

OSFM 2021 Seasonal Fireworks Injury Report

The OSFM Fire Prevention Division requested hospitals and emergency treatment centers in Illinois to provide information about injuries associated with fireworks starting in January and ending in December.

During the July seasonal reporting period, 60 hospitals and facilities reported a total of 202 injuries. There was one fatality reported during the 2021 reporting period. Comparatively, 89 hospitals reported 163 injuries during the same period in 2020. The increase in reported injuries is most likely related to reaching out to facilities and the availability of online reporting. There is no requirement for healthcare providers to report fireworks injuries and we appreciate their efforts.

Healthcare facilities reported 202 persons having been injured by fireworks during the 2020 seasonal reporting period. Approximately half of all injured persons suffered multiple injuries. Of those injured, 143 are male and 59 are female. Over half of all injuries (57%) occurred to persons over 22 years of age. Children's injuries in the 11-16 age group increased (29) from the previous year of 23.

The reported injuries were related to a wide variety of fireworks with "Mortars" (25%) and "Unknown Type" (17%) listed as the most frequent type of fireworks or pyrotechnic effect involved in injury. This was followed by Bottle Rockets (13%), Roman Candles (13%) and Sparklers (10%) and Salutes at 4%. It appears the COVID cancellations again affected the fireworks season and increased the at home injuries. The balance of injuries reported were associated with various other effects including Smoke Bombs (4%), Firecrackers (4%) and handheld cones and fountains (4%). (The sale and use of Roman Candles, Firecrackers and salute devices are prohibited in Illinois.)

More than 50% of all injuries affected hands (22%), injuries to the head/face (16%) and eyes (18%). Second degree burns were the leading type of injury at 35% followed by first degree burns at 13%. Lacerations accounted for 10% of the injuries and abrasions at 10%. Lacerations and Abrasions combined for 20% of injuries. Dismemberment/amputation injuries decreased to 7 as compared to 19 in 2020.

The OSFM Fire Prevention Division greatly appreciates the participation of all hospitals and reporting facilities who submit data. While the majority of injuries occur during the seasonal July reporting, hospitals and treating facilities are encouraged to report fireworks related injuries throughout the year. While a few reports were received in paper format, 96% of these were received electronically via:

<https://www2.illinois.gov/sites/sfm/SFMDocuments/Documents/PyrotechnicHospitalFireworksSurvey.pdf>

Office of the Illinois State Fire Marshal

2021 Illinois Fireworks Injuries

Type of Fireworks	Number of Fireworks Causing Injuries	Percent
Cones, Fountains Handheld	9	4%
Firecrackers/Lady Finger	9	4%
Jumping/Crazy Jack	0	0%
M-80/M-60/M-100/Silver Salute	8	4%
Missile Rocket	4	2%
Mortar	50	25%
Other Fireworks	0	0%
Roman Candles/Shots/Balls	26	13%
Sky/Bottle Rockets	27	13%
Smoke/Cherry Bomb	9	4%
Sparklers Wire/Wood Core	21	10%
Fireworks Display	3	1%
Homemade	2	1%
Unknown	34	17%
Total	202	100%

Type of Injuries	Table of Type of Injuries	
	Number of Injuries	Percent
Abrasions	24	10%
Burns 1st Degree	31	13%
Burns 2nd Degree	84	35%
Burns 3rd Degree	11	5%
Dismemberment/Amputation	7	3%
Fatality	1	0%
Fracture	15	6%
Hearing Loss	6	2%
Lacerations	25	10%
Loss of Sight	11	5%
Other (<i>trauma, blast, wound, bruise</i>)	23	9%
Unknown	5	2%
Total	243	100%

Gender	Number of Injuries	Percent
Female	59	29%
Male	143	71%
Unknown (<i>did not specify</i>)	0	0%
Total	202	100%

Age	Number of Injuries	Percent
0-6	14	7%
7-10	14	7%
11-16	29	14%
17-21	27	13%
22 & Over	116	57%
Unknown	2	1%
Total	202	100%

Body Parts	Table of Type of Injuries	
	Number of Injuries	Percent
Arms	29	12%
Ears	4	2%
Eyes	44	18%
Feet	5	2%
Fingers	23	9%

Hands	56	22%
Head/Face	41	16%
Legs	24	10%
Neck	5	2%
Torso	17	7%
Unknown (<i>did not specify</i>)	2	1%
Total	250	100%

	Number of Injuries	Percent
Hospitalized Less than 24 Hours	30	15%
Hospitalized More than 24 Hours	31	15%
Treated and Released	136	67%
Unknown (<i>did not specify</i>)	5	2%
Total	202	100%

**Data is based on surveys received from 60 participating hospitals and emergency facilities.*