

Data Supplement S1

Pain-related ED visits included any visit with a Reason for Visit code that was “definitely painful” or “probably painful”.

Pain-related ED visits with painful chief complaint included any visit in which the first Reason for Visit code (first line of RFV) was categorized as “definitely painful”.

Definitely painful Reason for Visit codes (SYMPTOMS)

- **1050.0** Chest pain and related symptoms
 - 1050.1 Chest pain, soreness (excludes: heart pain, 1265.0)
 - 1050.2 Chest discomfort, pressure, tightness, heaviness (includes C – pressure)
 - 1050.3 Burning sensation in the chest
- **1055.0** Pain, specified site not referable to a specific body system (includes: Buttock pain, Gluteal pain, Perineal pain; excludes: abdominal pain [1545.1-1545.3], chest pain [1050.1], phantom leg/limb [2307.0])
 - 1055.1 Rib pain
 - 1055.2 Side pain, flank pain
 - 1055.3 Groin pain (includes: Pubic pain)
 - 1055.4 Facial pain (includes: Jaw pain, Pain over eye)
- **1060.0** Pain and related symptoms, NEC
 - 1060.1 Pain, unspecified (includes: Ache all over [generalized], Incisions [postopcode 4205.0 also])
 - 1060.2 Cramps, spasms, site unspecified (excludes: Menstrual cramps [1745.2])
 - 1060.3 Stiffness, site unspecified
- **1355.0** Earache, or ear infection
 - 1355.1 Earache, pain
 - 1355.2 Ear infection
- **1545.0** Stomach and abdominal pain, cramps and spasms (includes: gastric pain; excludes: groin pain [1055.3])
 - 1545.1 Abdominal pain, cramps, spasms, NOS (includes: Abdominal discomfort, NO, Gas pains, intestinal colic)
 - 1545.2 Lower abdominal pain, cramps, spasms (includes: Right lower quadrant [RLQ] pain, Left lower quadrant [LLQ] pain, inguinal pain)
 - 1545.3 Upper abdominal pain, cramps, spasms (includes: Epigastric pain, Left upper quadrant (LUQ) pain, Pain in umbilical region, Right upper quadrant (RUQ) pain).
- **1210.0** Headache, pain in head (includes: Post-traumatic [also code 5575.0]; excludes: migraine [2365.0], sinus headache [1410.1], symptoms of head, NEC [1207.0])
- **1265.0** Heart pain (includes: Anginal pain, heart distress, pain over heart; excludes: angina pectoris [2515.0], chest pain [1050.1])
- **1320.1** Eye pain (includes: irritation)
- **1320.3** Eye burning, stinging
- **1410.1** Sinus pain and pressure (includes: Sinus headache)
- **1455.1** Soreness (Includes: Throat hurts)
- **1455.2** Pain (burning, throat on fire)

- **1485.1** Lung pain
- **1500.1** Toothache
- **1500.2** Gum pain
- **1510.1** Pain, burning, soreness (1510.0 is symptoms referable to mouth)
- **1515.1** Pain (1515.0 is symptoms referable to tongue)
- **1605.1** Pain (includes: burning, irritation) (1605.0 is symptoms referable to anus-rectum)
- **1610.1** Pain (1610.0 is symptoms of liver, gallbladder, and biliary tract)
- **1650.0** Painful urination (includes: Burning, discomfort)
- **1665.1** Pain (1665.0 is symptoms of bladder)
- **1670.1** Pain (1670.0 is symptoms of the kidneys)
- **1700.1** Pain, aching, soreness, tenderness, painful erection (1700.0 is symptoms of penis)
- **1715.1** Pain, aching, tenderness (1715.0 is symptoms of the scrotum and testes)
- **1745.2** Painful menstruation (dysmenorrhea) (includes: Menstrual cramps, pain in legs and back during menstruation) (1745.0 is menstrual symptoms, other and unspecified)
- **1765.1** Pain (1765.0 is other vaginal symptoms)
- **1775.1** Pain (1775.0 is pelvic symptoms)
- **1790.1** Pain during pregnancy
- **1800.0** Pain or soreness of breast (includes: Tenderness)
- **1870.1** Pain (1870.0 is skin irritations, NEC)
- **1900.1** Neck symptoms (includes: pain, ache, soreness, discomfort)
- **1905.1** Back symptoms (includes: pain, ache, soreness, discomfort)
- **1910.1** Low back symptoms (includes: pain, ache, soreness, discomfort)
- **1915.1** Hip symptoms (includes: pain, ache, soreness, discomfort)
- **1920.1** Leg symptoms (includes: pain, ache, soreness, discomfort)
- **1925.1** Knee symptoms (includes: pain, ache, soreness, discomfort)
- **1930.1** Ankle symptoms (includes: pain, ache, soreness, discomfort)
- **1935.1** Foot and toe symptoms (includes: pain, ache, soreness, discomfort)
- **1940.1** Shoulder symptoms (includes: pain, ache, soreness, discomfort)
- **1945.1** Arm symptoms (includes: pain, ache, soreness, discomfort)
- **1950.1** Elbow symptoms (includes: pain, ache, soreness, discomfort)
- **1955.1** Wrist symptoms (includes: pain, ache, soreness, discomfort)
- **1960.1** Hand and finger symptoms (includes: pain, ache, soreness, discomfort)
- **1965.1** Symptoms of unspecified muscles (includes: pain, ache, soreness, discomfort)
- **1970.1** Symptoms of unspecified joints (includes: pain, ache, soreness, discomfort)
- **1975.1** Bowlegged, knock-kneed (1975.0 is Musculoskeletal deformities)
- **1980.1** Other musculoskeletal symptoms (includes: bone pain, stump pain)

Definitely painful Reason for Visit codes (CONDITIONS)

- **2010.0** Streptococcal infection (includes: Streptococcal tonsillitis, Scarlet fever)
- **2365.0** Migraine headache
- **2655.0** Appendicitis, all types
- **4521.0** Major surgery
- **5005.0** Fractures and dislocations, Head and face (includes: facial bones, jaw, nose, skull)
- **5010.0** Fracture and dislocation, Spinal column (includes: back, neck, vertebrae)

- **5015.0** Fractures and dislocations, Trunk area except spinal column (includes: clavicle, collarbone, pelvic scapula, rib)
- **5020.0** Fractures and dislocations, Leg (includes: femur, fibula, hip, knee, tibia)
- **5025.0** Fractures and dislocations, Ankle
- **5030.0** Fractures and dislocations, Foot and toes
- **5035.0** Fractures and dislocations, Arm (includes: elbow, humerus, radius, shoulder, ulna)
- **5040.0** Fractures and dislocations, Wrist
- **5045.0** Fractures and dislocations, Hand and fingers
- **5050.0** Fractures and dislocations, Fracture, other and unspecified
- **5105.0** Sprains and strains, Cervical spine, neck (includes: whiplash)
- **5110.0** Sprains and strains, Back
- **5115.0** Sprains and strains, Knee
- **5120.0** Sprains and strains, Ankle
- **5125.0** Sprains and strains, Wrist
- **5130.0** Sprains and strains, other and unspecified
- **5205.0** Lacerations and cuts, Head and neck area (excludes: face [5210.0])
- **5210.0** Lacerations and cuts, Facial area (includes: eye, ear, forehead, lip, nose)
- **5215.0** Lacerations and cuts, Trunk area (includes: perineum)
- **5220.0** Lacerations and cuts, Lower extremity (includes: ankle, foot)
- **5225.0** Lacerations and cuts, Upper extremity (includes: arm, fingers, hand, wrist)
- **5230.0** Lacerations and cuts, site unspecified
- **5305.0** Puncture wounds, Head, neck, and facial area
- **5310.0** Puncture wounds, Trunk area
- **5315.0** Puncture wounds, Lower extremity
- **5320.0** Puncture wounds, Upper extremity
- **5325.0** Puncture wounds, site unspecified (includes: Needlestick, NOS)
- **5405.0** Contusions, abrasions, and bruises, Head, neck, and face (excludes: Eye [5410.0])
- **5410.0** Contusions, abrasions, and bruises, Eye (includes: black eye, contusion, corneal abrasion)
- **5415.0** Contusions, abrasions, and bruises, Trunk area (includes: injury to scrotum)
- **5420.0** Contusions, abrasions, and bruises, Lower extremity
- **5425.0** Contusions, abrasions, and bruises, Upper extremity
- **5430.0** Contusions, abrasions, and bruises, site unspecified
- **5505.0** Injury, other, and unspecified type, Head, neck, and face (includes: post concussive syndrome, tooth fracture, tooth knocked out, traumatic brain injury; excludes: Loose tooth [no injury] 1500.0)
- **5510.0** Injury, other, and unspecified type, Eye
- **5515.0** Injury, other, and unspecified type, Back (includes: Tail bone)
- **5520.0** Injury, other, and unspecified type, Chest and abdomen (includes: Internal injuries)
- **5525.0** Injury, other, and unspecified type, Hip
- **5535.0** Injury, other, and unspecified type, Knee
- **5530.0** Injury, other, and unspecified type, Leg

- **5540.0** Injury, other, and unspecified type, Ankle
- **5545.0** Injury, other, and unspecified type, Foot and toe(s)
- **5550.0** Injury, other, and unspecified type, Shoulder
- **5555.0** Injury, other, and unspecified type, Arm
- **5560.0** Injury, other, and unspecified type, Elbow
- **5565.0** Injury, other, and unspecified type, Wrist
- **5570.0** Injury, other, and unspecified type, Hand and finger(s)
- **5575.0** Injury, multiple or unspecified (includes: post traumatic NOS headache)
- **5705.0** Burns, all degrees, Head, neck, and face (includes: eyes)
- **5710.0** Burns, all degrees, Trunk area
- **5715.0** Burns, all degrees, Extremities (includes: lower, upper)
- **5720.0** Burns, all degrees, Burn site unspecified
- **5760.0** Bites, animal, snake, human

Probably painful Reason for Visit codes (SYMPTOMS)

- **1220.3** Disturbances of sensation, Abnormal sensation (paresthesia) (includes: burning legs, burning, tingling sensation, needles and pins, prickly feeling, stinging)
- **1430.0** Breathing problems (includes: Hurts to breath)
- **1791.0** Postpartum problems (includes: bleeding, pain; excludes: postpartum examination, routine)
- **2675.5** Temporomandibular joint (TMJ) pain, temporomandibular joint (TMJ) syndrome

Probably painful Reason for Visit codes (CONDITIONS)

- **1840.0** Infections of skin, NOS (includes: draining wounds, infected blister, infected wound; excludes: athlete's foot [2025.0], wound drainage [as treatment])
 - **1840.1** Infection of skin of head or neck area
 - **1840.2** Infection of skin of arm, hand, or finger
 - **1840.3** Infection of skin of leg, foot, or toe
- **1240.0** Other symptoms referable to the nervous system (includes: brain lesion, confusion, cognitive decline, damaged nerves, neuralgia, neurovegetative, pinched nerve, postictal; excludes: nerve block 4560.0)
- **1825.0** Symptoms of sexual dysfunction (includes: dyspareunia, painful intercourse; excludes: psychological disorders)
- **2250.0** Anemia (includes: anemia, NOS, iron deficiency anemia, pernicious anemia, sickle cell anemia)
- **2450.0** Otitis media
- **2515.0** Ischemic heart disease (includes: angina pectoris, arteriosclerotic cardiovascular disease, arteriosclerotic heart disease, coronary, coronary heart disease, heart attack, ischemic cardiomyopathy, myocardial infarction)
- **2600.0** Upper respiratory infections except tonsillitis (includes: croup, laryngitis, pharyngitis, rhinitis, sinusitis; excludes: allergic rhinitis [2636.0], cold [1445.0], nose infection NOS [1405.3], sinus infection NOS [1410.2], throat infection NOS [1455.3])
- **2605.0** Tonsillitis
- **2650.0** Diseases of the esophagus, stomach, and duodenum (includes: Barrett's esophagus, duodenal ulcer, esophageal ulcer, esophagitis, gastritis, GERD, peptic ulcer, reflux, stomach ulcer; excludes: gastroenteritis [2005.0], stomach flu [1540.0])
- **2665.0** Diseases of the intestine and peritoneum (includes: abscess rectal, adhesions [abdominal or NOS; if states post-op, code 42050 also], Crohn's disease, diverticulitis, diverticulosis, fissure – rectal and anal, fistula – rectal and anal, ileitis, irritable bowel syndrome, proctitis, small bowel obstruction, spastic colitis, ulcerative colitis; excludes: intestinal virus [1540.0])
- **2675.1** Dental abscess
- **2675.2** Dental cavities
- **2705.0** Urinary tract disease except cystitis (includes: bladder stones, glomerulonephritis, glomerulonephrosis, kidney cyst, kidney stones, neurogenic bladder, pyelonephritis, renal failure, ureteral calculus, urethritis, urolithiasis; excludes: bladder infection [1665.2], kidney infection NOS [1670.2], passed stones [1680.0], urinary tract infection [1675.0])
- **2900.0** Arthritis (includes: osteoarthritis, rheumatism NOS, rheumatoid arthritis, septic)

- **2905.0** Nonarticular rheumatism (includes: bursitis, ganglion cyst, lumbago, myositis, polymyalgia rheumatica, radiculitis/radiculopathy, synovitis, tendinitis, tenosynovitis; excludes: rheumatism NOS [2900.0])
- **4520.0** Minor surgery
- **4540.0** Cast, splint – application, removal
- **5920.0** Adverse effects of environment (includes: air pollution, frostbite, hypothermia, noise pollution, sun damage, sun poisoning, too hot, water pollution)
- **5930.0** Complications of surgical or medical procedures and treatments (includes: artificial openings [ostomies, stoma], catheter, foreign body [accidentally left during surgery eg. Sponge, instrument], medical complication NOS, non-healing surgical wound, post-op fever, post-op hemorrhage [bleeding], post-op infection or inflammation, post-op [septicemia], shunt, tubes, wound dehiscence; excludes: postpartum conditions [1791.0 and 1810.2], complication of transplant organs [4565.1-4565.2])
- **5805.0** Motor vehicle accident, type of injury unspecified (includes: auto accident, car accident, motorcycle accident)
- **5810.0** Accident NOS (includes: fall, type or location of injury unspecified)
- **5815.0** Violence NOS (includes: abuse, beat up, in a fight, stabbing; excludes: violence against oneself [5818.0, 5820.0])
- **5818.0** Intentional self-mutilation (includes: self-abuse, tried to hurt self; excludes: suicide attempt [5820.0])
- **5820.0** Suicide attempt (includes: found in car with motor running, hanging oneself, slashed wrists, stabbed oneself).

Data Supplement S2

Codes by body system:

Musculoskeletal

- 1900 Neck symptoms
- 1905 Back symptoms
- 1910 Low back symptoms
- 1915 Hip symptoms
- 1920 Leg symptoms
- 1925 Knee symptoms
- 1930 Ankle symptoms
- 1940 Shoulder symptoms
- 1945 Arm symptoms
- 1950 Elbow symptoms
- 1955 Wrist symptoms
- 1960 Hand and finger symptoms (includes ring stuck on finger)
- 5005 Fractures and dislocations, Head and face
- 5020 Fractures and dislocations, Leg
- 5035 Fractures and dislocations, Arm
- 5045 Fractures and dislocations, Hand and Fingers
- 5050 Fractures and dislocations, other and unspecified
- 5105 Sprains and strains, Cervical spine, neck
- 5115 Sprains and strains, Knee
- 5120 Sprains and strains, Ankle
- 5405 Contusions, abrasions, and bruises, Head, neck, and face
- 5415 Contusions, abrasions, and bruises, Trunk area
- 5420 Contusions, abrasions, and bruises, Lower extremity
- 5425 Contusions, abrasions, and bruises, Upper extremity
- 5505 Injury, other and unspecified type, Head, neck, and face
- 5515 Injury, other and unspecified type, Back
- 5520 Injury, other and unspecified type, Chest and abdomen (includes internal injuries)
- 5530 Injury, other and unspecified type, Leg
- 5535 Injury, other and unspecified type, Knee
- 5540 Injury, other and unspecified type, Ankle
- 5545 Injury, other and unspecified type, Foot and toe(s)
- 5550 Injury, other and unspecified type, Shoulder
- 5555 Injury, other and unspecified type, Arm
- 5560 Injury, other and unspecified type, Elbow
- 5565 Injury, other and unspecified type, Wrist
- 5570 Injury, multiple or unspecified (includes post-traumatic NOS headache)

ENT

- 1355 Earache, or ear infection
- 1410 Sinus problems
- 1455 Symptoms referable to throat, raw throat

- 2010 Streptococcal infection

Abdominal

- 1545 Stomach and abdominal pain, cramps and spasms

Laceration

- 5205 Lacerations and cuts, Head and neck area
- 5210 Lacerations and cuts, Facial area
- 5215 Lacerations and cuts, Trunk area
- 5220 Lacerations and cuts, Lower extremity
- 5225 Lacerations and cuts, Upper extremity
- 5230 Laceration and cuts, site unspecified
- 5305 Puncture wounds, Head, neck and facial area
- 5315 Puncture wounds, Trunk area
- 5315 Puncture wounds, Lower extremity
- 5320 Puncture wounds, Upper extremity
- 5325 Puncture wound, site unspecified

Headache

- 1210 Headache, pain in head
- 2365 Migraine headache

General Pain

- 1800 Pain or soreness of breast
- 1055 Pain specified site not referable to a specific body system
- 1060 Pain and related symptoms, NEC
- 5430 Contusions, abrasions, and bruises, site unspecified
- 5575 Injury, multiple or unspecified
- 5130 Sprain or strain, other and unspecified
- 1970 Symptoms of unspecified joints
- 1965 Wrist symptoms

Chest

- 1050 Chest pain and related symptoms (not referable to a specific body system)

Eye

- 1320 Abnormal sensations of the eye
- 5510 Injury, other and unspecified type, Eye

Bite

- 5760 Bites, Animal, snake, human

Genitourinary

- 1650 Painful urination
- 1605 Symptoms referable to anus-rectum

- 1700 Symptoms of penis
- 1715 Symptoms of scrotum and testes
- 1745 Menstrual symptoms, other and unspecified
- 1765 Other vaginal symptoms
- 1775 Pelvic symptoms
- 1790 Problems of pregnancy

Burn

- 5705 Burns, all degrees, Head, neck, and face
- 5715 Burns, all degrees, Extremities
- 5720 Burn, site unspecified

Oral

- 1500 Symptoms of teeth and gums
- 1510 Symptoms referable to mouth

Data Supplement S3

Table S3.1. Baseline characteristics comparison between pain-related and non-pain-related

pediatric ED visits.

	All ED Visits
Age	
< 6 years	44.47% (40.20%, 48.83%)
6-11 years	24.07% (22.83%, 25.35%)
12-18 years	31.46% (27.25%, 26.00%)
Sex	
Female	48.47% (46.70%, 50.25%)
Male	51.53% (49.75%, 53.30%)
Ethnicity	
Hispanic or Latino	25.47% (19.16%, 33.00%)
Not Hispanic or Latino	74.53% (67.00%, 80.84%)
Race	
White	67.72% (61.60%, 73.29%)
Black	28.21% (22.82%, 34.32%)
Other	4.06% (3.10%, 5.32%)
Region	
Northeast	13.27% (8.00%, 21.21%)
Midwest	24.71% (17.22%, 34.12%)
South	45.30% (33.52%, 57.63%)
West	16.72% (9.84%, 26.97%)
Metropolitan Statistical Area (MSA)	
MSA	86.96% (75.42%, 93.55%)
Non-MSA	13.04% (6.45%, 24.58%)
Arrived in EMS	
Yes	4.95% (4.00%, 6.11%)
No	90.52% (84.10%, 94.52%)
Unknown	4.01% (1.05%, 14.13%)
Blank	0.52% (0.34%, 0.79%)
Triage (Immediacy)	
Immediate	0.97% (0.29%, 3.22%)
Emergent	7.23% (4.43%, 11.58%)
Urgent	26.57% (21.79%, 31.97%)
Semi-urgent	33.59% (28.20%, 39.44%)
Non-urgent	7.01% (4.15%, 11.60%)
Unknown	16.30% (10.35%, 24.72%)
Primary Payer	
Private insurance	22.60% (18.55%, 27.24%)
Medicare	0.36% (0.19%, 0.69%)

Medicaid or CHIP	63.08% (56.22%, 69.46%)
Self-pay	4.47% (3.14%, 6.31%)
Worker's compensation	0.02% (0.01%, 0.07%)
No charge/charity	0.08% (0.02%, 0.28%)
Other	1.37% (0.81%, 2.31%)
Unknown	6.44% (2.48%, 15.70%)
Blank	1.58% (0.55%, 4.49%)

*Results are presented as weighted proportions with its 95% confidence intervals.

Data Supplement S4

Table S4.1. Sensitivity analysis - baseline characteristics comparison between definitely painful visits and non-painful visits.

	Definitely Painful Reason for Visit 54.27% (51.79% to 56.50%)	Non-Pain Related Visits 45.85% (43.50% to 48.21%)
Age		
< 6 years	25.93% (22.08%, 30.20%)	66.16% (61.47%, 70.55%)
6-11 years	32.33% (29.68%, 35.10%)	14.67% (12.71%, 16.88%)
12-18 years	41.73% (36.47%, 47.19%)	19.17% (15.87%, 22.96%)
Sex		
Female	49.21% (45.30%, 53.14%)	47.95% (45.19%, 50.72%)
Male	50.79% (46.86%, 54.70%)	52.05% (49.28%, 54.81%)
Ethnicity		
Hispanic or Latino	25.46% (18.06%, 34.61%)	25.93% (19.95%, 32.96%)
Not Hispanic or Latino	74.54% (65.39%, 81.94%)	74.07% (67.04%, 80.05%)
Race		
White	71.09% (64.41%, 76.96%)	70.86% (64.15%, 76.77%)
Black	26.50% (20.82%, 33.09%)	26.57% (20.89%, 33.15%)
Other	2.41% (1.67%, 3.45%)	2.56% (1.72%, 3.82%)
Region		
Northeast	12.66% (7.67%, 20.17%)	13.69% (8.00%, 22.46%)
Midwest	24.89% (17.78%, 33.68%)	24.63% (16.16%, 35.66%)
South	47.05% (35.24%, 59.21%)	43.15% (31.00%, 56.18%)
West	15.40% (9.19%, 24.66%)	18.53% (10.46%, 30.69%)
Arrived in EMS		
Yes	3.95% (2.84%, 5.46%)	5.67% (4.14%, 7.72%)
No	91.69% (85.19%, 95.49%)	89.76% (83.06%, 94.00%)
Blank/Unknown	4.36% (1.34%, 13.26%)	4.57% (1.34%, 14.48%)
Triage (Immediacy)		
No triage for visit but ESA	0.83% (0.34%, 2.03%)	1.04% (0.42%, 2.54%)
Immediate	1.04% (0.28%, 3.85%)	0.75% (0.27%, 2.06%)
Emergent	5.49% (3.36%, 8.84%)	8.77% (5.19%, 14.44%)
Urgent	28.78% (22.51%, 35.99%)	23.87% (19.65%, 28.66%)
Semi-urgent	35.32% (28.88%, 42.33%)	31.73% (27.04%, 36.82%)
Non-urgent	4.63% (2.27%, 9.21%)	10.12% (6.66%, 15.08%)
Blank/Unknown	20.09% (13.04%, 29.66%)	19.66% (13.37%, 27.96%)
Primary Payer		
Private insurance	25.90% (21.61%, 30.71%)	18.29% (14.21%, 23.22%)
Medicare	0.37% (0.18%, 0.77%) [†]	0.38% (0.16%, 0.88%) [†]
Medicaid or CHIP	61.24% (55.39%, 66.79%)	65.80% (56.93%, 73.69%)

Self pay	4.57% (3.17%, 6.56%)	4.45% (2.92%, 6.72%)
Worker's compensation	0.03% (0.01%, 0.14%) [†]	0.01% (0.00%, 0.06%) [†]
No charge/charity	0.06% (0.01%, 0.43%) [†]	0.12% (0.03%, 0.54%) [†]
Other	1.12% (0.60%, 2.07%)	1.38% (0.72%, 2.65%)
Blank/Unknown	6.71% (3.22%, 13.42%)	9.58% (4.03%, 21.11%)

*Results are presented as weighted proportions with its 95% confidence intervals.

[†]This represented cell sizes smaller than 30, which are considered not reliable for meaningful analysis by the NHAMCS guidelines.

Data Supplement S5

Table S5.1. Body system involvement for all pain-related ED visits stratified by the presence of injury/trauma.

Body system	Pain-related ED visits with injury/trauma*	Pain-related ED visits without injury/trauma*
Musculoskeletal	69.5% (63.7%, 74.8%)	7.1% (4.5%, 11.1%)
Skin Laceration	14.7% (11.4%, 18.8%)	0.0% (0.0%, 0.0%)
General Pain	3.7% (2.4%, 5.5%)	6.2% (4.0%, 9.5%)
Headache	3.2% (2.0%, 5.2%)	8.8% (6.6%, 11.8%)
Eye	1.6% (0.8%, 3.2%)	0.8% (0.3%, 2.3%)
Bite	2.3% (1.4%, 3.8%)	0.0% (0.0%, 0.0%)
Burn	1.9% (0.9%, 4.1%)	0.0% (0.0%, 0.0%)
Abdominal	0.6% (0.3%, 1.4%)	32.0% (25.5%, 39.3%)
Ear/Nose/Throat	0.7% (0.3%, 1.7%)	31.0% (23.1%, 40.2%)
Genital-urinary/Dysuria	0.2% (0.1%, 0.9%)	5.7% (4.2%, 7.7%)
Chest	0.9% (0.3%, 2.4%)	6.9% (4.8%, 10.0%)
Oral	0.6% (0.2%, 2.1%)	1.3% (0.5%, 2.3%)

*Results are presented as weighted proportions with its 95% confidence intervals.

Table S5.2. Body system involvement for pain-related ED visits with a painful chief complaint.

Body system	Proportion* (95% CI)
Musculoskeletal	39.9% (34.6%, 45.6%)
Abdominal	16.0% (11.9%, 21.1%)
Ear/Nose/Throat	14.8% (12.1%, 18.0%)
Skin Laceration	7.6% (5.6%, 10.2%)
Headache	5.8% (4.5%, 7.3%)
General Pain	4.7% (3.3%, 6.9%)
Chest	3.8% (2.6%, 5.6%)
Genital-urinary/Dysuria	2.8% (2.1%, 3.8%)
Eye	1.3% (0.8%, 2.1%)
Bite	1.2% (0.7%, 2.0%)
Burn	1.0% (0.4%, 2.2%)
Oral	0.9% (0.4%, 1.9%)

*Results are presented as weighted proportions with its 95% confidence intervals.