OSFM 2022 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, 44 hospitals and facilities reported a total of 168 injuries. There were no fatalities reported during the 2022 reporting period. Comparatively, 60 hospitals reported 202 injuries during the same period in 2021. There is no requirement for healthcare providers to report fireworks injuries and we appreciate their efforts.

Healthcare facilities reported 120 persons having been injured by fireworks during the 2022 seasonal reporting period. Approximately 1/3 of all injured persons suffered multiple injuries. Of those injured, 89 are male and 31 are female. Over half of all injuries (67%) occurred to persons over 22 years of age. Children's injuries in the 11-16 age group decreased (18) from the previous year of 29.

The reported injuries were related to a wide variety of fireworks with "Mortars" (24%) and "Unknown Type" (24%) listed as the most frequent type of fireworks or pyrotechnic effect involved in injury. This was followed by Roman Candles (10%), Public Displays (8%), Homemade Pyrotechnics (6%) and Bottle Rockets at 6%. The balance of injuries reported were associated with various other effects including Fountains (6%), Firecrackers (6%), M-80s (5%), Sparklers (5%), and Smoke Bombs (2%). (The sale and use of Roman Candles, Firecrackers and salute devices are prohibited in Illinois.)

More than 50% of all injuries affected hands (23%), injuries to the head/face (15%) and eyes (13%). Second degree burns were the leading type of injury at 21% followed by first degree burns at 17%. Lacerations accounted for 13% of the injuries and abrasions at 13%. Lacerations and Abrasions combined for 26% of injuries. Dismemberment/amputation injuries increased to 20 as compared to 7 in 2021.

The OSFM Fire Prevention Division greatly appreciates the participation of all hospitals and reporting facilities who submit data. While most 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, 87% of these were received electronically via:

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

Office of the Illinois State Fire Marshal

2022 Illinois Fireworks Injuries

Type of Fireworks	Number of Fireworks Causing Injuries	Percent
Cones, Fountains Handheld	9	6%
Firecrackers/Lady Finger	9	6%
Jumping/Crazy Jack	0	0%
M-80/M-60/M-100/Silver Salute	8	5%
Missile Rocket	0	0%
Mortar	38	24%
Other Fireworks	0	0%
Roman Candles/Shots/Balls	16	10%
Sky/Bottle Rockets	9	6%
Smoke/Cherry Bomb	2	1%
Sparklers Wire/Wood Core	8	5%
Fireworks Display	13	8%
Homemade	10	6%
Unknown	39	24%
Total	161	100%

Type of Injuries	Table of Type of Injuries	Percent
	Number of Injuries	
Abrasions	21	13%
Burns 1st Degree	28	17%
Burns 2nd Degree	36	21%
Burns 3rd Degree	8	5%
Dismemberment/Amputation	20	12%
Fatality	0	0%
Fracture	10	6%
Hearing Loss	6	4%
Lacerations	21	13%
Loss of Sight	7	4%
Other (trauma, blast, wound, bruise)	11	7%
Unknown	0	0%
Total	168	100%

Gender	Number of Injuries	Percent
Female	31	26%
Male	89	74%
Unknown (did not specify)	0	0%
Total	120	100%

Age	Number of Injuries	Percent
0-6	10	8%
7-10	8	7%
11-16	18	15%
17-21	13	11%
22 & Over	67	56%
Unknown	4	3%
Total	120	100%

Body Parts	Table of Type of Injuries Number of Injuries	Percent
Arms	9	5%
Ears	4	2%
Eyes	22	13%
Feet	7	4%

Fingers	18	11%
Hands	39	23%
Head/Face	25	15%
Legs	18	11%
Neck	4	2%
Torso	19	11%
Unknown (did not specify)	1	1%
Total	166	100%

	Number of Injuries	Percent
Hospitalized Less than 24 Hours	5	4%
Hospitalized More than 24 Hours	20	17%
Treated and Released	67	56%
Transferred	16	13%
Unknown (did not specify)	12	10%
Total	120	100%

^{*}Data is based on surveys received from 44 participating hospitals and emergency facilities.