30 |  | 3 |  | 45 |  | 3 |  |
|  | Temporary / Contract Worker | | | 33 |  | 1 |  | 5 |  | 3 |  | 20 |  | 2 |  | 8 |  | <1 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Occupation** | | | | **2,908** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  |
|  | Physician | | | 1,099 |  | 38 |  | 47 |  | 24 |  | 279 |  | 29 |  | 773 |  | 44 |  |
|  | Nurse | | | 1,092 |  | 38 |  | 90 |  | 46 |  | 380 |  | 39 |  | 622 |  | 36 |  |
|  | Technician | | | 462 |  | 16 |  | 40 |  | 21 |  | 205 |  | 21 |  | 217 |  | 12 |  |
|  | Support Services | | | 123 |  | 4 |  | 8 |  | 4 |  | 50 |  | 5 |  | 65 |  | 4 |  |
|  | Other Medical Staff | | | 76 |  | 2 |  | <10 |  | -- |  | <40 |  | -- |  | <35 |  | -- |  |
|  | Other / Unknown / Not answered | | | 56 |  | 2 |  | <5 |  | -- |  | <20 |  | -- |  | <40 |  | -- |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Department where injury occurred** | | | | **2,908** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  |
|  | Operating and Procedure Rooms | | | 1,298 |  | 45 |  | 72 |  | 37 |  | 383 |  | 40 |  | 843 |  | 48 |  |
|  | Inpatient Units | | | 592 |  | 20 |  | 51 |  | 26 |  | 210 |  | 22 |  | 331 |  | 19 |  |
|  | Emergency Department | | | 281 |  | 10 |  | 22 |  | 11 |  | 128 |  | 13 |  | 131 |  | 8 |  |
|  | Intensive Care Units | | | 207 |  | 7 |  | <5 |  | -- |  | <65 |  | -- |  | 140 |  | 8 |  |
|  | Outpatient areas | | | 201 |  | 7 |  | 23 |  | 12 |  | 70 |  | 7 |  | 108 |  | 6 |  |
|  | Laboratories | | | 117 |  | 4 |  | 6 |  | 3 |  | 34 |  | 4 |  | 77 |  | 4 |  |
|  | Other / Unknown / Not answered | | | 212 |  | 7 |  | <20 |  | -- |  | <80 |  | -- |  | 116 |  | 7 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Device involved in the injury** | | | | **2,908** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  |
|  | Hypodermic needle/syringe | | | 938 |  | 32 |  | 62 |  | 32 |  | 344 |  | 36 |  | 532 |  | 30 |  |
|  | Suture needle | | | 631 |  | 22 |  | 34 |  | 18 |  | 190 |  | 20 |  | 407 |  | 23 |  |
|  | Scalpel blade | | | 210 |  | 7 |  | 12 |  | 6 |  | 55 |  | 6 |  | 143 |  | 8 |  |
|  | Winged-steel needle | | | 188 |  | 6 |  | 23 |  | 12 |  | 81 |  | 8 |  | 84 |  | 5 |  |
|  | Vacuum tube collection holder/needle | | | 114 |  | 4 |  | 5 |  | 3 |  | 61 |  | 6 |  | 48 |  | 3 |  |
|  | Glass | | | 28 |  | 1 |  | <5 |  | -- |  | <10 |  | -- |  | 21 |  | 1 |  |
|  | Dental device or item | | | 13 |  | <1 |  | <5 |  | -- |  | <10 |  | -- |  | 6 |  | <1 |  |
|  | Other hollow bore needle | | | 310 |  | 11 |  | 21 |  | 11 |  | 80 |  | 8 |  | 209 |  | 12 |  |
|  | Other / Unknown / Not answered | | | 476 |  | 16 |  | 36 |  | 19 |  | 144 |  | 15 |  | 296 |  | 17 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Procedure for which the device was used** | | | | **2,908** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  |
|  | Injection | | | 795 |  | 27 |  | 56 |  | 29 |  | 282 |  | 29 |  | 457 |  | 26 |  |
|  | Suturing | | | 637 |  | 22 |  | 33 |  | 17 |  | 195 |  | 20 |  | 409 |  | 23 |  |
|  | Blood procedures | | | 369 |  | 13 |  | 33 |  | 17 |  | 164 |  | 17 |  | 172 |  | 10 |  |
|  | Line procedures | | | 308 |  | 11 |  | 24 |  | 12 |  | 90 |  | 9 |  | 194 |  | 11 |  |
|  | Making the incision | | | 291 |  | 10 |  | 22 |  | 11 |  | 69 |  | 7 |  | 200 |  | 11 |  |
|  | To obtain body fluid or tissue sample | | | 48 |  | 2 |  | 0 |  | 0 |  | 11 |  | 1 |  | 37 |  | 2 |  |
|  | Dental procedures | | | 15 |  | 1 |  | 0 |  | 0 |  | 6 |  | 1 |  | 9 |  | 1 |  |
|  | Other / Unknown / Not answered | | | 445 |  | 15 |  | 26 |  | 13 |  | 151 |  | 16 |  | 268 |  | 15 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ^Hospital size: small≤100 licensed beds; medium=101-300 licensed beds; large>300 licensed beds | | | | | | | | | | | | | | | | | | | |
| For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed. | | | | | | | | | | | | | | | | | | | |
| **Table 2b.** | | | **Sharps injuries by worker and incident characteristics and hospital size, Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | | |
|  | | | | | | | | Hospital Size | | | | | | | | | | | | |
|  | | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | | |
|  | | | | 92 hospitals | | | | 29 hospitals | | | | 50 hospitals | | | | 13 hospitals | | | | |
|  | | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  | |
| **Work status of injured worker** | | | | **3,010** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** |  | |
|  | Employee | | | 2,562 |  | 85 |  | 187 |  | 93 |  | 783 |  | 82 |  | 1,592 |  | 86 |  | |
|  | Non-Employee Practitioner | | | 350 |  | 12 |  | 6 |  | 3 |  | 123 |  | 13 |  | 221 |  | 12 |  | |
|  | Student | | | 63 |  | 2 |  | 0 |  | 0 |  | 32 |  | 3 |  | 31 |  | 2 |  | |
|  | Temporary / Contract Worker | | | 35 |  | 1 |  | 8 |  | 4 |  | 18 |  | 2 |  | 9 |  | <1 |  | |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **Occupation** | | | | **3,010** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** |  | |
|  | Physician | | | 1,160 |  | 39 |  | 55 |  | 27 |  | 267 |  | 28 |  | 838 |  | 45 |  | |
|  | Nurse | | | 1,071 |  | 36 |  | 82 |  | 41 |  | 366 |  | 38 |  | 623 |  | 34 |  | |
|  | Technician | | | 479 |  | 16 |  | 39 |  | 19 |  | 210 |  | 22 |  | 230 |  | 12 |  | |
|  | Support Services | | | 129 |  | 4 |  | 10 |  | 5 |  | 48 |  | 5 |  | 71 |  | 4 |  | |
|  | Other Medical Staff | | | 108 |  | 4 |  | <15 |  | -- |  | 33 |  | 4 |  | <65 |  | -- |  | |
|  | Other / Unknown / Not answered | | | 63 |  | 2 |  | <5 |  | -- |  | 32 |  | 3 |  | <30 |  | -- |  | |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **Department where injury occurred** | | | | **3,010** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** |  | |
|  | Operating and Procedure Rooms | | | 1,319 |  | 44 |  | 83 |  | 41 |  | 391 |  | 41 |  | 845 |  | 46 |  | |
|  | Inpatient Units, excluding ICU | | | 626 |  | 21 |  | 48 |  | 24 |  | 228 |  | 23 |  | 350 |  | 19 |  | |
|  | Emergency Department | | | 283 |  | 9 |  | 24 |  | 12 |  | 130 |  | 14 |  | 129 |  | 7 |  | |
|  | Outpatient areas | | | 269 |  | 9 |  | 22 |  | 11 |  | 58 |  | 6 |  | 187 |  | 10 |  | |
|  | Intensive Care Units | | | 217 |  | 7 |  | 8 |  | 4 |  | 58 |  | 6 |  | 151 |  | 8 |  | |
|  | Laboratories | | | 85 |  | 3 |  | 7 |  | 3 |  | 12 |  | 1 |  | 66 |  | 4 |  | |
|  | Other / Unknown / Not answered | | | 211 |  | 7 |  | 9 |  | 4 |  | 80 |  | 8 |  | 122 |  | 7 |  | |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **Device involved in the injury** | | | | **3,010** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** |  | |
|  | Hypodermic needle/syringe | | | 1,018 |  | 34 |  | 71 |  | 35 |  | 338 |  | 35 |  | 609 |  | 33 |  | |
|  | Suture needle | | | 681 |  | 23 |  | 31 |  | 15 |  | 195 |  | 20 |  | 455 |  | 25 |  | |
|  | Scalpel blade | | | 220 |  | 7 |  | 15 |  | 7 |  | 58 |  | 6 |  | 147 |  | 8 |  | |
|  | Winged-steel needle | | | 212 |  | 7 |  | 11 |  | 5 |  | 80 |  | 8 |  | 121 |  | 7 |  | |
|  | Vacuum tube collection holder/needle | | | 91 |  | 3 |  | <10 |  | -- |  | 48 |  | 5 |  | <40 |  | -- |  | |
|  | Glass | | | 32 |  | 1 |  | <5 |  | -- |  | <10 |  | -- |  | <30 |  | -- |  | |
|  | Dental device or item | | | 16 |  | 1 |  | 0 |  | 0 |  | <5 |  | -- |  | <15 |  | -- |  | |
|  | Other hollow bore needle | | | 294 |  | 10 |  | 30 |  | 15 |  | 102 |  | 11 |  | 162 |  | 9 |  | |
|  | Other / Unknown / Not answered | | | 446 |  | 15 |  | 34 |  | 16 |  | 127 |  | 14 |  | 285 |  | 15 |  | |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **Procedure for which the device was used** | | | | **3,010** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** |  | |
|  | Injection | | | 844 |  | 28 |  | 60 |  | 30 |  | 287 |  | 30 |  | 497 |  | 27 |  | |
|  | Suturing | | | 657 |  | 22 |  | 30 |  | 15 |  | 186 |  | 19 |  | 441 |  | 24 |  | |
|  | Blood procedures | | | 383 |  | 13 |  | 24 |  | 12 |  | 163 |  | 17 |  | 196 |  | 11 |  | |
|  | Making the incision | | | 326 |  | 11 |  | 36 |  | 18 |  | 85 |  | 9 |  | 205 |  | 11 |  | |
|  | Line procedures | | | 226 |  | 8 |  | <25 |  | -- |  | <70 |  | -- |  | 139 |  | 7 |  | |
|  | To obtain body fluid or tissue sample | | | 80 |  | 3 |  | <5 |  | -- |  | <25 |  | -- |  | <65 |  | -- |  | |
|  | Dental procedures | | | 21 |  | 1 |  | 0 |  | 0 |  | <5 |  | -- |  | <20 |  | -- |  | |
|  | Other / Unknown / Not answered | | | 473 |  | 16 |  | 26 |  | 12 |  | 150 |  | 15 |  | 297 |  | 16 |  | |
| ^Hospital size: small≤100 licensed beds; medium=101-300 licensed beds; large>300 licensed beds | | | | | | | | | | | | | | | | | | | | |
| For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed. | | | | | | | | | | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 2c.** | | **Sharps injuries by worker and incident characteristics and hospital size, Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | |
|  | | | | | | | Hospital Size | | | | | | | | | | | |
|  | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | 90 hospitals | | | | 27 hospitals | | | | 49 hospitals | | | | 14 hospitals | | | |
|  | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Work status of injured worker** | | | **2,938** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** |  |
|  | Employee | | 2,558 |  | 87 |  | 152 |  | 87 |  | 784 |  | 84 |  | 1,622 |  | 89 |  |
|  | Non-Employee Practitioner | | 255 |  | 9 |  | 10 |  | 6 |  | 90 |  | 10 |  | 155 |  | 8 |  |
|  | Student | | 79 |  | 3 |  | <5 |  | -- |  | <35 |  | -- |  | 42 |  | 2 |  |
|  | Temporary / Contract Worker | | 34 |  | 1 |  | 8 |  | 5 |  | <20 |  | -- |  | <15 |  | -- |  |
|  | Nonclassifiable | | 12 |  | <1 |  | <5 |  | -- |  | 8 |  | 1 |  | <5 |  | -- |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Occupation** | | | **2,938** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** |  |
|  | Nurse | | 1,111 |  | 38 |  | 70 |  | 40 |  | 394 |  | 42 |  | 647 |  | 35 |  |
|  | Physician | | 1,046 |  | 36 |  | 47 |  | 27 |  | 219 |  | 24 |  | 780 |  | 43 |  |
|  | Technician | | 464 |  | 16 |  | 34 |  | 19 |  | 210 |  | 23 |  | 220 |  | 12 |  |
|  | Support Services | | 125 |  | 4 |  | <10 |  | -- |  | <50 |  | -- |  | 71 |  | 4 |  |
|  | Other Medical Staff | | 107 |  | 4 |  | 12 |  | 7 |  | 33 |  | 4 |  | 62 |  | 3 |  |
|  | Other / Unknown / Not answered | | 85 |  | 3 |  | <10 |  | -- |  | <30 |  | -- |  | 52 |  | 3 |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Department where injury occurred** | | | **2,938** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** |  |
|  | Operating and Procedure Rooms | | 1,319 |  | 45 |  | 66 |  | 38 |  | 376 |  | 40 |  | 877 |  | 48 |  |
|  | Inpatient Units, excluding ICU | | 642 |  | 22 |  | 42 |  | 24 |  | 230 |  | 25 |  | 370 |  | 20 |  |
|  | Emergency Department | | 276 |  | 9 |  | 18 |  | 10 |  | 123 |  | 13 |  | 135 |  | 7 |  |
|  | Intensive Care Units | | 212 |  | 7 |  | <10 |  | -- |  | <50 |  | -- |  | 157 |  | 9 |  |
|  | Outpatient areas | | 187 |  | 6 |  | 26 |  | 15 |  | 28 |  | 3 |  | 133 |  | 7 |  |
|  | Laboratories | | 70 |  | 2 |  | <5 |  | -- |  | <25 |  | -- |  | 45 |  | 2 |  |
|  | Other / Unknown / Not answered | | 232 |  | 8 |  | 12 |  | 7 |  | 105 |  | 11 |  | 115 |  | 6 |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Device involved in the injury** | | | **2,938** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** |  |
|  | Hypodermic needle/syringe | | 994 |  | 34 |  | 50 |  | 29 |  | 335 |  | 36 |  | 609 |  | 33 |  |
|  | Suture needle | | 640 |  | 22 |  | 28 |  | 16 |  | 144 |  | 15 |  | 468 |  | 26 |  |
|  | Winged-steel needle | | 236 |  | 8 |  | 19 |  | 11 |  | 109 |  | 12 |  | 108 |  | 6 |  |
|  | Scalpel blade | | 195 |  | 7 |  | 9 |  | 5 |  | 59 |  | 6 |  | 127 |  | 7 |  |
|  | Vacuum tube collection holder/needle | | 85 |  | 3 |  | <5 |  | -- |  | 49 |  | 5 |  | <35 |  | -- |  |
|  | Glass | | 21 |  | 1 |  | <5 |  | -- |  | <10 |  | -- |  | <15 |  | -- |  |
|  | Dental device or item | | 10 |  | <1 |  | 0 |  | 0 |  | 0 |  | 0 |  | 10 |  | <1 |  |
|  | Other hollow bore needle | | 289 |  | 10 |  | 24 |  | 14 |  | 87 |  | 9 |  | 178 |  | 10 |  |
|  | Other / Unknown / Not answered | | 468 |  | 16 |  | 38 |  | 22 |  | 140 |  | 15 |  | 290 |  | 16 |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Procedure for which the device was used** | | | **2,938** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** |  |
|  | Injection | | 871 |  | 30 |  | 45 |  | 26 |  | 287 |  | 31 |  | 539 |  | 29 |  |
|  | Suturing | | 640 |  | 22 |  | 28 |  | 16 |  | 136 |  | 15 |  | 476 |  | 26 |  |
|  | Blood procedures | | 370 |  | 13 |  | 19 |  | 11 |  | 168 |  | 18 |  | 183 |  | 10 |  |
|  | Making the incision | | 314 |  | 11 |  | 15 |  | 9 |  | 100 |  | 11 |  | 199 |  | 11 |  |
|  | Line procedures | | 281 |  | 10 |  | 29 |  | 17 |  | 80 |  | 9 |  | 172 |  | 9 |  |
|  | To obtain body fluid or tissue sample | | 53 |  | 2 |  | <5 |  | -- |  | <20 |  | -- |  | 31 |  | 2 |  |
|  | Dental procedures | | 15 |  | 1 |  | <5 |  | -- |  | <5 |  | -- |  | <15 |  | -- |  |
|  | Other / Unknown / Not answered | | 394 |  | 13 |  | 36 |  | 21 |  | 139 |  | 15 |  | 219 |  | 12 |  |
| ^Hospital size: small≤100 licensed beds; medium=101-300 licensed beds; large>300 licensed beds | | | | | | | | | | | | | | | | | | |
| For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed. | | | | | | | | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 3a.** | **Sharps injuries involving hollow-bore devices by device type and occupation, Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Occupation** | | | **Total** | | | | | | | | **Hypodermic** | | | | | | | **Winged-Steel** | | | | | | | | **Vacuum Tube** | | | | | **Other Hollow** | | | |
|  | | |  | | | | | | | | **Needle/Syringe** | | | | | | | **Needle** | | | | | | | | **Collection Set** | | | | | **Bore** | | | |
|  | | | N | |  | | % | |  | | N |  | | % | |  | | N | |  | | % | |  | | N | |  | % |  | N |  | % |  |
| **Nurse** | | | 857 | |  | | 100 | |  | | 561 |  | | 65 | |  | | 79 | |  | | 9 | |  | | 53 | |  | 6 |  | 164 |  | 19 |  |
| **Physician** | | | 325 | |  | | 100 | |  | | 221 |  | | 68 | |  | | <5 | |  | | -- | |  | | <5 | |  | -- |  | 98 |  | 30 |  |
| **Technician** | | | 257 | |  | | 100 | |  | | 91 |  | | 35 | |  | | 86 | |  | | 33 | |  | | 52 | |  | 20 |  | 28 |  | 11 |  |
| **Support Services** | | | 39 | |  | | 100 | |  | | 23 |  | | 59 | |  | | <5 | |  | | <1 | |  | | <5 | |  | -- |  | 15 |  | 38 |  |
| **Other medical staff** | | | 50 | |  | | 100 | |  | | 29 |  | | 58 | |  | | 14 | |  | | 28 | |  | | <10 | |  | -- |  | <5 |  | -- |  |
| **Other / Unknown / Not answered** | | | 22 | |  | | 100 | |  | | 13 |  | | 59 | |  | | <5 | |  | | -- | |  | | <5 | |  | -- |  | <5 |  | -- |  |
|  | | |  | |  | |  | |  | |  |  | |  | |  | |  | |  | |  | |  | |  | |  |  |  |  |  |  |  |
| **Total** | | | **1,550** | |  | | **100** | |  | | **938** |  | | **61** | |  | | **188** | |  | | **12** | |  | | **114** | |  | **7** |  | **310** |  | **20** |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Table 3b.** | **Sharps injuries involving hollow-bore devices by device type and occupation, Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Occupation** | | **Total** | | | | | | | | **Hypodermic** | | | | | | | | **Winged-Steel** | | | | | | | | **Vacuum Tube** | | | | | **Other Hollow** | | | |
|  | |  | | | | | | | | **Needle/Syringe** | | | | | | | | **Needle** | | | | | | | | **Collection Set** | | | | | **Bore** | | | |
|  | | N | |  | | % | |  | | N | |  | | % | |  | | N | |  | | % | |  | | N | |  | % |  | N |  | % |  |
| **Nurse** | | 856 | |  | | 100 | |  | | 609 | |  | | 71 | |  | | 92 | |  | | 11 | |  | | 24 | |  | 3 |  | 131 |  | 15 |  |
| **Physician** | | 377 | |  | | 100 | |  | | 255 | |  | | 68 | |  | | <5 | |  | | -- | |  | | <5 | |  | -- |  | 115 |  | 31 |  |
| **Technician** | | 246 | |  | | 100 | |  | | 79 | |  | | 32 | |  | | 86 | |  | | 35 | |  | | 51 | |  | 21 |  | 30 |  | 12 |  |
| **Support Services** | | 38 | |  | | 100 | |  | | 21 | |  | | 55 | |  | | <5 | |  | | -- | |  | | 5 | |  | 13 |  | <15 |  | -- |  |
| **Other medical staff** | | 67 | |  | | 100 | |  | | 38 | |  | | 56 | |  | | 19 | |  | | 29 | |  | | <10 | |  | -- |  | <5 |  | -- |  |
| **Other / Unknown / Not answered** | | 31 | |  | | 100 | |  | | 16 | |  | | 52 | |  | | 10 | |  | | 32 | |  | | <5 | |  | -- |  | <5 |  | -- |  |
|  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |  |  |  |  |  |  |
| **Total** | | **1,615** | |  | | **100** | |  | | **1,018** | |  | | **63** | |  | | **212** | |  | | **13** | |  | | **91** | |  | **6** |  | **294** |  | **18** |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Table 3c.** | **Sharps injuries involving hollow-bore devices by device type and occupation, Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Occupation** | | | **Total** | | | | | | | | **Hypodermic** | | | | | | | | **Winged-Steel** | | | | | | | | **Vacuum Tube** | | | | **Other Hollow** | | | |
|  | | |  | | | | | | | | **Needle/Syringe** | | | | | | | | **Needle** | | | | | | | | **Collection Set** | | | | **Bore** | | | |
|  | | | N | |  | | % | |  | | N | |  | | % | |  | | N | |  | | % | |  | | N |  | % |  | N |  | % |  |
| **Nurse** | | | 910 | |  | | 100 | |  | | 622 | |  | | 68 | |  | | 91 | |  | | 10 | |  | | 36 |  | 4 |  | 161 |  | 18 |  |
| **Physician** | | | 304 | |  | | 100 | |  | | 213 | |  | | 70 | |  | | <5 | |  | | -- | |  | | <5 |  | -- |  | 84 |  | 28 |  |
| **Technician** | | | 240 | |  | | 100 | |  | | 70 | |  | | 29 | |  | | 103 | |  | | 43 | |  | | 41 |  | 17 |  | 26 |  | 11 |  |
| **Support Services** | | | 39 | |  | | 100 | |  | | 29 | |  | | 74 | |  | | <5 | |  | | -- | |  | | <5 |  | -- |  | <10 |  | -- |  |
| **Other medical staff** | | | 62 | |  | | 100 | |  | | 33 | |  | | 53 | |  | | 27 | |  | |  | |  | | <5 |  | -- |  | <10 |  | -- |  |
| **Other / Unknown / Not answered** | | | 49 | |  | | 100 | |  | | 27 | |  | | 55 | |  | | 9 | |  | | 18 | |  | | <5 |  | -- |  | 8 |  | 16 |  |
|  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |  |  |  |  |  |  |  |
| **Total** | | | **1,604** | |  | | **100** | |  | | **994** | |  | | **62** | |  | | **236** | |  | | **15** | |  | | **85** |  | **5** |  | **289** |  | **18** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 4a.** | **Sharps injuries involving solid-bore device by device type and occupation, Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Occupation** | | **Total** | | | **Suture Needle** | | | | | | **Scalpel** | | | | | | **Glass** | | | | **Other/** | | | | | | | |
|  | |  | | |  | | | | | |  | | | | | |  | | | | **Unknown** | | | | | | | |
|  | | N |  | % | |  | N |  | % |  | N |  | | % | |  | N |  | % |  | | N | |  | % | |  | |
| **Physician** | | 774 |  | 100 | |  | 462 |  | 60 |  | 126 |  | | 16 | |  | 6 |  | 1 |  | | 180 | |  | 23 | |  | |
| **Nurse** | | 235 |  | 100 | |  | 83 |  | 35 |  | 23 |  | | 10 | |  | 8 |  | 3 |  | | 121 | |  | 52 | |  | |
| **Technician** | | 205 |  | 100 | |  | 68 |  | 33 |  | 46 |  | | 22 | |  | 10 |  | 5 |  | | 81 | |  | 40 | |  | |
| **Support Services** | | 84 |  | 100 | |  | <10 |  | -- |  | <10 |  | | -- | |  | 0 |  | -- |  | | 73 | |  | 87 | |  | |
| **Other medical staff** | | 26 |  | 100 | |  | <5 |  | -- |  | 5 |  | | 19 | |  | <5 |  | -- |  | | 17 | |  | 65 | |  | |
| **Other / Unknown / Not answered** | | 34 |  | 100 | |  | 10 |  | 29 |  | <10 |  | | -- | |  | <5 |  | -- |  | | 17 | |  | 50 | |  | |
|  | |  |  |  | |  |  |  |  |  |  |  | |  | |  |  |  |  |  | |  | |  |  | |  | |
| **Total** | | **1,358** |  | **100** | |  | **631** |  | **46** |  | **210** |  | | **15** | |  | **28** |  | **2** |  | | **489** | |  | **36** | |  | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Table 4b.** | **Sharps injuries involving solid-bore device by device type and occupation, Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Occupation** | | **Total** | | | | | **Suture Needle** | | | | **Scalpel** | | | | | | **Glass** | | | | | | **Other/** | | | | | |
|  | |  | | | | |  | | | |  | | | | | |  | | | | | | **Unknown** | | | | | |
|  | | N |  | % | |  | N |  | % |  | N |  | | % | |  | N |  | % |  | | N | |  | % |  | |
| **Physician** | | 783 |  | 100 | |  | 490 |  | 63 |  | 120 |  | | 15 | |  | 5 |  | 1 |  | | 168 | |  | 21 |  | |
| **Technician** | | 233 |  | 100 | |  | 93 |  | 40 |  | 55 |  | | 24 | |  | 8 |  | 3 |  | | 77 | |  | 33 |  | |
| **Nurse** | | 215 |  | 100 | |  | 69 |  | 32 |  | 26 |  | | 12 | |  | 11 |  | 5 |  | | 109 | |  | 51 |  | |
| **Support Services** | | 91 |  | 100 | |  | 7 |  | 8 |  | <10 |  | | -- | |  | <5- |  | -- |  | | 74 | |  | 81 |  | |
| **Other medical staff** | | 41 |  | 100 | |  | 5 |  | 12 |  | <15 |  | | -- | |  | <5 |  | -- |  | | 15 | |  | 37 |  | |
| **Other / Unknown / Not answered** | | 32 |  | 100 | |  | 17 |  | 53 |  | <5 |  | | -- | |  | <5 |  | -- |  | | 19 | |  | 59 |  | |
|  | |  |  |  | |  |  |  |  |  |  |  | |  | |  |  |  |  |  | |  | |  |  |  | |
| **Total** | | **1,395** |  | **100** | |  | **681** |  | **49** |  | **220** |  | | **16** | |  | **32** |  | **2** |  | | **462** | |  | **33** |  | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Table 4c.** | **Sharps injuries involving solid-bore device by device type and occupation, Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Occupation** | | **Total** | | | | | **Suture Needle** | | | | **Scalpel** | | | | | | **Glass** | | | | | | **Other/** | | | | |
|  | |  | | | | |  | | | |  | | | | | |  | | | | | | **Unknown** | | | | |
|  | | N |  | % | |  | N |  | % |  | N | |  | | % |  | N |  | % |  | | N | |  | % |  | |
| **Physician** | | 742 |  | 100 | |  | 474 |  | 64 |  | <110 | |  | | --4 |  | <5 |  | -- |  | | 161 | |  | 22 |  | |
| **Technician** | | 224 |  | 100 | |  | 72 |  | 32 |  | 53 | |  | | 24 |  | 5 |  | 2 |  | | 94 | |  | 42 |  | |
| **Nurse** | | 201 |  | 100 | |  | 73 |  | 37 |  | 25 | |  | | 13 |  | 7 |  | 4 |  | | 96 | |  | 48 |  | |
| **Support Services** | | 86 |  | 100 | |  | <5 |  | -- |  | <5 | |  | | -- |  | <5 |  | -- |  | | 79 | |  | 92 |  | |
| **Other medical staff** | | 41 |  | 100 | |  | <5 |  | -- |  | <5 | |  | | -- |  | <5 |  | -- |  | | 34 | |  | 83 |  | |
| **Other / Unknown / Not answered** | | 40 |  | 100 | |  | 15 |  | 38 |  | 6 | |  | | 15 |  | 5 |  | 13 |  | | 14 | |  | 35 |  | |
|  | |  |  |  | |  |  |  |  |  |  | |  | |  |  |  |  |  |  | |  | |  |  |  | |
| **Total** | | **1,334** |  | **100** | |  | **640** |  | **48** |  | **195** | |  | | **15** |  | **21** |  | **2** |  | | **478** | |  | **36** |  | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 5a.** | | **Sharps injuries by SESIP status by hospital size: all devices and excluding suture needles, Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | | |
|  | | | | | | | Hospital Size^ | | | | | | | | | | | | |
|  | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | | |
|  | | | 93 hospitals | | | | 29 hospitals | | | | 49 hospitals | | | | 15 hospitals | | | | |
| Sharps Injury Protections | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  | |
| **All devices** | | | **2,908`** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  | |
|  | SESIP | | 1,250 |  | 43 |  | 98 |  | 51 |  | 475 |  | 59 |  | 677 |  | 39 |  | |
|  | Non-SESIP | | 1,464 |  | 50 |  | 87 |  | 45 |  | 406 |  | 42 |  | 971 |  | 56 |  | |
|  | Unknown/Not answered | | 194 |  | 7 |  | 9 |  | 5 |  | 87 |  | 9 |  | 98 |  | 6 |  | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **Devices excluding suture needles** | | | **2,277** |  | **100** |  | **160** |  | **100** |  | **778** |  | **100** |  | **1,339** |  | **100** |  | |
|  | SESIP | | 1,247 |  | 55 |  | 98 |  | 61 |  | 473 |  | 61 |  | 676 |  | 50 |  | |
|  | Non-SESIP | | 845 |  | 37 |  | 53 |  | 33 |  | 225 |  | 29 |  | 567 |  | 42 |  | |
|  | Unknown/Not answered | | 185 |  | 8 |  | 9 |  | 6 |  | 80 |  | 10 |  | 96 |  | 7 |  | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **Table 5b.** | | **Sharps injuries by SESIP status by hospital size: all devices and excluding suture needles, Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | | |
|  | | | | | | | Hospital Size^ | | | | | | | | | | | | |
|  | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | | |
|  | | | 92 hospitals | | | | 29 hospitals | | | | 50 hospitals | | | | 13 hospitals | | | | |
| Sharps Injury Protections | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % | |  | |
| **All devices** | | | **3,010`** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** | |  | |
|  | SESIP | | 1,318 |  | 44 |  | 97 |  | 48 |  | 471 |  | 49 |  | 750 |  | 40 | |  | |
|  | Non-SESIP | | 1,531 |  | 51 |  | 94 |  | 47 |  | 412 |  | 43 |  | 1,025 |  | 55 | |  | |
|  | Unknown/Not answered | | 161 |  | 5 |  | 10 |  | 5 |  | 73 |  | 8 |  | 78 |  | 4 | |  | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| **Devices excluding suture needles** | | | **2,329** |  | **100** |  | **170** |  | **100** |  | **761** |  | **100** |  | **1,398** |  | **100** | |  | |
|  | SESIP | | 1,317 |  | 57 |  | 97 |  | 57 |  | 471 |  | 62 |  | 749 |  | 54 | |  | |
|  | Non-SESIP | | 860 |  | 37 |  | 63 |  | 37 |  | 225 |  | 30 |  | 572 |  | 41 | |  | |
|  | Unknown/Not answered | | 152 |  | 7 |  | 10 |  | 6 |  | 65 |  | 8 |  | 77 |  | 5 | |  | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| **Table 5c.** | | **Sharps injuries by SESIP status by hospital size: all devices and excluding suture needles, Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | Hospital Size^ | | | | | | | | | | | | | | |
|  | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | | | | |
|  | | | 90 hospitals | | | | 27 hospitals | | | | 49 hospitals | | | | 14 hospitals | | | | | | |
| Sharps Injury Protections | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % | |  | | |
| **All devices** | | | **2,938** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** | |  | | |
|  | SESIP | | 1,319 |  | 45 |  | 86 |  | 49 |  | 499 |  | 54 |  | 734 |  | 40 | |  | | |
|  | Non-SESIP | | 1,482 |  | 50 |  | 70 |  | 40 |  | 379 |  | 41 |  | 1,033 |  | 56 | |  | | |
|  | Unknown/Not answered | | 137 |  | 5 |  | 19 |  | 11 |  | 53 |  | 5 |  | 65 |  | 4 | |  | | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  | | |
| **Devices excluding suture needles** | | | **2,298** |  | **100** |  | **147** |  | **100** |  | **787** |  | **100** |  | **1,364** |  | **100** | |  | | |
|  | SESIP | | 1,319 |  | 57 |  | 86 |  | 59 |  | 499 |  | 63 |  | 734 |  | 54 | |  | | |
|  | Non-SESIP | | 846 |  | 37 |  | 42 |  | 29 |  | 238 |  | 30 |  | 566 |  | 42 | |  | | |
|  | Unknown/Not answered | | 133 |  | 6 |  | 19 |  | 13 |  | 50 |  | 6 |  | 64 |  | 4 | |  | | |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  | | |
| ^Hospital size: small≤100 licensed beds; medium=101-300 licensed beds; large>300 licensed beds | | | | | | | | | | | | | | | | | | | | | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |
| --- | --- |
| **Figure 3a.** | **Sharps injuries by device and SESIP status, Massachusetts hospital workers, 2016, N=2,908** |

|  |  |
| --- | --- |
| **Figure 3b.** | **Sharps injuries by device and SESIP status, Massachusetts hospital workers, 2017, N=3,010** |

|  |  |
| --- | --- |
| **Figure 3c.** | **Sharps injuries by device and SESIP status, Massachusetts hospital workers, 2018, N=2,937** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 6a.** | | **Sharps injuries by procedure and SESIP status, Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | | |
| Procedure | | | Total | | | | SESIP | | | | Non-SESIP | | | | Unknown | | | | |
|  | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  | |
| **Injection procedures** | | | **795** |  | **100** |  | **608** |  | **76** |  | **159** |  | **20** |  | **28** |  | **4** |  | |
|  | Subcutaneous injection | | 630 |  | 100 |  | 499 |  | 79 |  | 111 |  | 18 |  | 20 |  | 3 |  | |
|  | Intramuscular injection | | 110 |  | 100 |  | 87 |  | 79 |  | <20 |  | -- |  | <5 |  | -- |  | |
|  | Other injections | | 55 |  | 100 |  | 22 |  | 40 |  | <30 |  | -- |  | <5 |  | -- |  | |
| **Blood procedures** | | | **369** |  | **100** |  | **306** |  | **83** |  | **45** |  | **12** |  | **18** |  | **5** |  | |
|  | Percutaneous venous puncture | | 258 |  | 100 |  | 237 |  | 92 |  | 11 |  | 4 |  | 10 |  | 4 |  | |
|  | Finger stick / Heel stick | | 52 |  | 100 |  | 24 |  | 46 |  | 23 |  | 44 |  | 5 |  | 10 |  | |
|  | Percutaneous arterial puncture | | 32 |  | 100 |  | 29 |  | 91 |  | <5 |  | -- |  | <5 |  | -- |  | |
|  | Other blood procedures | | 27 |  | 100 |  | 16 |  | 59 |  | <10 |  | -- |  | <5 |  | -- |  | |
| **Line procedures** | | | **308** |  | **100** |  | **200** |  | **65** |  | **91** |  | **30** |  | **17** |  | **6** |  | |
|  | To insert peripheral IV/set up heparin lock | | 108 |  | 100 |  | 95 |  | 88 |  | <10 |  | -- |  | <5 |  | -- |  | |
|  | To insert central line | | 44 |  | 100 |  | 13 |  | 30 |  | <30 |  | -- |  | <10 |  | -- |  | |
|  | Other line procedures | | 156 |  | 100 |  | 92 |  | 59 |  | 57 |  | 37 |  | 7 |  | 4 |  | |
| **Other procedures/Unknown/Not Answered** | | | **1,436** |  | **100** |  | **136** |  | **9** |  | **1,169** |  | **81** |  | **131 131** |  | **9** |  | |
| **Total** | | | **2,908** |  | **100** |  | **1,250** |  | **43** |  | **1,464** |  | **50** |  | **194** |  | **7** |  | |
| **Table 6b.** | | **Sharps injuries by procedure and SESIP status, Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | | |
| **Injection procedures** | | | **844** |  | **100** |  | **676** |  | **80** |  | **150** |  | **18** |  | **18** |  | **2** |  | |
|  | Subcutaneous injection | | 636 |  | 100 |  | 537 |  | 84 |  | 90 |  | 14 |  | 9 |  | 1 |  | |
|  | Intramuscular injection | | 149 |  | 100 |  | 122 |  | 82 |  | <30 |  | -- |  | <5 |  | -- |  | |
|  | Other injections | | 59 |  | 100 |  | 17 |  | 29 |  | <35 |  | -- |  | <10 |  | -- |  | |
| **Blood procedures** | | | **383** |  | **100** |  | **312** |  | **82** |  | **61** |  | **16** |  | **10** |  | **3** |  | |
|  | Percutaneous venous puncture | | 283 |  | 100 |  | 257 |  | 91 |  | 20 |  | 7 |  | 6 |  | 2 |  | |
|  | Finger stick / Heel stick | | 40 |  | 100 |  | <15 |  | -- |  | 28 |  | 70 |  | <5 |  | -- |  | |
|  | Percutaneous arterial puncture | | 40 |  | 100 |  | <35 |  | -- |  | 6 |  | <1 |  | <5 |  | -- |  | |
|  | Other blood procedures | | 20 |  | 100 |  | <15 |  | -- |  | 7 |  | <1 |  | <5 |  | -- |  | |
| **Line procedures** | | | **226** |  | **100** |  | **156** |  | **69** |  | **64** |  | **28** |  | **6** |  | **3** |  | |
|  | To insert central line | | 27 |  | 100 |  | <15 |  | -- |  | 16 |  | 59 |  | <5 |  | -- |  | |
|  | To insert peripheral IV/set up heparin lock | | 79 |  | 100 |  | <75 |  | -- |  | 6 |  | <1 |  | <5 |  | -- |  | |
|  | Other line procedures | | 120 |  | 100 |  | <75 |  | -- |  | 42 |  | 35 |  | <5 |  | -- |  | |
| **Other procedures** | | | **1,391** |  | **100** |  | **167** |  | **12** |  | **1,181** |  | **85** |  | **43** |  | **3** |  | |
| **Unknown / Not answered / Non-classifiable** | | | **166** |  | **100** |  | **7** |  | **4** |  | **75** |  | **45** |  | **84** |  | **51** |  | |
| **Total** | | | **3,010** |  | **100** |  | **1,318** |  | **44** |  | **1,531** |  | **51** |  | **161** |  | **5** |  | |
| **Table 6c.** | | **Sharps injuries by procedure and SESIP status, Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | | | |
| **Injection procedures** | | | **871** |  | **100** |  | **698** |  | **80** |  | **153** |  | **18** |  | **20** |  | **2** | |  | |
|  | Subcutaneous injection | | 639 |  | 100 |  | 523 |  | 82 |  | 106 |  | 17 |  | 10 |  | 2 | |  | |
|  | Intramuscular injection | | 178 |  | 100 |  | 161 |  | 90 |  | <20 |  | -- |  | <5 |  | -- | |  | |
|  | Other injections | | 54 |  | 100 |  | 14 |  | 26 |  | <35 |  | -- |  | <10 |  | -- | |  | |
| **Blood procedures** | | | **370** |  | **100** |  | **318** |  | **86** |  | **41** |  | **11** |  | **11** |  | **3** | |  | |
|  | Percutaneous venous puncture | | 287 |  | 100 |  | 272 |  | 95 |  | 10 |  | 3 |  | 5 |  | 2 | |  | |
|  | Finger stick / Heel stick | | 30 |  | 100 |  | <10 |  | -- |  | 19 |  | 63 |  | <5 |  | -- | |  | |
|  | Percutaneous arterial puncture | | 32 |  | 100 |  | 23 |  | 72 |  | <10 |  | -- |  | <5 |  | -- | |  | |
|  | Other blood procedures | | 21 |  | 100 |  | <15 |  | -- |  | <10 |  | -- |  | <5 |  | -- | |  | |
| **Line procedures** | | | **281** |  | **100** |  | **191** |  | **68** |  | **83** |  | **30** |  | **7** |  | **2** | |  | |
|  | To insert central line | | 37 |  | 100 |  | 11 |  | 30 |  | <25 |  | -- |  | <5 |  | -- | |  | |
|  | To insert peripheral IV/set up heparin lock | | 100 |  | 100 |  | 90 |  | 90 |  | <10 |  | -- |  | <5 |  | -- | |  | |
|  | Other line procedures | | 144 |  | 100 |  | 90 |  | 63 |  | <55 |  | -- |  | <5 |  | -- | |  | |
| **Other procedures** | | | **1,245** |  | **100** |  | **97** |  | **8** |  | **1,120** |  | **90** |  | **28** |  | **2** | |  | |
| **Unknown / Not answered / Non-classifiable** | | | **171** |  | **100** |  | **15** |  | **9** |  | **85** |  | **50** |  | **71** |  | **41** | |  | |
| **Total** | | | **2,938** |  | **100** |  | **1,319** |  | **45** |  | **1,482** |  | **50** |  | **137** |  | **5** | |  | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 7a.** | | **Sharps injuries by inclusion in prepackaged kit and hospital size, Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | |
|  | | | | | | | Hospital Size^ | | | | | | | | | | | |
|  | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | 93 hospitals | | | | 29 hospitals | | | | 49 hospitals | | | | 15 hospitals | | | |
|  | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Device included in prepackaged kit** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Yes | | 544 |  | 19 |  | 23 |  | 12 |  | 221 |  | 23 |  | 300 |  | 17 |  |
|  | No | | 2,134 |  | 73 |  | 159 |  | 82 |  | 651 |  | 67 |  | 1,324 |  | 76 |  |
|  | Unknown/Not answered | | 230 |  | 8 |  | 12 |  | 6 |  | 96 |  | 10 |  | 122 |  | 7 |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Total** | | | **2,908** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  |
|  | |  | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | |
| **Table 7b.** | | **Sharps injuries by inclusion in prepackaged kit and hospital size, Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | |
|  | | | | | | | Hospital Size^ | | | | | | | | | | | |
|  | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | 92 hospitals | | | | 29 hospitals | | | | 50 hospitals | | | | 13 hospitals | | | |
|  | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Device included in prepackaged kit** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Yes | | 648 |  | 22 |  | 45 |  | 22 |  | 227 |  | 24 |  | 376 |  | 20 |  |
|  | No | | 2,184 |  | 73 |  | 144 |  | 72 |  | 641 |  | 67 |  | 1,399 |  | 75 |  |
|  | Unknown/Not answered | | 178 |  | 6 |  | 12 |  | 6 |  | 88 |  | 9 |  | 78 |  | 4 |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Total** | | | **3,010** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** |  |
|  | |  | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | |
| **Table 7c.** | | **Sharps injuries by inclusion in prepackaged kit and hospital size, Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | |
|  | | | | | | | Hospital Size^ | | | | | | | | | | | |
|  | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | 90 hospitals | | | | 27 hospitals | | | | 49 hospitals | | | | 14 hospitals | | | |
|  | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Device included in prepackaged kit** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Yes | | 563 |  | 19 |  | 32 |  | 18 |  | 202 |  | 22 |  | 329 |  | 18 |  |
|  | No | | 2,204 |  | 75 |  | 126 |  | 72 |  | 652 |  | 70 |  | 1,426 |  | 78 |  |
|  | Unknown/Not answered | | 171 |  | 6 |  | 17 |  | 10 |  | 77 |  | 8 |  | 77 |  | 4 |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Total** | | | **2,938** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** |  |
| ^Hospital size: small ≤100 licensed beds; medium =101-300 licensed beds; large >300 licensed beds | | | | | | | | | | | | | | | | | | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |
| --- | --- |
| **Figure 4a.** | **Sharps injuries involving devices from prepackaged kits by device and SESIP status, Massachusetts hospital workers, 2016, N=544** |

|  |  |
| --- | --- |
| **Figure 4b.** | **Sharps injuries involving devices from prepackaged kits by device and SESIP status, Massachusetts hospital workers, 2017, N=648** |

|  |  |
| --- | --- |
| **Figure 4c.** | **Sharps injuries involving devices from prepackaged kits by device and SESIP status, Massachusetts hospital workers, 2018, N=563** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 8a.** | | | **Sharps injuries among hospital workers by when and how the injury occurred by hospital size, Massachusetts, 2016** | | | | | | | | | | | | | | | | |
|  | | | | | | | | Hospital Size^ | | | | | | | | | | | |
|  | | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | | 93 hospitals | | | | 29 hospitals | | | | 49 hospitals | | | | 15 hospitals | | | |
|  | | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Before use of the item** | | | | **24** |  | **1** |  | **<5** |  | **--** |  | **<10** |  | **--** |  | **16** |  | **1** |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **During use of the item** | | | | **1,183** |  | **41** |  | **81** |  | **42** |  | **396** |  | **41** |  | **706** |  | **40** |  |
|  | Suturing | | | 305 |  | 10 |  | 20 |  | 10 |  | 79 |  | 8 |  | 206 |  | 12 |  |
|  | Collision with worker or sharp | | | 257 |  | 9 |  | 25 |  | 13 |  | 83 |  | 9 |  | 149 |  | 9 |  |
|  | Manipulate needle in patient | | | 253 |  | 9 |  | 14 |  | 7 |  | 104 |  | 11 |  | 135 |  | 8 |  |
|  | Patient moved and jarred device | | | 223 |  | 8 |  | 15 |  | 8 |  | 90 |  | 9 |  | 118 |  | 7 |  |
|  | Access IV line | | | 20 |  | 1 |  | <5 |  | -- |  | <10 |  | -- |  | 11 |  | 1 |  |
|  | Handle/pass equipment | | | 13 |  | <1 |  | <5 |  | -- |  | <5 |  | -- |  | <15 |  | -- |  |
|  | Device malfunction | | | 6 |  | <1 |  | <5 |  | -- |  | 0 |  | 0 |  | <10 |  | -- |  |
|  | Other / Unknown / Nonclassifiable | | | 106 |  | 4 |  | <5 |  | -- |  | <35 |  | -- |  | 72 |  | 4 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **After use, before disposal** | | | | **1,222** |  | **42** |  | **83** |  | **43** |  | **369** |  | **38** |  | **770** |  | **44** |  |
|  | Handle/pass equipment | | | 361 |  | 12 |  | 9 |  | 5 |  | 70 |  | 7 |  | 282 |  | 16 |  |
|  | Activating injury protection mechanism | | | 291 |  | 10 |  | 29 |  | 15 |  | 124 |  | 13 |  | 138 |  | 8 |  |
|  | During clean-up | | | 191 |  | 7 |  | 15 |  | 8 |  | 52 |  | 5 |  | 124 |  | 7 |  |
|  | Collision with worker or sharp | | | 142 |  | 5 |  | 10 |  | 5 |  | 43 |  | 4 |  | 89 |  | 5 |  |
|  | Sharps injury prevention mechanism | | | 76 |  | 3 |  | 9 |  | 5 |  | 28 |  | 3 |  | 39 |  | 2 |  |
|  |  | not activated | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Recap needle | | | 65 |  | 2 |  | <5 |  | -- |  | <25 |  | -- |  | 40 |  | 2 |  |
|  | Device malfunction | | | 27 |  | 1 |  | 5 |  | 3 |  | 10 |  | 1 |  | 12 |  | 1 |  |
|  | Other / Unknown / Nonclassifiable | | | 69 |  | 2 |  | <5 |  | -- |  | <25 |  | -- |  | 46 |  | 3 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **During or after disposal of item** | | | | **345** |  | **12** |  | **22** |  | **11** |  | **135** |  | **14** |  | **188** |  | **11** |  |
|  | During sharps disposal | | | 170 |  | 6 |  | 11 |  | 6 |  | 62 |  | 6 |  | 97 |  | 6 |  |
|  | Improper Disposal | | | 163 |  | 6 |  | 9 |  | 5 |  | 69 |  | 7 |  | 85 |  | 5 |  |
|  | Collision with worker or sharp | | | 8 |  | <1 |  | <5 |  | -- |  | <5 |  | -- |  | 5 |  | <1 |  |
|  | Device malfunction | | | <5 |  | -- |  | 0 |  | 0 |  | <5 |  | -- |  | <5 |  | -- |  |
|  | Other / Unknown / Nonclassifiable | | | <5 |  | -- |  | 0 |  | 0 |  | <5 |  | -- |  | <5 |  | -- |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unknown / Not answered / Nonclassifiable** | | | | **134** |  | **5** |  | **6** |  | **3** |  | **62** |  | **6** |  | **66** |  | **4** |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Total** | | | | **2,908** |  | **100** |  | **194** |  | **100** |  | **968** |  | **100** |  | **1,746** |  | **100** |  |
| ^Hospital size: small<100 licensed beds; medium 101-300 licensed beds; large >300 licensed beds | | | | | | | | | | | | | | | | | | | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 8b.** | | | **Sharps injuries among hospital workers by when and how the injury occurred by hospital size, Massachusetts, 2017** | | | | | | | | | | | | | | | | |
|  | | | | | | | | Hospital Size^ | | | | | | | | | | | |
|  | | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | | 92 hospitals | | | | 29 hospitals | | | | 50 hospitals | | | | 13 hospitals | | | |
|  | | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Before use of the item** | | | | **44** |  | **1** |  | **<5** |  | **--** |  | **21** |  | **2** |  | **<20** |  | **--** |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **During use of the item** | | | | **1,267** |  | **42** |  | **79** |  | **39** |  | **378** |  | **40** |  | **810** |  | **44** |  |
|  | Suturing | | | 342 |  | 11 |  | 12 |  | 6 |  | 87 |  | 9 |  | 243 |  | 13 |  |
|  | Manipulate needle in patient | | | 289 |  | 10 |  | 19 |  | 9 |  | 91 |  | 9 |  | 179 |  | 10 |  |
|  | Patient moved and jarred device | | | 238 |  | 8 |  | 19 |  | 9 |  | 88 |  | 9 |  | 131 |  | 7 |  |
|  | Collision with worker or sharp | | | 196 |  | 6 |  | 23 |  | 11 |  | 59 |  | 6 |  | 114 |  | 6 |  |
|  | Access IV line | | | 29 |  | 1 |  | <5 |  | -- |  | <10 |  | 1 |  | 19 |  | 1 |  |
|  | Handle/pass equipment | | | 16 |  | 1 |  | <5 |  | -- |  | <5 |  | -- |  | 11 |  | 1 |  |
|  | Device malfunction | | | 7 |  | <1 |  | <5 |  | -- |  | <5 |  | -- |  | <10 |  | -- |  |
|  | Other | | | 133 |  | 4 |  | <5 |  | -- |  | <40 |  | -- |  | 95 |  | 5 |  |
|  | Unknown / Nonclassifiable | | | 17 |  | 1 |  | 0 |  | 0 |  | <5 |  | -- |  | <15 |  | -- |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **After use, before disposal** | | | | **1,330** |  | **44** |  | **94** |  | **47** |  | **395** |  | **41** |  | **831** |  | **45** |  |
|  | Handle/pass device | | | 353 |  | 12 |  | 16 |  | 8 |  | 77 |  | 8 |  | 259 |  | 14 |  |
|  | Activating injury protection mechanism | | | 298 |  | 10 |  | 20 |  | 10 |  | 106 |  | 11 |  | 169 |  | 9 |  |
|  | During clean-up | | | 212 |  | 7 |  | 6 |  | 3 |  | 64 |  | 7 |  | 140 |  | 8 |  |
|  | Collision with worker or sharp | | | 130 |  | 4 |  | 8 |  | 4 |  | 25 |  | 3 |  | 96 |  | 5 |  |
|  | Sharps injury prevention mechanism | | | 108 |  | 4 |  | 19 |  | 9 |  | 51 |  | 5 |  | 37 |  | 2 |  |
|  |  | not activated | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Recap needle | | | 80 |  | 3 |  | 8 |  | 4 |  | 24 |  | 2 |  | 48 |  | 3 |  |
|  | During sharps disposal | | | 45 |  | 1 |  | <5 |  | -- |  | <15 |  | -- |  | 33 |  | 2 |  |
|  | Improper disposal | | | 45 |  | 1 |  | 6 |  | 3 |  | 18 |  | 2 |  | 19 |  | 1 |  |
|  | Device malfunction | | | 19 |  | 1 |  | <10 |  | -- |  | 10 |  | 1 |  | <5 |  | -- |  |
|  | Patient moved and jarred device | | | 7 |  | <1 |  | <5 |  | -- |  | <5 |  | -- |  | <5 |  | -- |  |
|  | Other | | | 27 |  | 1 |  | <5 |  | -- |  | <5 |  | -- |  | 21 |  | 1 |  |
|  | Unknown / Nonclassifiable | | | 6 |  | <1 |  | 0 |  | 0 |  | <5 |  | -- |  | <5 |  | -- |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **During or after disposal of item** | | | | **215** |  | **7** |  | **10** |  | **5** |  | **90** |  | **9** |  | **115** |  | **6** |  |
|  | Improper Disposal | | | 112 |  | 4 |  | <5 |  | -- |  | <55 |  | -- |  | 57 |  | 3 |  |
|  | During sharps disposal | | | 98 |  | 3 |  | <10 |  | -- |  | 38 |  | 44 |  | <60 |  | -- |  |
|  | Other | | | 5 |  | <1 |  | 0 |  | 0 |  | <5 |  | -- |  | <5 |  | -- |  |
|  | Unknown / Nonclassifiable | | | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unknown / Not answered / Nonclassifiable** | | | | **154** |  | **5** |  | **14** |  | **7** |  | **72** |  | **8** |  | **68** |  | **3** |  |
|  | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Total** | | | | **3,010** |  | **100** |  | **201** |  | **100** |  | **956** |  | **100** |  | **1,853** |  | **100** |  |
| ^Hospital size: small<100 licensed beds; medium 101-300 licensed beds; large >300 licensed beds | | | | | | | | | | | | | | | | | | | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 8c.** | | | **Sharps injuries among hospital workers by when and how the injury occurred by hospital size, Massachusetts, 2018** | | | | | | | | | | | | | | | | |
|  | | | | | | | | Hospital Size^ | | | | | | | | | | | |
|  | | | | All Hospitals | | | | Small | | | | Medium | | | | Large | | | |
|  | | | | 90 hospitals | | | | 27 hospitals | | | | 49 hospitals | | | | 14 hospitals | | | |
|  | | | | N |  | % |  | N |  | % |  | N |  | % |  | N |  | % |  |
| **Before use of the item** | | | | **32** |  | **1** |  | **2** |  | **1** |  | **19** |  | **2** |  | **11** |  | **1** |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **During use of the item** | | | | **1,392** |  | **47** |  | **78** |  | **45** |  | **387** |  | **42** |  | **927** |  | **51** |  |
|  | Suturing | | | 372 |  | 13 |  | 22 |  | 13 |  | 82 |  | 9 |  | 268 |  | 15 |  |
|  | Manipulate needle in patient | | | 295 |  | 10 |  | 14 |  | 8 |  | 87 |  | 9 |  | 194 |  | 11 |  |
|  | Patient moved and jarred device | | | 229 |  | 8 |  | 15 |  | 9 |  | 101 |  | 11 |  | 113 |  | 6 |  |
|  | Collision with worker or sharp | | | 198 |  | 7 |  | 18 |  | 10 |  | 41 |  | 4 |  | 139 |  | 8 |  |
|  | Access IV line | | | 10 |  | <1 |  | <5 |  | -- |  | <5 |  | -- |  | 5 |  | <1 |  |
|  | Handle/pass equipment | | | 127 |  | 4 |  | <5 |  | -- |  | <25 |  | -- |  | 105 |  | 6 |  |
|  | Device malfunction | | | 11 |  | <1 |  | 0 |  | 0 |  | 5 |  | 1 |  | 6 |  | <1 |  |
|  | Other | | | 125 |  | 4 |  | 7 |  | 4 |  | 40 |  | 4 |  | 78 |  | 4 |  |
|  | Unknown / Nonclassifiable | | | 25 |  | 1 |  | 0 |  | 0 |  | 6 |  | 1 |  | 19 |  | 1 |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **After use, before disposal** | | | | **1,080** |  | **37** |  | **57** |  | **33** |  | **363** |  | **39** |  | **660** |  | **36** |  |
|  | Handle/pass device | | | 185 |  | 6 |  | 5 |  | 3 |  | 51 |  | 5 |  | 129 |  | 7 |  |
|  | Activating injury protection mechanism | | | 291 |  | 10 |  | 14 |  | 8 |  | 128 |  | 14 |  | 149 |  | 8 |  |
|  | During clean-up | | | 216 |  | 7 |  | 8 |  | 5 |  | 65 |  | 7 |  | 143 |  | 8 |  |
|  | Collision with worker or sharp | | | 126 |  | 4 |  | 6 |  | 3 |  | 35 |  | 4 |  | 85 |  | 5 |  |
|  | Sharps injury prevention mechanism | | | 43 |  | 1 |  | <5 |  | -- |  | 24 |  | 3 |  | <20 |  | -- |  |
|  |  | not activated | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Recap needle | | | 70 |  | 2 |  | <5 |  | -- |  | <25 |  | -- |  | 47 |  | 3 |  |
|  | During sharps disposal | | | 62 |  | 2 |  | <5 |  | -- |  | <20 |  | -- |  | 41 |  | 2 |  |
|  | Improper disposal | | | 10 |  | <1 |  | <5 |  | -- |  | <5 |  | -- |  | 6 |  | <1 |  |
|  | Device malfunction | | | 28 |  | 1 |  | 9 |  | 5 |  | 7 |  | 1 |  | 12 |  | 1 |  |
|  | Patient moved and jarred device | | | <5 |  | -- |  | 0 |  | 0 |  | <5 |  | -- |  | <5 |  | -- |  |
|  | Other | | | 38 |  | 4 |  | 5 |  | 3 |  | 6 |  | 1 |  | 27 |  | 1 |  |
|  | Unknown / Nonclassifiable | | | <10 |  | -- |  | 0 |  | 0 |  | <10 |  | -- |  | <5 |  | -- |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **During or after disposal of item** | | | | **297** |  | **10** |  | **28** |  | **16** |  | **104** |  | **11** |  | **165** |  | **9** |  |
|  | Improper Disposal | | | 148 |  | 5 |  | 10 |  | 6 |  | 55 |  | 6 |  | 83 |  | 5 |  |
|  | During sharps disposal | | | 122 |  | 4 |  | 17 |  | 10 |  | 42 |  | 5 |  | 63 |  | 3 |  |
|  | Other | | | <30 |  | -- |  | <5 |  | -- |  | <10 |  | -- |  | <20 |  | -- |  |
|  | Unknown / Nonclassifiable | | | <5 |  | -- |  | <5 |  | -- |  | <5 |  | -- |  | <5 |  | -- |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unknown / Not answered / Nonclassifiable** | | | | **136** |  | **5** |  | **10** |  | **6** |  | **58** |  | **6** |  | **68** |  | **4** |  |
|  | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Total** | | | | **2,937** |  | **100** |  | **175** |  | **100** |  | **931** |  | **100** |  | **1,832** |  | **100** |  |
| ^Hospital size: small<100 licensed beds; medium 101-300 licensed beds; large >300 licensed beds | | | | | | | | | | | | | | | | | | | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 9a.** | **Sharps injuries involving select devices without sharps injury prevention features but for which SESIPs are widely available, by when the injury occurred, Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | **When the Injury Occurred** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Device** | | **Total** | | | | | | | **Before use** | | | | | | | | | | | | | **During use** | | | | | | | **After use,** | | | | | | | | | **During or after disposal** | | | | | | | | **Unknown/** | | | | | | |
|  | |  | | | | | | | **use** | | | | | | | | | | | | |  | | | | | | | **Before Disposal\*** | | | | | | | | | **Disposal\*** | | | | | | | | **Non-classifiable** | | | | | | |
|  | | N |  | | % | |  | | N | |  | | | % | | | |  | | | N | | |  | | % |  | | | N | |  | | % | |  | | N | |  | | % | |  | | N | |  | | % | |  |
| Hypodermic Needle/Syringe | | 187 |  | | 100 | |  | | <5 | |  | | | -- | | | |  | | | 49 | | |  | | 26 |  | | | 103 | |  | | 55 | |  | | 27 | |  | | 14 | |  | | <10 | |  | | -- | |  |
| IV Stylet | | 42 |  | | 100 | |  | | <5 | |  | | | -- | | | |  | | | 18 | | |  | | 43 |  | | | 16 | |  | | 38 | |  | | <10 | |  | | -- | |  | | <5 | |  | | -- | |  |
| Vacuum Tube Collection Set | | <20 |  | | -- | |  | | 0 | |  | | | 0 | | | |  | | | <5 | | |  | | -- |  | | | <10 | |  | | -- | |  | | 8 | |  | | 50 | |  | | 0 | |  | | 0 | |  |
| Winged-Steel Needle | | <5 |  | | -- | |  | | 0 | |  | | | 0 | | | |  | | | <5 | | |  | | -- |  | | | 0 | |  | | 0 | |  | | <5 | |  | | -- | |  | | <5 | |  | | -- | |  |
| **Total** | | **249** |  | | **100** | |  | | **4** | |  | | | **2** | | | |  | | | **72** | | |  | | **29** |  | | | **124** | |  | | **50** | |  | | **42** | |  | | **17** | |  | | **7** | |  | | **3** | |  |
|  | |  |  | |  | |  | |  | |  | | |  | | | |  | | |  | | |  | |  |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |
|  | |  |  | |  | |  | |  | |  | | |  | | | |  | | |  | | |  | |  |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  |
| **Table 9b.** | **Sharps injuries involving select devices without sharps injury prevention features but for which SESIPs are widely available, by when the injury occurred, Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | **When the Injury Occurred** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Device** | | **Total** | | | | | | **Before use** | | | | | | | | | | | **During use** | | | | | | | | | | **After use,** | | | | | | | | | **During or after disposal** | | | | | | | | **Unknown/** | | | | | | |
|  | |  | | | | | | **use** | | | | | | | | | | |  | | | | | | | | | | **Before Disposal\*** | | | | | | | | | **Disposal\*** | | | | | | | | **Non-classifiable** | | | | | | |
|  | | N |  | % | |  | | N | |  | | | % | | |  | | | N | | | |  | | | % |  | | | N | |  | | % | |  | | N | | |  | | % |  | | N | |  | | % | |  |
| Hypodermic Needle/Syringe | | 182 |  | 100 | |  | | <5 | |  | | | -- | | |  | | | 42 | | | |  | | | 23 |  | | | 111 | |  | | 61 | |  | | 19 | | |  | | 1 |  | | <10 | |  | | -- | |  |
| IV Stylet | | 44 |  | 100 | |  | | <5 | |  | | | -- | | |  | | | 27 | | | |  | | | 61 |  | | | 11 | |  | | 25 | |  | | <10 | | |  | | -- |  | | 0 | |  | | 0 | |  |
| Vacuum Tube Collection Set | | 20 |  | 100 | |  | | 0 | |  | | | 0 | | |  | | | <10 | | | |  | | | -- |  | | | <10 | |  | | -- | |  | | <5 | | |  | | -- |  | | <5 | |  | | -- | |  |
| Winged-Steel Needle Holder | | 7 |  | 100 | |  | | 0 | |  | | | 0 | | |  | | | <5 | | | |  | | | -- |  | | | <5 | |  | | -- | |  | | 0 | | |  | | 0 |  | | 0 | |  | | 0 | |  |
| **Total** | | **253** |  | **100** | |  | | **<5** | |  | | | **--** | | |  | | | **80** | | | |  | | | **32** |  | | | **134** | |  | | **53** | |  | | **27** | | |  | | **11** |  | | **<10** | |  | | **--** | |  |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Table 9c.** | **Sharps injuries involving select devices without sharps injury prevention features but for which SESIPs are widely available, by when the injury occurred, Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | **When the Injury Occurred** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Device** | | **Total** | | | | | | **Before use** | | | | | | | | | | | | **During use** | | | | | | | | | **After use,** | | | | | | | | | | **During or after disposal** | | | | | | | | **Unknown/** | | | | | |
|  | |  | | | | | | **use** | | | | | | | | | | | |  | | | | | | | | | **Before Disposal\*** | | | | | | | | | | **Disposal\*** | | | | | | | | **Non-classifiable** | | | | | |
|  | | N |  | % | |  | | N | | | |  | | | % | |  | | | N | | |  | | % | | |  | | | N | |  | | % | |  | | N | |  | | % | |  | | N | |  | | % |  |
| Hypodermic Needle/Syringe | | 170 |  | 100 | |  | | <5 | | | |  | | | -- | |  | | | 53 | | |  | | 31 | | |  | | | 78 | |  | | 46 | |  | | 26 | |  | | 15 | |  | | 11 | |  | | 6 |  |
| IV Stylet | | 33 |  | 100 | |  | | 0 | | | |  | | | 0 | |  | | | 15 | | |  | | 45 | | |  | | | <100 | |  | | -- | |  | | 9 | |  | | 27 | |  | | <5 | |  | | -- |  |
| Vacuum Tube Collection Set | | 12 |  | 100 | |  | | 0 | | | |  | | | 0 | |  | | | <5 | | |  | | -- | | |  | | | <5 | |  | | -- | |  | | <10 | |  | | -- | |  | | <5 | |  | | -- |  |
| Winged-Steel Needle | | 4 |  | 100 | |  | | 0 | | | |  | | | 0 | |  | | | <5 | | |  | | -- | | |  | | | <5 | |  | | -- | |  | | <5 | |  | | -- | |  | | 0 | |  | | 0 |  |
| **Total** | | **219** |  | **100** | |  | | **<5** | | | |  | | | **--** | |  | | | **71** | | |  | | **32** | | |  | | | **89** | |  | | **41** | |  | | **41** | |  | | **19** | |  | | **16** | |  | | **7** |  |
| \*SESIPs offer protection during the period after use. Injuries presented in this table that occurred after use (n=130) can be considered “preventable adverse events” – events that could have been prevented with the use of SESIPS. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 10a.** | | **Sharps injuries by occupation (detailed), Massachusetts hospital workers, 2016** | | | | | | | | | | |
|  |  | | N |  | % |  |  | | N |  | % |  |
| **Physician** | | | **1,099** |  | **38** |  | **Support Services** | | **123** |  | **4** |  |
|  | Intern/Resident | | 411 |  | 14 |  |  | Housekeeper | 77 |  | 3 |  |
|  | MD | | 307 |  | 11 |  |  | Central supply | 35 |  | 1 |  |
|  | Fellow | | 103 |  | 4 |  |  | Safety/security | 6 |  | <1 |  |
|  | Surgeon | | 92 |  | 3 |  |  | Maintenance | <5 |  | -- |  |
|  | Physician Assistant | | 90 |  | 3 |  |  | Attendant/orderly | <5 |  | -- |  |
|  | Medical Student | | 56 |  | 2 |  |  | Other ancillary staff | <5 |  | -- |  |
|  | Anesthesiologist | | 33 |  | 1 |  |  |  |  |  |  |  |
|  | Radiologist | | 7 |  | <1 |  | **Other Medical Staff** | | **72** |  | **2** |  |
|  |  | |  |  |  |  |  | Medical assistant | 60 |  | 2 |  |
| **Nurse** | | | **1,092** |  | **38** |  |  | Dental student | <10 |  | -- |  |
|  | RN or LPN | | 964 |  | 33 |  |  | Dentist | <5 |  | -- |  |
|  | Nurse assistant | | 34 |  | 1 |  |  | Dental assistant/tech | <5 |  | -- |  |
|  | Nursing practitioner | | 31 |  | 1 |  |  | Other medical staff | <5 |  | -- |  |
|  | Patient care technician | | 22 |  | 1 |  |  |  |  |  |  |  |
|  | Nursing student | | 19 |  | 1 |  |  |  |  |  |  |  |
|  | Nurse anesthetist | | 15 |  | 1 |  |  |  |  |  |  |  |
|  | Nurse midwife | | <5 |  | -- |  | **Other** | | **56** |  | **2** |  |
|  | Home health aide | | <5 |  | -- |  |  | Researcher | 23 |  | 1 |  |
|  |  | |  |  |  |  |  | Pharmacist | <5 |  | -- |  |
| **Technician** | | | **462** |  | **16** |  |  | Counselor/social worker | <5 |  | -- |  |
|  | OR/Surgical technician | | 179 |  | 6 |  |  | EMT/paramedic | <5 |  | -- |  |
|  | Phlebotomist | | 107 |  | 4 |  |  | Clerical/administrative | <5 |  | -- |  |
|  | Clinical lab technician | | 60 |  | 2 |  |  | Dietician | <5 |  | -- |  |
|  | Radiologic technician | | 35 |  | 1 |  |  | Law enforcement officer | <5 |  | -- |  |
|  | Respiratory therapist/ Tech | | 20 |  | 1 |  |  | Other student | 20 |  | 1 |  |
|  | Hemodialysis technician | | <5 |  | -- |  |  | Other | <5 |  | -- |  |
|  | Morgue technician | | <5 |  | -- |  |  |  |  |  |  |  |
|  | Other technician | | 57 |  | 2 |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  | **Total** | **2,908** |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 10b.** | | **Sharps injuries by occupation (detailed), Massachusetts hospital workers, 2017** | | | | | | | | | | |
|  |  | | N |  | % |  |  | | N |  | % |  |
| **Physician** | | | **1,160** |  | **39** |  | **Support Services** | | **129** |  | **4** |  |
|  | Intern/Resident | | 459 |  | 15 |  |  | Housekeeper | 66 |  | 2 |  |
|  | MD | | 266 |  | 9 |  |  | Central supply | 50 |  | 2 |  |
|  | Surgeon | | 126 |  | 4 |  |  | Safety/security | 5 |  | <1 |  |
|  | Fellow | | 119 |  | 4 |  |  | Attendant/orderly | <5 |  | -- |  |
|  | Physician Assistant | | 102 |  | 3 |  |  | Maintenance | <5 |  | -- |  |
|  | Medical Student | | 37 |  | 1 |  |  | Other ancillary staff | <5 |  | -- |  |
|  | Anesthesiologist | | 36 |  | 1 |  |  |  |  |  |  |  |
|  | Radiologist | | 15 |  | <1 |  | **Other Medical Staff** | | **108** |  | **4** |  |
|  |  | |  |  |  |  |  | Medical assistant | 89 |  | 3 |  |
| **Nurse** | | | **1,071** |  | **36** |  |  | Dental assistant/tech | 7 |  | <1 |  |
|  | RN or LPN | | 944 |  | 31 |  |  | Dentist | 6 |  | <1 |  |
|  | Nurse assistant | | 40 |  | 1 |  |  | Dental hygienist | <5 |  | -- |  |
|  | Patient care technician | | 37 |  | 1 |  |  | Other medical staff | <5 |  | -- |  |
|  | Nursing practitioner | | 25 |  | 1 |  |  |  |  |  |  |  |
|  | Nurse anesthetist | | 8 |  | <1 |  |  |  |  |  |  |  |
|  | Nursing student | | 6 |  | <1 |  |  |  |  |  |  |  |
|  | Nurse midwife | | 10 |  | <1 |  | **Other** | | **63** |  | **2** |  |
|  | Home health aide | | <5 |  | -- |  |  | Researcher | 14 |  | <1 |  |
|  |  | |  |  |  |  |  | Pharmacist | 7 |  | <1 |  |
|  | | |  |  |  |  |  | EMT/paramedic | <5 |  | -- |  |
| **Technician** | | | **479** |  | **16** |  |  | Clerical/administrative | <5 |  | -- |  |
|  | OR/Surgical technician | | 215 |  | 7 |  |  | Counselor/social worker | <5 |  | -- |  |
|  | Phlebotomist | | 113 |  | 4 |  |  | Other student | 32 |  | 1 |  |
|  | Clinical lab technician | | 33 |  | 1 |  |  | Other | <5 |  | -- |  |
|  | Radiologic technician | | 32 |  | 1 |  |  |  |  |  |  |  |
|  | Respiratory therapist/ Tech | | 19 |  | 1 |  |  |  |  |  |  |  |
|  | Other technician | | 67 |  | 2 |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  | **Total** | **3,010** |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 10c.** | | **Sharps injuries by occupation (detailed), Massachusetts hospital workers, 2018** | | | | | | | | | | |
|  |  | | N |  | % |  |  | | N |  | % |  |
| **Physician** | | | **1,046** |  | **36** |  | **Support Services** | | **125** |  | **4** |  |
|  | Intern/Resident | | 432 |  | 15 |  |  | Housekeeper | 62 |  | 2 |  |
|  | MD | | 238 |  | 8 |  |  | Central supply | 54 |  | 2 |  |
|  | Fellow | | 112 |  | 4 |  |  | Safety/security | 6 |  | <1 |  |
|  | Surgeon | | 88 |  | 3 |  |  | Attendant/orderly | <5 |  | -- |  |
|  | Physician Assistant | | 88 |  | 3 |  |  | Maintenance | <5 |  | -- |  |
|  | Medical Student | | 45 |  | 2 |  |  | Other ancillary staff | <5 |  | -- |  |
|  | Anesthesiologist | | 33 |  | 1 |  |  |  |  |  |  |  |
|  | Radiologist | | 10 |  | <1 |  | **Other Medical Staff** | | **104** |  | **4** |  |
|  |  | |  |  |  |  |  | Medical assistant | 73 |  | 2 |  |
| **Nurse** | | | **1,111** |  | **38** |  |  | Dental assistant/tech | 7 |  | <1 |  |
|  | RN or LPN | | 1,006 |  | 34 |  |  | Dentist | <5 |  | -- |  |
|  | Nurse assistant | | 32 |  | 1 |  |  | Dental hygienist | <5 |  | -- |  |
|  | Nursing practitioner | | 27 |  | 1 |  |  | Home health aide | 0 |  | 0 |  |
|  | Patient care technician | | 17 |  | 1 |  |  | Other medical staff | 17 |  | 1 |  |
|  | Nursing student | | 13 |  | <1 |  |  | Physical therapist | <5 |  | -- |  |
|  | Nurse anesthetist | | 11 |  | <1 |  |  |  |  |  |  |  |
|  | Nurse midwife | | 5 |  | <1 |  | **Other** | | **76** |  | **3** |  |
|  |  | |  |  |  |  |  | Researcher | 20 |  | 1 |  |
|  |  | |  |  |  |  |  | Pharmacist | 5 |  | <1 |  |
| **Technician** | | | **464** |  | **16** |  |  | EMT/paramedic | <5 |  | -- |  |
|  | OR/Surgical technician | | 212 |  | 7 |  |  | Clerical/administrative | <5 |  | -- |  |
|  | Phlebotomist | | 123 |  | 4 |  |  | Counselor/social worker | 5 |  | <1 |  |
|  | Clinical lab technician | | 38 |  | 1 |  |  | Other student | 21 |  | 1 |  |
|  | Radiologic technician | | 27 |  | 1 |  |  | Other | 20 |  | 1 |  |
|  | Respiratory therapist/ Tech | | 14 |  | <1 |  |  |  |  |  |  |  |
|  | Other technician | | 32 |  | 1 |  | **Unknown/Not Answered** | | 9 |  | <1 |  |
|  | Anesthesia technician | | 11 |  | <1 |  |  |  |  |  |  |  |
|  | Emergency department technician | | 7 |  | <1 |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  | **Total** | **2,938** |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 11a.** | | **Sharps injuries by department (detailed), Massachusetts hospital workers, 2016** | | | | | | | | | | | | | | | | | | | | |
|  |  | | | N | |  | | % | |  | |  | | | N | |  | | % | |  | |
| **Operating and Procedure Rooms** | | | **1,298** | |  | | **45** | |  | | **Laboratory** | | | | | **117** | |  | | **4** | |  |
|  | Operating room | | 980 | |  | | 34 | |  | |  | | | Histology/pathology | | 40 | |  | | 1 | |  |
|  | Labor and delivery | | 88 | |  | | 3 | |  | |  | | | Morgue/autopsy room | | 11 | |  | | <1 | |  |
|  | Radiology | | 82 | |  | | 3 | |  | |  | | | Microbiology | | 7 | |  | | <1 | |  |
|  | Cardiac catheterization laboratory | | 54 | |  | | 2 | |  | |  | | | Blood bank | | <5 | |  | | -- | |  |
|  | Phlebotomy room | | 32 | |  | | 1 | |  | |  | | | Clinical chemistry | | <5 | |  | | -- | |  |
|  | Hematology/oncology | | 18 | |  | | 1 | |  | |  | | | Other laboratory | | 22 | |  | | <1 | |  |
|  | Endoscopy/bronchoscopy/cystoscopy | | 17 | |  | | 1 | |  | |  | | | Laboratory, unspecified | | 31 | |  | | 1 | |  |
|  | Dialysis | | 10 | |  | | <1 | |  | |  | | |  | |  | |  | |  | |  |
|  | Other procedure room | | 8 | |  | | <1 | |  | | **Other Areas** | | | | | **207** | |  | | **7** | |  |
|  | Procedure room, unspecified | | 9 | |  | | <1 | |  | |  | | Central sterile supply | | | 40 | |  | | 1 | |  |
|  | | |  | |  | |  | |  | |  | | Dermatology | | | 28 | |  | | 1 | |  |
| **Inpatient Units, other than ICU** | | | **592** | |  | | **20** | |  | |  | | | Rehabilitation unit | | 28 | |  | | 1 | |  |
|  | Medical/surgical ward | | 528 | |  | | 18 | |  | |  | | | Long term care | | 23 | |  | | 1 | |  |
|  | Obstetrics/gynecology | | 27 | |  | | 1 | |  | |  | | | Exam room | | 20 | |  | | 1 | |  |
|  | Psychiatry ward | | 16 | |  | | 1 | |  | |  | | | Hospital grounds | | 10 | |  | | <1 | |  |
|  | Nursery | | 9 | |  | | <1 | |  | |  | | | Anesthesia | | 9 | |  | | <1 | |  |
|  | Pediatrics | | <10 | |  | | -- | |  | |  | | | Pain clinic | | 9 | |  | | <1 | |  |
|  | Patient room, ward unspecified | | <5 | |  | | -- | |  | |  | | | Employee health/infection control | | <5 | |  | | -- | |  |
|  | | |  | |  | |  | |  | |  | | | Pharmacy | | <5 | |  | | -- | |  |
| **Emergency Department** | | | **281** | |  | | **10** | |  | |  | | | Laundry room | | <5 | |  | | -- | |  |
|  | | |  | |  | |  | |  | |  | | | Ambulance | | <5 | |  | | -- | |  |
| **Intensive Care Units** | | | **207** | |  | | **7** | |  | |  | | | Other Location | | 30 | |  | | 1 | |  |
|  | Intensive care unit | | 180 | |  | | 6 | |  | |  | | |  | |  | |  | |  | |  |
|  | Post anesthesia care unit | | 27 | |  | | 1 | |  | | **Unknown/Not Answered** | | | | | **5** | |  | | **<1** | |  |
|  | | |  | |  | |  | |  | |  | | | | |  | |  | |  | |  |
| **Outpatient Areas** | | | **201** | |  | | **7** | |  | |  | | |  | |  | |  | |  | |  |
|  | Ambulatory care clinic | | 127 | |  | | 4 | |  | |  | | |  | |  | |  | |  | |  |
|  | Dental clinic | | 15 | |  | | 1 | |  | |  | | | | |  | |  | |  | |  |
|  | Home health visit | | 10 | |  | | <1 | |  | |  | | | | |  | |  | |  | |  |
|  | Physician’s office | | 9 | |  | | <1 | |  | |  | | | | |  | |  | |  | |  |
|  | Other outpatient areas | | 40 | |  | | 1 | |  | |  | | |  | |  | |  | |  | |  |
|  |  | |  | |  | |  | |  | | **Total** | | | | | **2,908** | |  | | **100** | |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 11b.** | | **Sharps injuries by department (detailed), Massachusetts hospital workers, 2017** | | | | | | | | | | | |
|  |  | | N |  | % |  |  | | | N |  | % |  |
| **Operating and Procedure Rooms** | | | **1,319** |  | **44** |  | **Laboratory** | | | **85** |  | **3** |  |
|  | Operating room | | 995 |  | 33 |  |  | | Histology/pathology | 26 |  | 1 |  |
|  | Labor and delivery | | 107 |  | 4 |  |  | | Morgue/autopsy room | 9 |  | <1 |  |
|  | Radiology | | 80 |  | 3 |  |  | | Blood bank | 6 |  | <1 |  |
|  | Cardiac catheterization laboratory | | 47 |  | 2 |  |  | | Microbiology | <5 |  | -- |  |
|  | Hematology/oncology | | 29 |  | 1 |  |  | | Clinical chemistry | <5 |  | -- |  |
|  | Phlebotomy room | | 26 |  | 1 |  |  | | Other laboratory | 20 |  | <1 |  |
|  | Endoscopy/bronchoscopy/cystoscopy | | 12 |  | <1 |  |  | | Laboratory, unspecified | 19 |  | <1 |  |
|  | Dialysis | | <10 |  | <1 |  |  | |  |  |  |  |  |
|  | Other procedure room | | 12 |  | <1 |  | **Other Areas** | | | **209** |  | **7** |  |
|  | Procedure room, unspecified | | <5 |  | -- |  |  | Central sterile supply | | 54 |  | 2 |  |
|  |  | |  |  |  |  |  | Dermatology | | 35 |  | 1 |  |
| **Inpatient Units, other than ICU** | | | **626** |  | **21** |  |  | Rehabilitation unit | | 27 |  | 1 |  |
|  | Medical/surgical ward | | 547 |  | 18 |  |  | | Exam room | 18 |  | 1 |  |
|  | Obstetrics/gynecology | | 32 |  | 1 |  |  | | Long term care | 11 |  | <1 |  |
|  | Psychiatry ward | | 20 |  | 1 |  |  | | Anesthesia | 15 |  | <1 |  |
|  | Pediatrics | | 16 |  | 1 |  |  | | Pain clinic | 7 |  | <1 |  |
|  | Nursery | | 6 |  | <1 |  |  | | Hospital grounds | 6 |  | <1 |  |
|  | Patient room, ward unspecified | | 5 |  | <1 |  |  | | Detox unit | 5 |  | <1 |  |
|  |  | |  |  |  |  |  | | Pharmacy | <5 |  | -- |  |
| **Emergency Department** | | | **283** |  | **9** |  |  | | Central trash area | <5 |  | -- |  |
|  | | |  |  |  |  |  | | Ambulance | <5 |  | -- |  |
| **Intensive Care Units** | | | **217** |  | **7** |  |  | | Employee health/infection control | <5 |  | -- |  |
|  | Intensive care unit | | 192 |  | 6 |  |  | | Other Location | 23 |  | 1 |  |
|  | Post anesthesia care unit | | 25 |  | 1 |  |  | |  |  |  |  |  |
|  |  | |  |  |  |  | **Unknown/Not Answered** | | | **<5** |  | **--** |  |
| **Outpatient Areas** | | | **269** |  | **9** |  |  | | |  |  |  |  |
|  | Ambulatory care clinic | | 174 |  | 6 |  |  | |  |  |  |  |  |
|  | Dental clinic | | 21 |  | 1 |  |  | |  |  |  |  |  |
|  | Physician’s office | | 18 |  | 1 |  |  | | |  |  |  |  |
|  | Home health visit | | <15 |  | -- |  |  | | |  |  |  |  |
|  | Other outpatient areas | | 41 |  | 1 |  |  | | |  |  |  |  |
|  | Community health center | | <5 |  | -- |  |  | |  |  |  |  |  |
|  |  | |  |  |  |  | **Total** | | | **3,010** |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 11c.** | | **Sharps injuries by department (detailed), Massachusetts hospital workers, 2018** | | | | | | | | | | | |
|  |  | | N |  | % |  |  | | | N |  | % |  |
| **Operating and Procedure Rooms** | | | **1,319** |  | **45** |  | **Laboratory** | | | **70** |  | **2** |  |
|  | Operating room | | 1,008 |  | 34 |  |  | | Histology/pathology | 28 |  | 1 |  |
|  | Radiology | | 95 |  | 3 |  |  | | Morgue/autopsy room | <10 |  | <1 |  |
|  | Labor and delivery | | 75 |  | 3 |  |  | | Blood bank | <5 |  | -- |  |
|  | Phlebotomy room | | 45 |  | 2 |  |  | | Microbiology | 8 |  | <1 |  |
|  | Cardiac catheterization laboratory | | 43 |  | 1 |  |  | | Other laboratory | 15 |  | <1 |  |
|  | Hematology/oncology | | 26 |  | 1 |  |  | | Laboratory, unspecified | 10 |  | <1 |  |
|  | Dialysis | | 11 |  | <1 |  |  | |  |  |  |  |  |
|  | Endoscopy/bronchoscopy/cystoscopy | | 9 |  | <1 |  |  | |  |  |  |  |  |
|  | Other procedure room | | <10 |  | <1 |  | **Other Areas** | | | **225** |  | **8** |  |
|  | Procedure room, unspecified | | <5 |  | -- |  |  | Central sterile supply | | 55 |  | 2 |  |
|  |  | |  |  |  |  |  | Rehabilitation unit | | 31 |  | 1 |  |
| **Inpatient Units, other than ICU** | | | **642** |  | **22** |  |  | Dermatology | | 30 |  | 1 |  |
|  | Medical/surgical ward | | 547 |  | 19 |  |  | | Exam room | 30 |  | 1 |  |
|  | Obstetrics/gynecology | | 31 |  | 1 |  |  | | Long term care | 16 |  | 1 |  |
|  | Psychiatry ward | | 24 |  | 1 |  |  | | Anesthesia | 12 |  | <1 |  |
|  | Pediatrics | | 21 |  | 1 |  |  | | Pain clinic | 10 |  | <1 |  |
|  | Nursery | | 7 |  | <1 |  |  | | Pharmacy | 5 |  | <1 |  |
|  | Patient room, ward unspecified | | 7 |  | <1 |  |  | | Detox unit | <5 |  | -- |  |
|  | Specific ward, type unknown | | 5 |  | <1 |  |  | | Hospital grounds | <5 |  | -- |  |
|  |  | |  |  |  |  |  | | Central trash area | <5 |  | -- |  |
| **Emergency Department** | | | **276** |  | **9** |  |  | | Ambulance | <5 |  | -- |  |
|  | | |  |  |  |  |  | | Employee health/infection control | <5 |  | -- |  |
| **Intensive Care Units** | | | **212** |  | **7** |  |  | | Laundry room | <5 |  | -- |  |
|  | Intensive care unit | | 193 |  | 7 |  |  | | Other Location | 22 |  | 1 |  |
|  | Post anesthesia care unit | | 19 |  | 1 |  |  | |  |  |  |  |  |
|  |  | |  |  |  |  | **Unknown/Not Answered** | | | **7** |  | **<1** |  |
| **Outpatient Areas** | | | **187** |  | **6** |  |  | | |  |  |  |  |
|  | Ambulatory care clinic | | 131 |  | 4 |  |  | |  |  |  |  |  |
|  | Dental clinic | | 19 |  | 1 |  |  | |  |  |  |  |  |
|  | Physician’s office | | 14 |  | <1 |  |  | | |  |  |  |  |
|  | Home health visit | | <15 |  | -- |  |  | | |  |  |  |  |
|  | Other outpatient areas | | 11 |  | 0 |  |  | | |  |  |  |  |
|  | Community health center | | <5 |  | -- |  |  | |  |  |  |  |  |
|  |  | |  |  |  |  | **Total** | | | **2,938** |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 12a.** | | | | **Sharps injuries by device (detailed), Massachusetts hospital workers, 2016** | | | | | | | | | | | | |
|  | | | |  | N |  | % |  |  | | | N | |  | % |  |
| **Hypodermic needles/syringe** | | | | | **938** |  | **32** |  | **Glass** | | | **28** | |  | **1** |  |
|  | Hypodermic needle attached to a disposable syringe  syringe | | | | 827 |  | 28 |  |  | | Specimen / Test / Vacuum tube | 10 | |  | <1 |  |
|  |  | | disposable syringe | |  |  |  |  |  | | Medication ampule / Vial / IV bottle | | 7 |  | <1 |  |
|  | Prefilled cartridge syringe | | | | 28 |  | 1 |  |  | | Slide | 5 | |  | <5 |  |
|  | Unattached hypodermic needle | | | | 20 |  | 1 |  |  | | Pipette | <5 | |  | -- |  |
|  | Hypodermic Needle Attached to IV | | | | 17 |  | 1 |  |  | | Capillary tube | <5 | |  | -- |  |
|  |  | | tubing | |  |  |  |  |  | | Other glass item | <5 | |  | -- |  |
|  | Hypodermic needle attached to a | | | | 11 |  | <1 |  |  | | |  | |  |  |  |
|  |  | | non-disposable syringe | |  |  |  |  | **Dental Device or item** | | | **13** | |  | **<1** |  |
|  | Hypodermic needle, unspecified | | | | 35 |  | 1 |  |  | Dental bur | | <5 | |  | -- |  |
|  |  | | | |  |  |  |  |  | Scaler/curette | | <5 | |  | -- |  |
| **Suture Needle** | | | | | **631** |  | **22** |  |  | Dental explorer | | <5 | |  | -- |  |
|  | Curved suture needle | | | | 490 |  | 17 |  |  | Dental pick | | <5 | |  | -- |  |
|  | Straight suture needle | | | | 32 |  | 1 |  |  | Other dental device or item | | <5 | |  | -- |  |
|  | Suture needle, unspecified | | | | 109 |  | 4 |  |  | | |  | |  |  |  |
|  |  | | | |  |  |  |  | **Other** | | | **423** | |  | **15** |  |
| **Other Hollow Bore Needles** | | | | | **310** |  | **11** |  |  | Lancet | | 58 | |  | 2 |  |
|  | IV Stylet | | | | 157 |  | 5 |  |  | Wire | | 49 | |  | 2 |  |
|  | Huber Needle | | | | 48 |  | 2 |  |  | Electrode | | 47 | |  | 2 |  |
|  | Biopsy Needle | | | | 17 |  | 1 |  |  | Retractor | | 35 | |  | 1 |  |
|  | Spinal or epidural needle | | | | 11 |  | <1 |  |  | Scissors | | 30 | |  | 1 |  |
|  | Intraosseous needle | | | | 6 |  | <1 |  |  | Forceps | | 26 | |  | 1 |  |
|  | Other type of hollow bore needle | | | | 18 |  | 1 |  |  | Bovie electrocautery device | | 20 | |  | 1 |  |
|  | Hollow bore needle, unspecified | | | | 53 |  | 2 |  |  | Cutting blade other than scalpel | | 18 | |  | 1 |  |
|  | | | | |  |  |  |  |  | Pin | | 13 | |  | <1 |  |
| **Scalpel Blade** | | | | | **210** |  | **7** |  |  | Drill bit | | 12 | |  | <1 |  |
|  | | | | |  |  |  |  |  | Bone cutter | | 11 | |  | <1 |  |
| **Winged Steel Needle** | | | | | **188** |  | **6** |  |  | Trocar | | 7 | |  | <1 |  |
|  | Winged Steel needle attached to a | | | | 128 |  | 4 |  |  | Staple | | 6 | |  | <1 |  |
|  |  | | vacuum tube collection holder | |  |  |  |  |  | Other needle | | 10 | |  | <1 |  |
|  | Winged Steele Needle | | | | 54 |  | 2 |  |  | Other Type of Sharp Object | | 67 | |  | 2 |  |
|  | Winged Steele Needle attached to IV | | | | 6 |  | <1 |  |  | Needle, unspecified | | 14 | |  | <1 |  |
|  |  | | tubing | |  |  |  |  |  |  | |  | |  |  |  |
|  | | | | |  |  |  |  |  |  | |  | |  |  |  |
| **Vacuum Tube Collection Holder/Needle** | | | | | **114** |  | **4** |  | **Unknown/Not Answered** | | | **53** | |  | **2** |  |
|  | | Vacuum tube collection holder/needle | | | 83 |  | 3 |  |  | | |  | |  |  |  |
|  | Phlebotomy needle (other than winged | | | | 31 |  | 1 |  |  | | |  | |  |  |  |
|  |  | | steel needle) | |  |  |  |  |  | | |  | |  |  |  |
|  |  | |  | |  |  |  |  |  | | |  | |  |  |  |
|  |  | | | |  |  |  |  | **Total** | | | **2,908** | |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 12b.** | | | | **Sharps injuries by device (detailed), Massachusetts hospital workers, 2017** | | | | | | | | | | | | |
|  | | | |  | N |  | % |  |  | | | N | |  | % |  |
| **Hypodermic needles/syringe** | | | | | **1,018** |  | **34** |  | **Glass** | | | **32** | |  | **1** |  |
|  | Hypodermic needle attached to a disposable syringe  syringe | | | | 841 |  | 28 |  |  | | Specimen / Test / Vacuum tube | 13 | |  | <1 |  |
|  |  | | disposable syringe | |  |  |  |  |  | | Medication ampule / Vial / IV bottle | | 8 |  | <1 |  |
|  | Prefilled cartridge syringe | | | | 37 |  | 1 |  |  | | Slide | <5 | |  | -- |  |
|  | Unattached hypodermic needle | | | | 13 |  | <1 |  |  | | Pipette | <5 | |  | -- |  |
|  | Hypodermic Needle Attached to IV | | | | 12 |  | <1 |  |  | | Capillary tube | <5 | |  | -- |  |
|  |  | | Tubing | |  |  |  |  |  | | Other glass item | 6 | |  | -- |  |
|  | Hypodermic needle attached to a | | | | 9 |  | <1 |  |  | | |  | |  |  |  |
|  |  | | non-disposable syringe | |  |  |  |  | **Dental Device or item** | | | **16** | |  | **1** |  |
|  | Hypodermic needle, unspecified | | | | 106 |  | 4 |  |  | Dental bur | | 5 | |  | <1 |  |
|  |  | | | |  |  |  |  |  | Scaler/curette | | <5 | |  | -- |  |
| **Suture Needle** | | | | | **681** |  | **23** |  |  | Dental explorer | | <5 | |  | -- |  |
|  | Curved suture needle | | | | 526 |  | 17 |  |  | Dental pick | | <5 | |  | -- |  |
|  | Straight suture needle | | | | 34 |  | 1 |  |  | Other dental device or item | | 5 | |  | <1 |  |
|  | Suture needle, unspecified | | | | 121 |  | 4 |  |  | | |  | |  |  |  |
|  |  | | | |  |  |  |  | **Other** | | | **393** | |  | **13** |  |
| **Other Hollow Bore Needles** | | | | | **294** |  | **10** |  |  | Lancet | | 53 | |  | 2 |  |
|  | IV Stylet | | | | 143 |  | 5 |  |  | Wire | | 51 | |  | 2 |  |
|  | Huber Needle | | | | 46 |  | 1 |  |  | Retractor | | 46 | |  | 2 |  |
|  | Spinal or epidural needle | | | | 32 |  | 1 |  |  | Scissors | | 39 | |  | 1 |  |
|  | Biopsy Needle | | | | 27 |  | 1 |  |  | Forceps | | 27 | |  | 1 |  |
|  | Intraosseous needle | | | | 5 |  | <1 |  |  | Electrode | | 22 | |  | 1 |  |
|  | Other type of hollow bore needle | | | | 9 |  | <1 |  |  | Bovie electrocautery device | | 15 | |  | <1 |  |
|  | Hollow bore needle, unspecified | | | | 32 |  | 1 |  |  | Bone cutter | | 14 | |  | <1 |  |
|  | | | | |  |  |  |  |  | Trocar | | 14 | |  | <1 |  |
| **Scalpel Blade** | | | | | **220** |  | **7** |  |  | Drill bit | | 13 | |  | <1 |  |
|  | | | | |  |  |  |  |  | Pin | | 12 | |  | <1 |  |
| **Winged Steel Needle** | | | | | **212** |  | **7** |  |  | Razor | | 11 | |  | <1 |  |
|  | Winged Steel needle attached to a | | | | 128 |  | 4 |  |  | Staple | | 8 | |  | <1 |  |
|  |  | | vacuum tube collection holder | |  |  |  |  |  | Tenaculum | | 7 | |  | <1 |  |
|  | Winged Steele Needle | | | | 77 |  | 3 |  |  | Cutting blade other than scalpel | | 5 | |  | <1 |  |
|  | Winged Steele Needle attached to IV | | | | 7 |  | 0 |  |  | Rod | | <5 | |  | -- |  |
|  |  | | tubing | |  |  |  |  |  | Other needle | | 11 | |  | <1 |  |
|  | | | | |  |  |  |  |  | Other Type of Sharp Object | | 41 | |  | 1 |  |
| **Vacuum Tube Collection Holder/Needle** | | | | | **91** |  | **3** |  |  | | Needle, unspecified | <5 | |  | -- |  |
|  | | Vacuum tube collection holder/needle | | | 58 |  | 2 |  |  | | |  | |  |  |  |
|  | Phlebotomy needle (other than winged | | | | 33 |  | 1 |  |  | | |  | |  |  |  |
|  |  | | steel needle) | |  |  |  |  | **Unknown/Not Answered** | | | **53** | |  | **2** |  |
|  |  | |  | |  |  |  |  |  | | |  | |  |  |  |
|  |  | | | |  |  |  |  | **Total** | | | **3,010** | |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 12c.** | | | | **Sharps injuries by device (detailed), Massachusetts hospital workers, 2018** | | | | | | | | | | | | |
|  | | | |  | N |  | % |  |  | | | N | |  | % |  |
| **Hypodermic needles/syringe** | | | | | **994** |  | **34** |  | **Glass** | | | **21** | |  | **1** |  |
|  | Hypodermic needle attached to a disposable syringe  syringe | | | | 876 |  | 30 |  |  | | Medication ampule / Vial / IV bottle | 9 | |  | -- |  |
|  |  | | disposable syringe | |  |  |  |  |  | | Specimen / Test / Vacuum tube | | <5 |  | -- |  |
|  | Prefilled cartridge syringe | | | | 52 |  | 2 |  |  | | Slide | <5 | |  | -- |  |
|  | Unattached hypodermic needle | | | | 30 |  | 1 |  |  | | Pipette | <5 | |  | -- |  |
|  | Hypodermic Needle Attached to IV | | | | 16 |  | 1 |  |  | | Capillary tube | <5 | |  | -- |  |
|  |  | | tubing | |  |  |  |  |  | | Other glass item | <5 | |  | -- |  |
|  | Hypodermic needle attached to a | | | | 9 |  | <1 |  |  | | |  | |  |  |  |
|  |  | | non-disposable syringe | |  |  |  |  | **Dental Device or item** | | | **10** | |  | **0** |  |
|  | Hypodermic needle, unspecified | | | | 11 |  | <1 |  |  | Dental bur | | 5 | |  | <1 |  |
|  |  | | | |  |  |  |  |  | Scaler/curette | | <5 | |  | -- |  |
| **Suture Needle** | | | | | **640** |  | **22** |  |  | Dental pick | | <5 | |  | -- |  |
|  | Curved suture needle | | | | 562 |  | 19 |  |  | Other dental device or item | | <5 | |  | -- |  |
|  | Straight suture needle | | | | 36 |  | 1 |  |  |  | |  | |  |  |  |
|  | Suture needle, unspecified | | | | 42 |  | 1 |  |  | | |  | |  |  |  |
|  |  | | | |  |  |  |  | **Other** | | | **400** | |  | **14** |  |
| **Other Hollow Bore Needles** | | | | | **289** |  | **10** |  |  | Wire | | 52 | |  | 2 |  |
|  | IV Stylet | | | | 133 |  | 5 |  |  | Retractor | | 42 | |  | 1 |  |
|  | Huber Needle | | | | 56 |  | 2 |  |  | Electrode | | 42 | |  | 1 |  |
|  | Biopsy Needle | | | | 31 |  | 1 |  |  | Lancet | | 34 | |  | 1 |  |
|  | Spinal or epidural needle | | | | 25 |  | 1 |  |  | Scissors | | 32 | |  | 1 |  |
|  | Other type of hollow bore needle | | | | 17 |  | 1 |  |  | Forceps | | 24 | |  | 1 |  |
|  | Hollow bore needle, unspecified | | | | 27 |  | 1 |  |  | Pin | | 16 | |  | 1 |  |
|  |  | | | |  |  |  |  |  | Bone cutter | | 16 | |  | 1 |  |
|  | | | | |  |  |  |  |  | Drill bit | | 11 | |  | <1 |  |
| **Scalpel Blade** | | | | | **195** |  | **7** |  |  | Bovie electrocautery device | | 9 | |  | <1 |  |
|  | | | | |  |  |  |  |  | Trocar | | 8 | |  | <1 |  |
| **Winged Steel Needle** | | | | | **236** |  | **8** |  |  | Cutting blade other than scalpel | | 8 | |  | <1 |  |
|  | Winged Steel needle attached to a | | | | 145 |  | 5 |  |  | Razor | | 7 | |  | <1 |  |
|  |  | | vacuum tube collection holder | |  |  |  |  |  | Staple | | 7 | |  | <1 |  |
|  | Winged Steele Needle | | | | 86 |  | 3 |  |  | Tenaculum | | 6 | |  | <1 |  |
|  | Winged Steele Needle attached to IV | | | | 5 |  | <1 |  |  | Other needle | | 16 | |  | 1 |  |
|  |  | | tubing | |  |  |  |  |  | Other Type of Sharp Object | | 57 | |  | 2 |  |
|  | | | | |  |  |  |  |  | Needle, unspecified | | 13 | |  | <1 |  |
| **Vacuum Tube Collection Holder/Needle** | | | | | **85** |  | **3** |  |  | |  |  | |  |  |  |
|  | | Vacuum tube collection holder/needle | | | 65 |  | 2 |  |  | | |  | |  |  |  |
|  | Phlebotomy needle (other than winged | | | | 20 |  | 1 |  | **Unknown/Not Answered** | | | **68** | |  | **2** |  |
|  |  | | steel needle) | |  |  |  |  |  | | |  | |  |  |  |
|  |  | |  | |  |  |  |  |  | | |  | |  |  |  |
|  |  | | | |  |  |  |  | **Total** | | | **2,938** | |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 13a.** | | | **Sharps injuries by procedure (detailed), Massachusetts hospital workers, 2016** | | | | | | | | | | | |
|  |  | | | N |  | % |  |  | | | N |  | % |  |
| **Injection** | | | | **795** |  | **27** |  | **Making the Incision** | | | **291** |  | **10** |  |
|  | Subcutaneous injection | | | 630 |  | 22 |  |  | Making the incision | | 221 |  | 8 |  |
|  | Intramuscular injection | | | 110 |  | 4 |  |  | Cauterization | | 15 |  | 1 |  |
|  | Epidural/spiral anesthesia | | | 20 |  | 1 |  |  | Other surgical procedure | | 26 |  | 1 |  |
|  | Other injection | | | 16 |  | 1 |  |  | Surgical procedure, unspecified | | 29 |  | 1 |  |
|  | Injection, unspecified | | | 19 |  | 1 |  |  |  | |  |  |  |  |
|  |  | | |  |  |  |  | **To Obtain Body Fluid or Tissue** | | | **48** |  | **2** |  |
| **Suturing** | | | | **637** |  | **22** |  |  | **Sample** | |  |  |  |  |
|  | Suturing | | | 632 |  | 22 |  |  |  | |  |  |  |  |
|  | Suture removal | | | 5 |  | <1 |  | **Dental Procedures** | | | **15** |  | **1** |  |
|  |  | | |  |  |  |  |  | Dental drilling | | <5 |  | -- |  |
| **Blood Procedures** | | | | **369** |  | **13** |  |  | Oral surgery | | <5 |  | -- |  |
|  | Percutaneous venous puncture | | | 258 |  | 9 |  |  | Other dental | | 5 |  | <1 |  |
|  | Finger stick / heel stick | | | 52 |  | 2 |  |  | Dental procedure, unspecified | | <5 |  | -- |  |
|  | Percutaneous arterial puncture | | | 32 |  | 1 |  |  |  | |  |  |  |  |
|  | Dialysis / AV fistula site | | | 13 |  | <1 |  | **Other** | | | **263** |  | **9** |  |
|  | Draw blood from umbilical vessel | | | <5 |  | -- |  |  | To obtain lab specimens | | 42 |  | 1 |  |
|  | Other blood procedure | | | 6 |  | <1 |  |  | Transferring blood/body fluid to | | 17 |  | 1 |  |
|  | Blood procedure, unspecified | | | <10 |  | -- |  |  |  | another container |  |  |  |  |
|  |  | | |  |  |  |  |  | Drilling | | 16 |  | 1 |  |
| **Line Procedures** | | | | **308** |  | **11** |  |  | Shaving | | 10 |  | <1 |  |
|  | To insert a peripheral IV line or | | | 108 |  | 4 |  |  | Processing lab specimens | | <5 |  | -- |  |
|  |  | set up a heparin lock | |  |  |  |  |  | Other procedure | | 174 |  | 6 |  |
|  | To insert a central IV line | | | 44 |  | 2 |  |  | Procedure, unspecified | | <5 |  | -- |  |
|  | Draw blood from central or | | | 37 |  | 1 |  |  | | |  |  |  |  |
|  |  | peripheral IV line or port | |  |  |  |  | **Unknown/Not answered** | | | **182** |  | **6** |  |
|  | To insert an arterial line | | | 28 |  | 1 |  |  |  | |  |  |  |  |
|  | Other injection into IV site/port | | | 26 |  | 1 |  |  |  | |  |  |  |  |
|  | Draw blood from arterial line  d  draw | | | 16 |  | 1 |  |  |  |  |  |  |  |  |
|  | To flush heparin/saline | | | 12 |  | <1 |  |  |  | |  |  |  |  |
|  | To connect IV line | | | <5 |  | -- |  |  |  | |  |  |  |  |
|  | Other line procedure | | | 28 |  | 1 |  |  |  | |  |  |  |  |
|  | Line procedure, unspecified | | | <10 |  | -- |  |  |  | |  |  |  |  |
|  |  | | |  |  |  |  |  | | |  |  |  |  |
|  |  | | |  |  |  |  | **Total** | | | **2,908** |  | **100** |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 13b.** | | | | **Sharps injuries by procedure (detailed), Massachusetts hospital workers, 2017** | | | | | | | | | | | | | | | | | | | |
|  |  | | | | N | |  | | % | |  | |  | | | N | |  | | % | |  | |
| **Injection** | | | | | | **844** | |  | | **28** | |  | **Making the Incision** | | | | **326** | |  | | **11** | |  |
|  | | Subcutaneous injection | | | | 636 | |  | | 21 | |  |  | Making the incision | | | 220 | |  | | 7 | |  |
|  | | Intramuscular injection | | | | 149 | |  | | 5 | |  |  | Cauterization | | | 5 | |  | | <1 | |  |
|  | | Epidural/spiral anesthesia | | | | 30 | |  | | 1 | |  |  | Other surgical procedure | | | 43 | |  | | 1 | |  |
|  | | Other injection | | | | 14 | |  | | <1 | |  |  | Surgical procedure, unspecified | | | 58 | |  | | 2 | |  |
|  | | Injection, unspecified | | | | 15 | |  | | <1 | |  |  |  | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  | **To Obtain Body Fluid or Tissue** | | | | **80** | |  | | **3** | |  |
| **Suturing** | | | | | | **657** | |  | | **22** | |  | **Sample** | | | |  | |  | |  | |  |
|  | | Suturing | | | | 649 | |  | | 22 | |  |  |  | | |  | |  | |  | |  |
|  | | Suture removal | | | | 8 | |  | | <1 | |  | **Dental Procedures** | | | | **21** | |  | | **1** | |  |
|  | |  | | | |  | |  | |  | |  |  | Oral surgery | | | 8 | |  | | <1 | |  |
| **Blood Procedures** | | | | | | **383** | |  | | **13** | |  |  | Dental drilling | | | <5 | |  | | -- | |  |
|  | | Percutaneous venous puncture | | | | 283 | |  | | 9 | |  |  | Periodontal surgery | | | <5 | |  | | -- | |  |
|  | | Finger stick / heel stick | | | | 40 | |  | | 1 | |  |  | Other dental | | | <5 | |  | | -- | |  |
|  | | Percutaneous arterial puncture | | | | 40 | |  | | 1 | |  |  | Dental procedure, unspecified | | | <5 | |  | | -- | |  |
|  | | Dialysis / AV fistula site | | | | 6 | |  | | <1 | |  |  | | | |  | |  | |  | |  |
|  | | Draw blood from umbilical vessel | | | | <5 | |  | | -- | |  | **Other** | | | | **307** | |  | | **10** | |  |
|  | | Blood procedure, unspecified | | | | <15 | |  | | -- | |  |  | To obtain lab specimens | | | 31 | |  | | 1 | |  |
|  | |  | | | |  | |  | |  | |  |  | Drilling | | | 12 | |  | | <1 | |  |
|  | |  | | | |  | |  | |  | |  |  | Transferring blood/body fluid to | | | 11 | |  | | <1 | |  |
| **Line Procedures** | | | | | | **226** | |  | | **8** | |  |  |  | another container | |  | |  | |  | |  |
|  | | To insert a peripheral IV line or | | | | 79 | |  | | 3 | |  |  | Shaving | | | <10 | |  | | -- | |  |
|  | |  | set up a heparin lock | | |  | |  | |  | |  |  | Other procedure | | | 245 | |  | | 8 | |  |
|  | | Draw blood from central or | | | | 31 | |  | | 1 | |  |  | Procedure, unspecified | | | <5 | |  | | -- | |  |
|  | |  | peripheral IV line or port | | |  | |  | |  | |  |  |  | | |  | |  | |  | |  |
|  | | To insert a central IV line | | | | 27 | |  | | 1 | |  |  |  | | |  | |  | |  | |  |
|  | | To insert an arterial line | | | | 21 | |  | | 1 | |  | **Unknown/Not answered** | | | | **161** | |  | | **5** | |  |
|  | | Other injection into IV site/port | | | | 15 | |  | | <1 | |  |  |  | | |  | |  | |  | |  |
|  | | To flush heparin/saline | | | | 15 | |  | | <1 | |  |  |  |  | |  | |  | |  | |  |
|  | | Draw blood from arterial line  d  draw | | | | <5 | |  | | -- | |  |  |  | | |  | |  | |  | |  |
|  | | To connect IV line | | | | <5 | |  | | -- | |  |  |  | | |  | |  | |  | |  |
|  | | Other line procedure | | | | 25 | |  | | 1 | |  |  |  | | |  | |  | |  | |  |
|  | | Line procedure, unspecified | | | | 9 | |  | | <1 | |  |  |  | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  |  |  | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  |  | | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  |  | | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  |  | | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  | **Total** | | | | **3,010** | |  | | **100** | |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 13c.** | | | | **Sharps injuries by procedure (detailed), Massachusetts hospital workers, 2018** | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | N | |  | | % | |  | |  | | | | N | |  | | % | |  | |
| **Injection** | | | | | | **871** | |  | | **30** | |  | | **Making the Incision** | | | | **314** | |  | | **11** | |  |
|  | | Subcutaneous injection | | | | 639 | |  | | 22 | |  | |  | Making the incision | | | 204 | |  | | 7 | |  |
|  | | Intramuscular injection | | | | 178 | |  | | 6 | |  | |  | Cauterization | | | 7 | |  | | <1 | |  |
|  | | Epidural/spiral anesthesia | | | | <30 | |  | | -- | |  | |  | Other surgical procedure | | | 50 | |  | | 2 | |  |
|  | | Other injection | | | | <5 | |  | | -- | |  | |  | Surgical procedure, unspecified | | | 53 | |  | | 2 | |  |
|  | | Injection, unspecified | | | | 26 | |  | | 1 | |  | |  |  | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  | | **To Obtain Body Fluid or Tissue** | | | | **53** | |  | | **2** | |  |
| **Suturing** | | | | | | **640** | |  | | **22** | |  | | **Sample** | | | |  | |  | |  | |  |
|  | | Suturing | | | | 634 | |  | | 22 | |  | |  |  | | |  | |  | |  | |  |
|  | | Suture removal | | | | 6 | |  | | <1 | |  | | **Dental Procedures** | | | | **15** | |  | | **1** | |  |
|  | |  | | | |  | |  | |  | |  | |  | Oral surgery | | | 6 | |  | | <1 | |  |
| **Blood Procedures** | | | | | | **370** | |  | | **13** | |  | |  | Dental drilling | | | <5 | |  | | -- | |  |
|  | | Percutaneous venous puncture | | | | 287 | |  | | 10 | |  | |  | Periodontal surgery | | | <5 | |  | | -- | |  |
|  | | Percutaneous arterial puncture | | | | 32 | |  | | 1 | |  | |  | Other dental | | | <5 | |  | | -- | |  |
|  | | Finger stick / heel stick | | | | 30 | |  | | 1 | |  | |  | Dental procedure, unspecified | | | <5 | |  | | -- | |  |
|  | | Dialysis / AV fistula site | | | | 10 | |  | | <1 | |  | |  | | | |  | |  | |  | |  |
|  | | Draw blood from umbilical vessel | | | | <10 | |  | | -- | |  | | **Other** | | | | **223** | |  | | **8** | |  |
|  | | Blood procedure, unspecified | | | | <5 | |  | | -- | |  | |  | To obtain lab specimens | | | 38 | |  | | 1 | |  |
|  | |  | | | |  | |  | |  | |  | |  | Drilling | | | 15 | |  | | 1 | |  |
|  | |  | | | |  | |  | |  | |  | |  | Transferring blood/body fluid to | | | 16 | |  | | 1 | |  |
| **Line Procedures** | | | | | | **281** | |  | | **10** | |  | |  |  | another container | |  | |  | |  | |  |
|  | | To insert a peripheral IV line or | | | | 100 | |  | | 3 | |  | |  | Shaving | | | <5 | |  | | -- | |  |
|  | |  | set up a heparin lock | | |  | |  | |  | |  | |  | Other procedure | | | 131 | |  | | 4 | |  |
|  | | Draw blood from central or | | | | 43 | |  | | 1 | |  | |  | Procedure, unspecified | | | <25 | |  | | -- | |  |
|  | |  | peripheral IV line or port | | |  | |  | |  | |  | |  |  | | |  | |  | |  | |  |
|  | | To insert a central IV line | | | | 37 | |  | | 1 | |  | |  |  | | |  | |  | |  | |  |
|  | | To insert an arterial line | | | | 19 | |  | | 1 | |  | | **Unknown/Not answered** | | | | **171** | |  | | **6** | |  |
|  | | Draw blood from arterial line  d  draw | | | | 13 | |  | | <1 | |  | |  |  | | |  | |  | |  | |  |
|  | | To connect IV line | | | | <10 | |  | | -- | |  | |  |  |  | |  | |  | |  | |  |
|  | | To flush heparin/saline | | | | <5 | |  | | -- | |  | |  |  | | |  | |  | |  | |  |
|  | | Other injection into IV site/port | | | | 28 | |  | | 1 | |  | |  |  | | |  | |  | |  | |  |
|  | | Other line procedure | | | | 32 | |  | | 1 | |  | |  |  | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  | |  |  | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  | |  |  | | |  | |  | |  | |  |
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|  | |  | | | |  | |  | |  | |  | |  | | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  | |  | | | |  | |  | |  | |  |
|  | |  | | | |  | |  | |  | |  | | **Total** | | | | **2,938** | |  | | **100** | |  |

For all tables presented, percentages may not total 100% due to rounding. Counts less than 5 have been suppressed. Percentages not calculated for counts that have been suppressed.

|  |
| --- |
| **Resources** |
| MDPH-OHSP…………www.mass.gov/service-details/needlesticks-and-other-sharps-injuries-among-healthcare-workers  CDC Sharps Safety for Healthcare Settings: Workbook and Teaching Tools…………………...www.cdc.gov/sharpssafety  NIOSH Preventing Needlesticks and Sharps Injuries……………………….…..www.cdc.gov/niosh/topics/bbp/sharps.html  OSHA Bloodborne Pathogens and Needlestick Prevention……………………[www.osha.gov/SLTC/bloodbornepathogens](http://www.osha.gov/SLTC/bloodbornepathogens)  09/04/20 |