



Contaminated Sharps Injuries 2019 Annual Report

Chapter 81, Texas Health and Safety Code

Texas Health and Human Services
Department of State Health Services



TEXAS
Health and Human
Services

**Texas Department of
State Health Services**

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Executive Summary

Sharps injuries are an occupational concern due to the bloodborne pathogen (e.g., Hepatitis B) risk to healthcare personnel. A sharps injury is any injury by a sharp (e.g., needle, scalpel), such as a cut, abrasion, and/or needlestick. To reduce bloodborne pathogen exposure, Texas adopted rules for sharps-related safe workplace practices, engineered devices, exposure protocols, and parameters for reporting and recording sharps injuries in an annual Sharps Injury Log; this report summarizes the 2019 Texas Sharps Injury Log.

Texas' sharps injury regulations are in the: 1) [Texas Bloodborne Pathogen Exposure Control Plan](#); and 2) [Texas Health and Safety Code, Chapter 81, Subchapter H](#). Sharps injury definitions and rules are in the: 1) [Texas Health and Safety Code, Chapter 81, Subchapter H](#); 2) [Texas Administrative Code, Title 25, Part 1, Chapter 96, Section 96.101, Definitions](#); and 3) [Texas Administrative Code, Title 25, Part 1, Chapter 96, Rule 96.401, Sharps Injury Log](#).

According to [Texas Health and Safety Code, Sec. 81.306](#), sharps exposure information must “be recorded in a written or electronic sharps injury log to be maintained by a governmental unit.” To comply, the Texas Department of State Health Services’ (DSHS) Healthcare Safety Unit, maintains a “Sharps Injury Log” of sharps injury information reported to the department (i.e., DSHS). Per [Texas Health and Safety Code, Sec. 81.302](#), this sharps reporting requirement applies only to Texas governmental units employing individuals who: “(1) provide services in a public or private facility providing healthcare-related services, including a home healthcare organization; or (2) otherwise have a risk of exposure to blood or other material potentially containing bloodborne pathogens in connection with exposure to sharps.”

[Texas Health and Safety Code, Sec. 81.306](#), requires the following information in the Sharps Injury Log (per injury incident): 1) exposure date and time; 2) sharp type and brand; 3) a description of the exposure incident, including A) employee’s job classification or title; B) exposure department or work area; C) the procedure the employee was performing at the time of the incident; D) how the incident occurred; E) the involved body part; and F) whether the sharp had engineered sharps injury protection, and if so, whether the protective mechanism was activated, and whether the injury occurred before, during or after activation of the protective mechanism.

[Texas Administrative Code, Title 25, Part 1, Chapter 96, Rule 96.401](#) requires the following in the Sharps Injury Log (per injury incident): 1) facility name and address; 2) chief administrative officer or designee’s name and phone number; 3) injury date and time; 4) injured employee’s age and sex; 5) sharp type and brand; 6) original intended sharp use; 7) whether injury occurred before, during, or after intended sharp use; 8) whether the exposure was during or after sharp use; 9) whether the device had engineered sharps injury protection; if yes, was the protective mechanism activated; and was the exposure incident before, during, or after protective mechanism activation; 10) whether the injured person wore gloves at the time of the injury; 11) whether the injured person completed a hepatitis B vaccination series; 12) whether a sharps container was readily available for sharp disposal; 13) whether the injured person received exposure control plan training within 12 months prior to the incident; 14) the involved body part; 15) the injured person’s job classification; 16) the injured person’s employment status; 17) sharps injury location/facility/agency; and the work area where injury occurred; and 18) a list of needleless systems and sharps with engineered sharps injury protection available for employees in the governmental unit.

For a complete list of Sharps Injury Log requirements, see [Texas Health and Safety Code, Sec. 81.306](#) and [Texas Administrative Code, Title 25, Part 1, Chapter 96, Rule 96.401](#). While Sec. 81.306 and Rule 96.401 are complementary, select terms vary between these two statutes (e.g., 81.306 includes less information requirements than Rule 96.401). The DSHS Sharps Injury Log includes a combination of elements from both statutes. This report summarizes data collected on the Sharps Injury Log excluding data that identifies the governmental unit or injured person.

In compliance with [Texas Health and Safety Code, Chapter 121](#), Texas public health is carried out by local and regional health departments. Sharps exposure incident forms are reported to the local health authority or DSHS Regional Office (if no local authority) by the facility's chief administrative officer or designee. The local or regional health authority reviews the form for completeness, then sends via U.S. or electronic mail to DSHS' Central Office for inclusion in Texas' Sharps Injury Log

Methods

Population and Inclusion

This report's data were submitted in 2019 by Texas governmental entities on behalf of employees with a sharps injury. According to [Texas Administrative Code, Chapter 96, Section 96.201](#) "a governmental unit includes but is not limited to hospital districts hospitals, city hospitals, county hospitals, hospital authority hospitals, DSHS regions and hospitals, other state hospitals and state supported living centers, community mental health and intellectual disability centers, Texas Juvenile Justice Department, Texas Department of Criminal Justice, locally or state-funded university student infirmaries, public school district clinics, emergency medical services, locally or state-funded long term care facilities, and blood banks." Data are per Public Health Region (PHR) and Texas overall.

Exclusion and Considerations

There were 271 sharps injuries reported in 2019, with one uncontaminated injury, leaving 270 total. Uncontaminated sharps injuries before sharp use for its intended purpose were excluded due to no bloodborne pathogen risk. Sharps injuries and/or contaminated sharps injuries from private healthcare facilities were excluded because Texas law does not require private facility reporting.

Sharps injuries tend to be underreported, so this report likely underestimates the total 2019 Texas sharps injuries in governmental units. The total number of times sharps were used in each facility was not reported, so the injury rate per facility type, work area, brand, Public Health Region, and so forth cannot be assessed (no known denominator). Also, it is not possible to determine whether injuries corresponded with brand, as more injuries with one brand could be due to it being the most widely used sharps brand in the reporting facility.

Descriptive Summary

Contaminated Sharps Injuries Overview

Table 1. Month of Sharps Injury Exposure by Public Health Region, Texas, 2019

Public Health Region									
Month	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
January	0	2	0	1	0	0	0	0	3
February	0	1	0	2	0	0	0	0	3
March	0	0	0	4	0	0	1	0	5
April	1	5	0	6	0	1	2	0	15
May	5	12	0	21	2	13	2	1	56
June	7	6	0	38	0	16	0	0	67
July	1	10	0	15	0	6	0	0	32
August	1	2	0	3	0	2	0	0	8
September	0	7	0	3	0	0	0	0	10
October	1	6	0	10	0	1	0	0	18
November	3	3	0	10	0	9	1	0	26
December	1	6	1	7	1	4	2	0	22
Not reported	1	1	0	2	0	1	0	0	5
Total	21	61	1	122	3	53	8	1	270

Table 2. Time of Sharps Injury Exposure by Public Health Region, Texas, 2019

Public Health Region									
Time	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
0000 – 1159	13	31	0	47	2	16	3	0	112
1200 – 2359	8	28	1	69	1	22	4	1	134
Not reported	0	2	0	6	0	15	1	0	24
Total	21	61	1	122	3	53	8	1	270

Table 3. Sharps Injury by Age Group, by Public Health Region, Texas, 2019

Public Health Region									
Age group (yrs)	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
0 - 18	0	0	0	0	0	0	0	0	0
19 - 25	3	13	0	18	1	9	1	0	45
26 - 35	5	23	1	43	1	14	5	1	93
36 - 45	1	6	0	20	0	12	2	0	41
46 - 55	2	8	0	23	1	7	0	0	41
56 - 65	0	4	0	10	0	3	0	0	17
66+	2	1	0	0	0	8	0	0	11
Unknown/ not reported	8	6	0	8	0	0	0	0	22
Total	21	61	1	122	3	53	8	1	270

Table 4. Sharps Injury by Sex, by Public Health Region, Texas, 2019

Public Health Region									
Sex	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Female	14	47	0	80	3	37	7	1	189
Male	7	12	1	40	0	13	1	0	74
Not reported	0	2	0	2	0	3	0	0	7
Total	21	61	1	122	3	53	8	1	270

Table 5. Sharps Injury by Sharp Type, by Public Health Region, Texas, 2019

Public Health Region									
Device type	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Syringe/needle, all types	7	22	0	50	2	20	4	1	106
Suture needle	2	11	0	26	0	13	0	0	52
Winged steel needle/butterfly	2	5	0	4	0	2	2	0	15
IV catheter/ IV	0	5	1	4	0	3	0	0	13
Scalpel	0	1	0	5	0	2	0	0	8
Other†	10	16	0	30	1	13	1	0	71
Not reported	0	1	0	3	0	0	1	0	5
Total	21	61	1	122	3	53	8	1	270

†Blood gas syringe, spinal/epidural needle, lancet/finger stick, surgical instruments (e.g., trocar, drill, retractor, clamp, bone cutter, staple/steel suture, microtome blade, Huber needle), and/or glass items (e.g., glass pipette, glass slide).

Table 6. Sharp Brand by Public Health Region, Texas, 2019

Public Health Region									
Brand	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Becton Dickinson (BD)†	2	5	0	1	0	2	3	0	13
Other*	1	1	0	0	0	0	1	1	4
Not reported	18	55	1	121	3	51	4	0	253
Total	21	61	1	122	3	53	8	1	270

†Becton Dickinson includes multiple sharp types by this brand. *Includes Braun, McKesson, Bovie, and/or Magellan.

Table 7. Original Intended Sharp Use by Public Health Region, Texas, 2019

Public Health Region									
Original use	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Injection*	5	15	0	26	2	12	4	0	64
Suturing skin	4	10	0	23	0	13	0	0	50
Drawing venous blood sample	2	9	0	8	0	5	2	0	26
Other†	8	23	1	57	1	22	1	1	114
Not reported	2	4	0	8	0	1	1	0	16
Total	21	61	1	122	3	53	8	1	270

**Intramuscular, subcutaneous, intradermal, other injection through skin; s†Start intravenous (IV) or heparin lock, connect to IV line, obtain body fluid or tissue sample, finger or heel stick, draw arterial blood sample, dialysis, tattoo, remove central line/port-o-catheter, heparin/saline flush, other injection or aspiration, drilling, cutting, wiring, and/or dental procedures (e.g., extraction, hygiene, orthodontic, periodontal, and restorative).

Table 8. Sharp Injury Occurrence† by Public Health Region, Texas, 2019

Public Health Region									
When injury occurred	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Before*	0	0	0	0	0	0	0	0	0
During	9	24	1	31	1	16	1	0	83
After	8	36	0	85	2	34	7	1	173
Not reported	4	1	0	6	0	3	0	0	14
Total	21	61	1	122	3	53	8	1	270

†Occurrence captures if injury happened before, during, or after sharps use for original purpose;

*Uncontaminated sharps injuries before the sharp used for its intended purpose are excluded due to no bloodborne pathogen transmission risk.

Table 9. Sharps Injury Procedure by Public Health Region, Texas, 2019

Public Health Region									
Procedure	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Between steps of multi-step process	3	5	0	45	0	4	0	0	57
Suturing	3	4	0	15	0	8	0	0	30
Activating safety device	0	8	0	7	1	11	2	0	29
Patient moved during procedure	1	6	0	8	0	4	4	0	23
Inappropriate place (trash, bed linen)	1	10	0	5	0	2	0	0	18
Interaction with another person	0	3	0	7	0	3	0	0	13
Other†	10	22	1	21	1	17	2	1	75
Not reported	3	3	0	14	1	4	0	0	25
Total	21	61	1	122	3	53	8	1	270

†Use of intravenous (IV)/central line, unsafe practice, recapping, laboratory process, disassembling device or equipment, device malfunction, use of sharps container, preparation for reuse of device or equipment.

Table 10. Sharps Injury Protection by Public Health Region, Texas, 2019

Public Health Region									
Injury protection	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Yes	7	34	0	35	2	23	4	1	106
No	10	22	1	37	1	25	3	0	99
Do not know	2	4	0	45	0	3	1	0	55
Not reported	2	1	0	5	0	2	0	0	10
Total	21	61	1	122	3	53	8	1	270

Table 11. Sharps Injury Protective Mechanism Activation by Public Health Region, Texas, 2019

Public Health Region									
Activated†	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Yes	3	10	0	16	0	10	2	0	41
No	13	27	1	36	3	15	3	1	99
Do not know	1	4	0	40	0	3	1	0	49
Not reported	4	20	0	30	0	25	2	0	81
Total	21	61	1	122	3	53	8	1	270

†Some sharps, such as disposable needles and syringes, have a component or attachment to protect the user from injury.

Table 12. Sharps Injury Occurrence and Protective Mechanism Activation† by Public Health Region, Texas, 2019

Public Health Region									
Injury occurred	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Before	2	29	0	11	1	11	2	1	57
During	2	6	1	20	2	5	3	0	39
After	3	3	0	15	0	11	0	0	32
Not reported	14	23	0	76	0	26	3	0	142
Total	21	61	1	122	3	53	8	1	270

†Captures if sharps injury occurred before, during, or after protective mechanism activation.

Table 13. Injured Person Wearing Gloves by Public Health Region, Texas, 2019

Public Health Region									
Wearing gloves	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Yes	18	56	1	117	3	49	8	1	253
No	1	3	0	1	0	1	0	0	6
Not reported	2	2	0	4	0	3	0	0	11
Total	21	61	1	122	3	53	8	1	270

Table 14. Injured Person Hepatitis B Vaccination by Public Health Region, Texas, 2019

Public Health Region									
Vaccinated	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Yes	18	55	1	114	3	48	8	1	248
No	0	4	0	1	0	3	0	0	8
Do not know	1	0	0	5	0	1	0	0	7
Not reported	2	2	0	2	0	1	0	0	7
Total	21	61	1	122	3	53	8	1	270

Table 15. Sharps Disposal Container by Public Health Region, Texas, 2019

Public Health Region									
Sharps container	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Yes	19	58	1	112	3	44	8	1	246
No	0	1	0	1	0	0	0	0	2
Not reported	2	2	0	9	0	9	0	0	22
Total	21	61	1	122	3	53	8	1	270

Table 16. Injured Person Received Exposure Control Training within Last 12 Months of Injury by Public Health Region, Texas, 2019

Public Health Region									
Training	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Yes	17	59	1	113	3	26	6	1	226
No	0	1	0	2	0	0	2	0	5
Not reported	4	1	0	7	0	27	0	0	39
Total	21	61	1	122	3	53	8	1	270

Table 17. Injured Body Part by Public Health Region, Texas, 2019

Public Health Region									
Body part	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Upper extremity	19	59	1	117	3	52	8	1	260
Face/head/neck	0	1	0	1	0	0	0	0	2
Torso (front or back)	0	0	0	1	0	0	0	0	1
Not reported	2	1	0	3	0	1	0	0	7
Total	21	61	1	122	3	53	8	1	270

Table 18. Sharps Injury by Job Classification, by Public Health Region, Texas, 2019

Public Health Region									
Job classification	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Registered nurse	4	24	0	19	0	20	3	0	70
Intern/resident	7	0	0	14	0	14	0	0	35
Physician/surgeon	3	6	0	23	0	1	0	0	33
Operating room/surgical technician	1	9	0	13	0	3	1	0	27
Dental student	0	0	0	14	0	0	0	0	14
Other†	6	21	1	37	3	14	3	1	86
Not reported	0	1	0	2	0	1	1		5
Total	21	61	1	122	3	53	8	1	270

†Medical/nursing student, physical/respiratory therapist, licensed vocational nurse, housekeeping, emergency medical technician/paramedic, firefighter, law enforcement, fellow, radiology technician, phlebotomist, clinical lab technician, nursing/medical or physician assistant, dental student, school personnel, or nurse practitioner.

Table 19. Sharps Injury by Employment Status, by Public Health Region, Texas, 2019

Public Health Region									
Employment status	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Employee	18	47	1	79	3	50	8	1	207
Other	1	7	0	10	0	0	0	0	18
Student	0	1	0	15	0	0	0	0	16
Not reported	2	6	0	18	0	3	0	0	29
Total	21	61	1	122	3	53	8	1	270

Table 20. Sharps Injury by Location/Facility/Agency Type, by Public Health Region, Texas, 2019

Public Health Region									
Facility type	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Hospital	17	52	0	91	2	46	7	0	215
Clinic	4	2	0	11	1	6	0	0	24
School/college	0	0	0	11	0	0	0	0	11
Others†	0	3	1	7	0	1	1	1	14
Not reported	0	4	0	2	0	0	0	0	6
Total	21	61	1	122	3	53	8	1	270

†Surgical center, emergency medical services (EMS)/fire/police, dental facility, freestanding laboratory, outpatient treatment center or correctional facility.

Table 21. Sharps Injury by Work Area by Public Health Region, Texas, 2019

Public Health Region									
Work area	1	2/3	4/5N	6/5S	7	8	9/10	11	Texas
Surgery/operating room	8	17	0	49	0	14	0	0	88
Patient room	2	17	0	16	1	1	1	0	38
Emergency department	2	10	0	3	1	5	0	0	21
Critical care unit	2	4	0	0	0	9	0	0	15
Medical outpatient clinic	1	2	0	8	1	3	0	0	15
Medical surgical unit	0	1	0	3	0	9	2	0	15
Procedure room	0	2	0	8	0	0	2	0	12
Other†	6	5	1	17	0	10	3	1	43
Not reported	0	2	0	3	0	2	0	0	7
Total	21	62	1	137	3	53	8	1	270

†Ambulance, autopsy/pathology, dialysis room/center, labor and delivery/gynecology unit, laboratory, pediatrics, nursery, radiology department, pre-operative or post-anesthesia recovery area, seclusion or psychiatric unit, and sterile processing.