



Consumer Product-Related Non-Fall Fatalities Involving Victims
65 Years of Age and Older
2009-2011

This report is intended to provide a general overview, using data taken directly from the CPSC data files for the purpose of identifying non-fall consumer product hazards to seniors. The reported fatalities were associated with, but not necessarily caused by, consumer products.

The views expressed in this report are those of CPSC staff, and this report has not been reviewed or approved by, and may not reflect the views of, the Commissioners.

October 2015

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Executive Summary

In this report, U.S. Consumer Product Safety Commission (“CPSC” or “Commission”) staff presents statistics on deaths associated with consumer products among seniors 65 years old and older. The data consist of senior fatality reports with the date of death ranging from 2009 to 2011. The emphasis of this report is on analyzing product, hazard, age, and gender patterns in non-fall senior fatalities.

Fall and Non-Fall Fatalities

- There were 12,540 consumer product-related senior fatalities reported to CPSC involving victims age 65 years old and older from 2009 to 2011, of which 9,140 (73%) were fall fatalities and 3,400 (27%) were non-fall fatalities.

Hazards¹

- The majority of reported senior non-fall fatalities were due to mechanical hazards (55%), followed by fire-related fatalities (32%), carbon monoxide poisoning deaths (5%), non-fire-related thermal fatalities (3%), non-carbon monoxide poisoning fatalities (1%), other hazard patterns (1%), and electrical-related deaths (1%).

Hazards by Product Group

- The top seven reported non-fall senior fatalities by product group hazards are: 379 ‘Swimming activity, pools, equipment’ submersions, 293 ‘Clothing, All’ fire-related fatalities, 253 ‘Bathtub & shower structures’ submersions, 252 ‘Cigarettes, etc., lighters, fuel’ fire-related fatalities, 244 ‘Home fires/CO/gas vapors with unknown product’ fire-related fatalities, 174 ‘ATV’s, mopeds, minibikes, etc.’ rollover fatalities, and 165 ‘Cooking ranges, ovens, etc.’ fire-related fatalities.

Age

- There were more non-fall fatality reports for seniors between the ages 65 and 69 years old than for older seniors. This is in contrast to fall fatality reports that peak between ages 84 and 89 years old.
- At age 90 years old and older, there was a steady decline in the number of non-fall fatalities reported for both senior men and women. This is not unexpected because only about 5 percent of the population in the United States age 65 years old and older between 2009 and 2011, was over 89 years old, according to the U.S. Census Bureau.

¹ Percentages do not sum to 100, due to rounding.

- There were about four times more reported fall fatalities than non-fall fatalities for seniors over 75 years old, and more than six times as many fall fatality reports as non-fall fatality reports for seniors older than 85 years old.

Gender

- Of reported senior non-fall fatalities, 64 percent were men and 36 percent were women. The population of seniors in the United States age 65 years old and older between 2009 and 2011, was 43 percent male and 57 percent female, according to the U.S. Census Bureau.

Gender by Age

- There were two and a half times as many non-fall fatality reports for men age 65 to 74 years old than for women that age. The population in the United States age 65 to 74 years old between 2009 and 2011 was 47 percent male and 53 percent female, according to the U.S. Census Bureau.
- There were one and a half times as many non-fall fatality reports for men age 75 to 89 years old than for women that age. The population in the United States age 75 to 89 years old between 2009 and 2011 was 41 percent male and 59 percent female, according to the U.S. Census Bureau.
- The number of reported non-fall fatalities for seniors in their early 90s is about the same for senior men and women; but after their early 90s, there are more reported senior women non-fall fatalities compared to senior men. The population in the United States age 90 years old and older between 2009 and 2011 was 28 percent male and 72 percent female, according to the U.S. Census Bureau.

Introduction

The U.S. Consumer Product Safety Commission (“CPSC”) compiles and reports statistics on consumer product-related injuries, fatalities, and hazards. Adults 65 years old and older have higher rates of medically treated, consumer product-related injuries and deaths than adults between the ages of 55 to 64.² In addition to seniors having a higher risk of consumer product-related deaths than younger adults, the baby boomer generation is currently among the youngest portion of the senior population, or will be turning 65 years old sometime over the next 14 years. Baby boomers are people born during the post–World War II baby boom between the years 1946 and 1964.³ The life expectancy of the average resident in the United States has also risen from 70.8 years in 1970 to 77.8 years in 2008, and projected life expectancies are expected to rise higher in the future.⁴ This means that on average, people in the United States will be expected to live increasingly more years during old age going forward. With so many adults expected to live beyond age 65 years in the near future, it is important for the aging population and policy makers to understand the risks associated with consumer products and activities performed during their daily lives and how to take proper precautions.

The U.S. Census estimates of the senior population in the United States by age group from 2000 to 2014⁵ and the U.S. Census projection estimates of the senior population in the United States for 5-year intervals from 2015 to 2035,⁶ plotted by age group, are shown in Figure 1.

² U.S. CPSC “Consumer Product-Related Injuries and Deaths in the United States: Estimated Injuries Occurring in 2010 and Estimated Deaths Occurring in 2008” pp.8–9, February 2012.

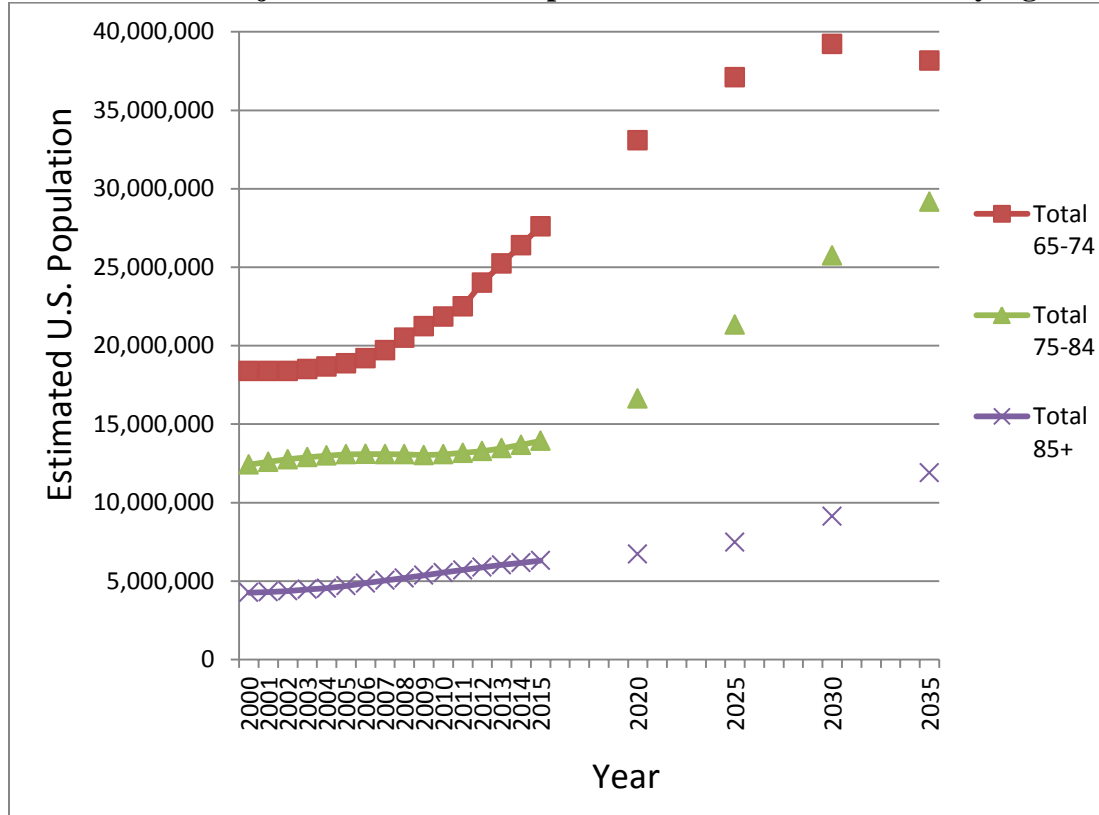
³ U.S. Census Bureau, 65+ in the United States: 2010 pp. 13, June 2014.

⁴ U.S. Census Bureau, 2008 National Population Projections, August 2008.

⁵ U.S. Census Bureau, Intercensal Estimates of the Resident Population by Sex and Age for the United States, September 2011 (for the years 2000–2009) and U.S. Census Bureau, Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, June 2015 (for the years 2010–2014).

⁶ U.S. Census Bureau, Projections of the Population by Sex and Age for the United States: 2015 to 2060, December 2014 (for the years 2015–2035).

Figure 1 – U.S. Census Estimates of the 65 and Older U.S. Resident Population 2000-2014 and Projected U.S. Senior Population Estimates 2015-2035 by Age Group



In 2013, CPSC reported on consumer product-related injuries and deaths to seniors 65 years old and older and found that falls were the hazard most frequently associated with injury and death⁷. The report focused mostly on the extent of products involved in injuries and fatalities, but the report did not elaborate on non-fall fatality hazards. This leads to the question: if falls are known to be the most common hazard associated with injury and death in seniors, then what are the leading hazards for consumer product-related fatalities not associated with falls? The focus of this report is to investigate non-fall product-related hazards which lead to fatalities in the senior population.

Methods

Data were extracted on May 14, 2015; so the data in this report consist of all senior fatalities in CPSC databases that meet inclusion criteria before this date. The data come from incident reports submitted to CPSC from various sources, such as telephone hotlines, Internet reports, newspaper clippings, medical examiners, death certificates,

⁷ U.S. CPSC, Hazard Screening Report Consumer Product-Related Injuries to Persons 65 Years of Age and Older, October 2013.

manufacturer reports, NEISS⁸, CPSC in-depth investigations, and other state/local authorities.⁹

Inclusion Criteria

If the age of the victim was reported to be 65 years old or older, the date of death was reportedly between January 1, 2009 and December 31, 2011, and a consumer product or activity within CPSC's jurisdiction was associated with the fatality, then the fatality was included. Fatalities involving products that do not fall under CPSC jurisdiction were not included, such as fatalities associated with drugs, food, pesticides, motor vehicles, boats, aircraft, medical devices, firearms, or deaths at work.

Products not under CPSC jurisdiction may be included if an incident was also associated with a consumer product under CPSC jurisdiction. For example, non-powered wheelchairs and canes are considered medical devices not in CPSC's jurisdiction and are not included in any product group. However, there were fatalities reported to CPSC involving a senior with a cane or non-powered wheelchair who fell to the floor that were included as fall fatalities with the floor being the CPSC product associated with the fall.

If a specific age at the date of death was unknown, then a fatality was only included if an age range entirely over 64 years old was provided. For instance, 'a woman in her 70s' would be included and considered a fatality with an unknown age. Those fatalities considered out of scope due to a vague age description, or with no age or age range provided, are: elderly, old, mid 60s, living at a nursing home or assisted living, or has a caretaker. Age groups were created for age comparisons by dividing seniors into three age groups: 65 to 74 years old, 75 to 84 years old, and 85 years old and older. There were five senior deaths where age was unknown, and all five were non-fall fatalities. There was one fatality with an unknown gender, and this fatality was a non-fall fatality.

Other fatalities that were considered out of scope are: suicide, murder, deaths not in the United States, autoerotic asphyxiation, dying of natural causes, electrocution with no known product involvement, non-residential escalators and elevators, and drowning in open water, such as oceans, lakes, ponds, rivers or streams with no consumer products involved (drowning in a pool, koi pond, hot tub, or bathtub among other consumer products were considered in scope).

⁸ U.S. CPSC, National Electronic Injury Surveillance System (NEISS) 2014.

⁹ U.S. CPSC purchases death certificates on consumer product-related fatalities based on a select set of the World Health Organization's ICD-10 codes from a number of sources, and additionally receives fatality reports through NEISS, and CPSC's Injury or Potential Injury Incident database. However, the reporting of fatal incidents to CPSC can be incomplete. CPSC does not provide fatality estimates for most products. Instead, reported fatalities can be considered a minimum number of known fatal incidents for a given consumer product. It is also possible for multiple reports to be received for the same fatal incident. While efforts are made to avoid duplicate counting, redundant cases that were not identified may be present.

Product Categorization

With thousands of consumer products under CPSC's jurisdiction, a full enumeration of each product was neither practical nor advisable. Instead, logical groupings of products were used to allow similar products to be summarized together. The product groups used were similar (and in most cases identical) to the ones used for the annual CPSC NEISS Data Highlights report and the 2013 CPSC Senior Hazard Sketch Report.¹⁰ The products that make up each product group, along with the number of non-fall fatalities associated with each product group, can be found in Table A in the Appendix. Up to two products were counted as involved in each reported non-fall fatality, although most fatalities were associated with only a single product. There were 562 non-fall fatalities with two products associated with the death, which is 17 percent (562 out of 3,400) of all non-fall fatalities reported. Of the 562 non-fall fatalities with two products involved, 442 were fire-related (79%). There were more fire-related deaths associated with two products than other hazards, because if the ignition source and the first product ignited were both known, then each product was counted to be associated with the single fatality. Note that each fatality was assigned only one hazard pattern for the hazard statistics analysis, but each fatality may be assigned two product groups that were involved in a single fatality.

Fall Definition

All consumer product-related senior fatalities were divided into two groups: fall fatalities and non-fall fatalities. A fatality is considered a fall fatality if a senior fell, leading to a fatality, and the fall was the primary hazard associated with the death. A fall can occur from a standing, walking, tripping, sitting, or lying position. Falls from a ladder or off workout equipment, such as a treadmill or a stationary bike, were considered fall fatalities. There are many instances where a fall occurred in the sequence of events leading to a fatality. Accordingly, the cause of death was used as the best evidence when deciding whether a death was considered a fall or non-fall fatality. Vehicle-related products that involved fatalities due to 'falls while riding' were considered non-fall fatalities instead of fall fatalities. These vehicle-related products include ATVs, UTVs, mopeds, bicycles, tractors, lawn mowers, snowmobiles, golf carts, Segways, powered scooters, and motorized wheelchairs. If the cause of death was due to health-related issues, such as a heart attack due to overexertion while interacting with a consumer product or activity, then the death was considered a non-fall fatality with the hazard pattern 'Other' used.

Hazard Patterns

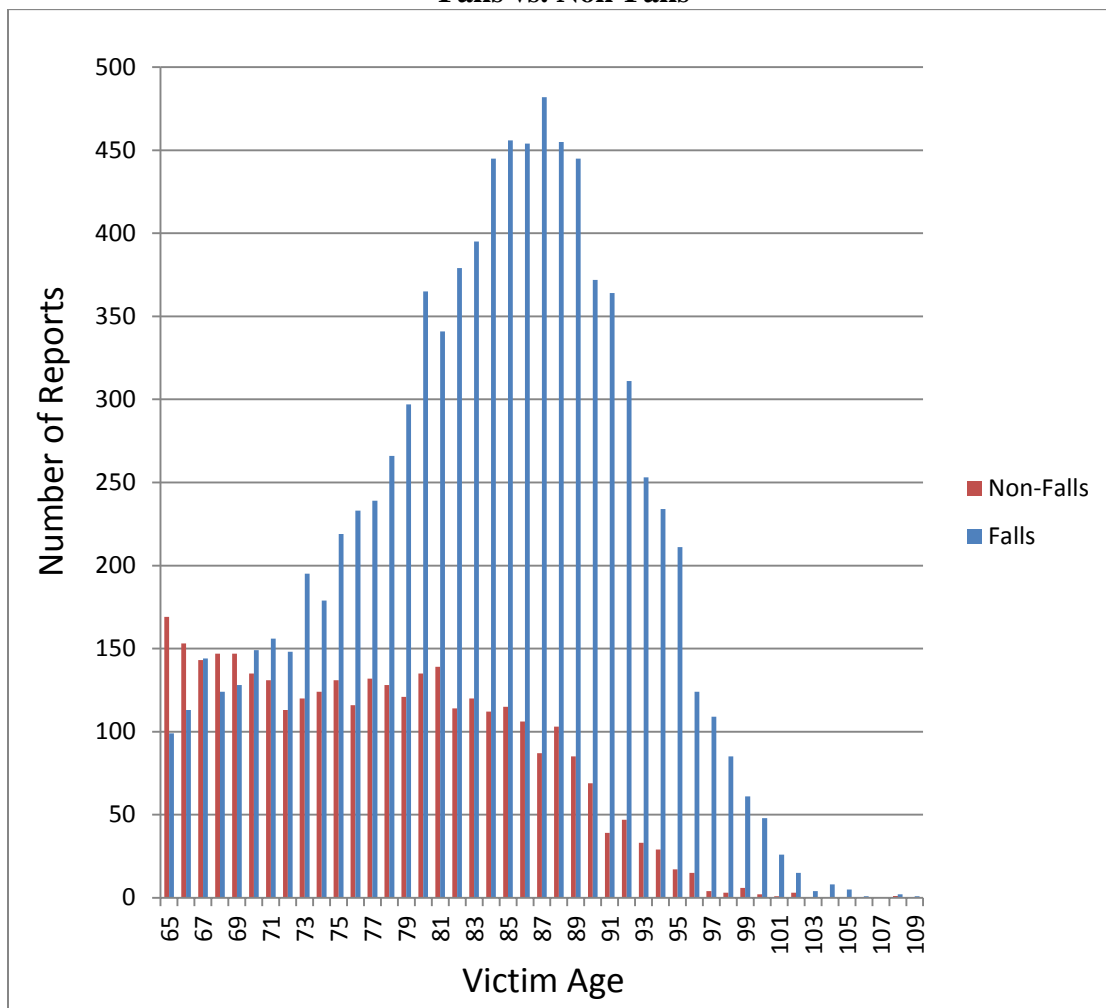
CPSC's data on consumer product-related fatality reports include 12,540 senior fatalities, age 65 years old and older from 2009 to 2011. Of these, 9,140 were considered fall fatalities, and 3,400 were considered fatalities not associated with a fall. The 3,400 non-fall fatality reports will be the main focus of the statistical analyses, with the fall fatality

¹⁰ U.S. CPSC, Hazard Screening Report Consumer Product-Related Injuries to Persons 65 Years of Age and Older, October 2013.

reports cited intermittently to provide context to the non-fall fatality figures. Product categories were analyzed based on hazard patterns, age groups, gender, and in some cases, fall fatalities compared with non-fall fatalities reported. Due to rounding, there are some places in the report where the percentages do not sum to 100 percent.

As a point of reference, all reported senior fall and non-fall fatalities with known ages are presented graphically in Figure 2. For all seniors age 65 to 69 years old, there were more non-fall fatalities than fall fatalities reported on average. However, from ages 70 through ages in the mid-80s, there were increasingly more fall fatalities than non-fall fatalities reported. The number of consumer product-related fall and non-fall fatalities reported begins to decline for individuals in the mid to late 80s. For all seniors over 75 years old, there were about four times as many consumer product-related fall fatality reports as non-fall fatality reports; and for seniors older than 85 years old, there were more than six times as many fall fatality reports as non-fall fatality reports. Those aged 90 years old and older accounted for nearly 8% of all senior non-fall fatalities reported.

**Figure 2 – 2009-2011 Reported Consumer Product-Related Senior Fatalities:
Falls vs. Non-Falls**



An age analysis of all reported senior non-fall fatalities by gender is shown below in Figure 3. Of reported senior non-fall fatalities, 64% were men and 36% were women. The population of seniors aged 65 years old and older between 2009 and 2011 in the U.S. was 43% male and 57% female according to the U.S. Census Bureau. On average, there were two and a half times as many consumer product-related non-fall fatality reports for men age 65 to 74 years old than for women that age. According to the U.S. Census Bureau between 2009 and 2011 the U.S. population aged 65 to 74 years old included 47% men and 53% women and for ages 75 to 89 years old there were 41% men and 59% women. From age 75 to 89 years old, there were one and a half times more non-fall fatality reports for men than for women on average. At age 90 years old and older, there was a steady decline in number of non-fall fatalities reported for both senior men and women. This is not unexpected as only about 5% of the U.S. population aged 65 years old and older between 2009 and 2011 was over 89 years old according to the U.S. Census Bureau, with 28% men and 72% women. From age 90 to 95 years old, there were about the same number of non-fall fatalities reported for men and women, but from ages older than 95 years old there were more non-fall fatalities reported for women.

Figure 3 – 2009-2011 Reported Consumer Product-Related Senior Non-Fall Fatalities: Men vs. Women

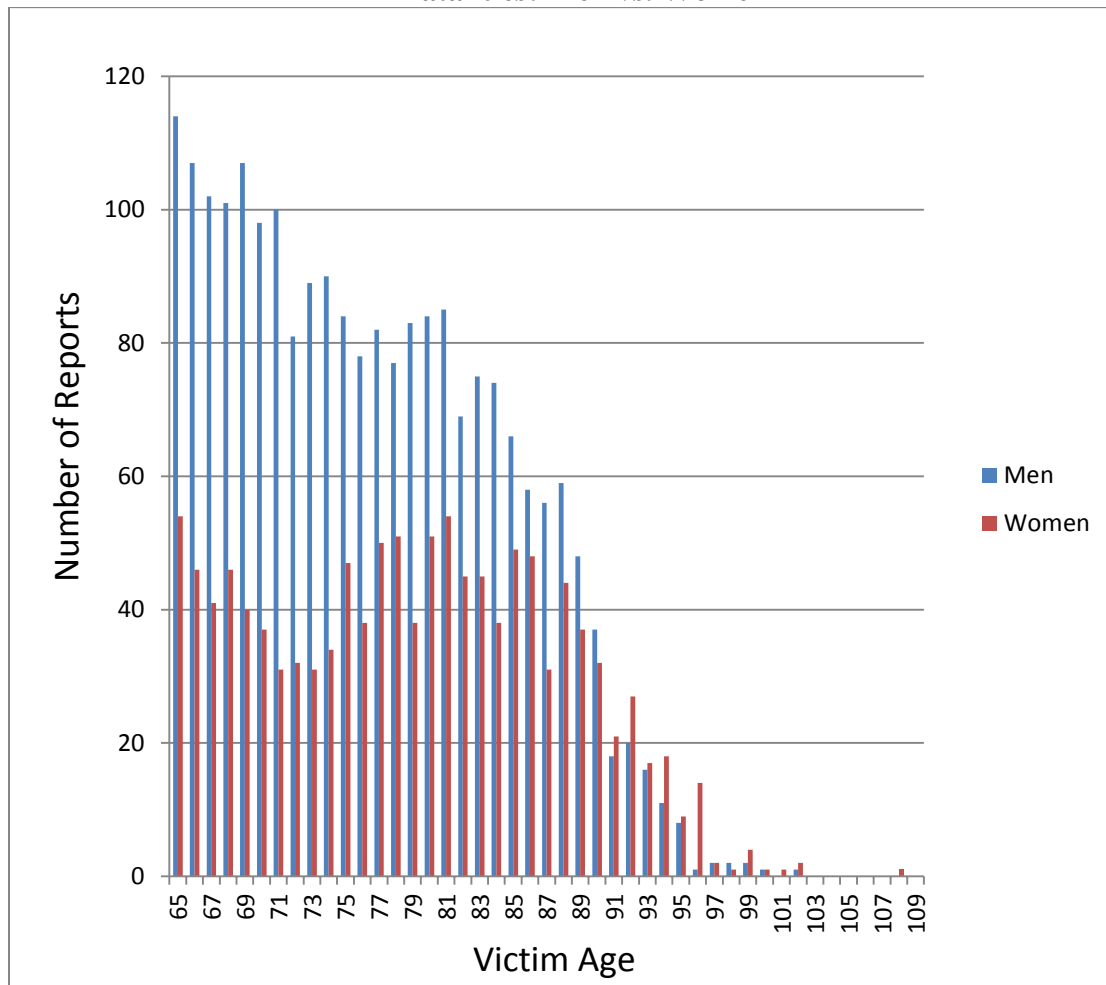


Table 1 presents a hazard pattern analysis of the number of reported consumer product-related non-fall fatalities by age and gender. Throughout the report, ‘fire-related’ and ‘Thermal – Fire-Related’ in Table 1 refer to the summation of the thermal categories in the full list of hazard pattern categories in Table B in the Appendix: ‘Thermal – Fire’, ‘Thermal - Flammable liquids, gases & vapors’, ‘Thermal - Other Flammable Materials’, ‘Thermal – Explosion’, and ‘Thermal - Outdoor Fire’. The category ‘Thermal – Not Fire-Related’ in Table 1 accounts for the summation of the remaining non-fire-related thermal hazard patterns.

Table 1– 2009-2011 Hazard Types of Reported Consumer Product-Related Senior Non-Fall Fatalities*

Hazard	65-74	75-84	85+	Male	Female	Total	%¹¹
Chemical – CO Poisoning	80	63	38	123	58	181	5%
Chemical - Not CO poisoning	17	17	14	25	23	48	1%
Electrical	17	10	1	25	3	28	1%
Mechanical	817	677	384	1,338	540	1,879	55%
Mechanical – Collision	164	128	42	266	68	334	10%
Mechanical - Crushing/Pinching	32	14	7	52	1	53	2%
Mechanical - Entanglement/Entrapment	37	38	59	58	76	134	4%
Mechanical - Explosion (pressure related)	0	1	0	0	1	1	0%
Mechanical – Fall (e.g. while riding)	88	67	40	168	27	195	6%
Mechanical - Sharp or Pointed Objects	8	13	12	21	12	33	1%
Mechanical - Struck by	15	11	5	28	3	31	1%
Mechanical - Submersion	311	284	177	449	323	772	23%
Mechanical - Tip Over / Instability / Rollover	145	104	33	259	23	283	8%
Mechanical – Unknown/Other	17	17	9	37	6	43	1%
Thermal – Fire-Related	401	426	272	591	512	1,103	32%
Thermal - Not Fire-Related	28	38	48	50	64	114	3%
Other	22	17	8	37	10	47	1%
Total	1,382	1,248	765	2,189	1,210	3,400	

*There were 5 senior non-fall fatality reports with an unknown age and 1 with an unknown gender. Of the 5 unknown age fatalities, 4 had ‘Thermal – Fire-Related’ and 1 had ‘Mechanical - Tip Over / Instability / Rollover’ as the hazard pattern. The unknown gender fatality had ‘Mechanical - Tip Over / Instability / Rollover’ as the hazard pattern.

The majority of reported senior non-fall fatalities associated with consumer products involved mechanical hazards (55%), followed by fire-related fatalities (32%). The next largest hazard was carbon monoxide poisoning deaths (5%), then non-fire-related thermal fatalities (3%), non-carbon monoxide poisoning chemical fatalities (1%), Other fatalities (1%), and electrical-related deaths (1%).

¹¹ Percentages do not sum to 100, due to rounding.

Of all reported non-fall mechanical fatalities, 71% were senior men and 29% were senior women. There were 43% of consumer product-related non-fall mechanical fatalities in the 65 to 74 year old age group, 36% in the 75 to 84 year old age group, and 20% were 85 years old and older.

Of all reported non-fall fire-related fatalities, 54% were senior men and 46% were senior women. There were 36% of consumer product-related non-fall fire-related fatalities in the 65 to 74 year old age group, 39% in the 75 to 84 year old age group, and 25% were 85 years old and older.

Table 2 presents the top product group hazard patterns of the number of reported consumer product-related senior non-fall fatalities.

Table 2 – 2009-2011 Product Group Hazards Associated with Reported Non-Fall Fatalities

Rank	Product Group	Hazard	Count
1	Swimming activity, pools, equipment	Mechanical – Submersion	379
2	Clothing, all	Thermal – Fire-Related	293
3	Bathtub & shower structures	Mechanical – Submersion	253
4	Cigarettes, etc., lighters, fuel	Thermal – Fire-Related	252
5	Home fires/CO/gas vapors with unknown product	Thermal – Fire-Related	244
6	ATV's, mopeds, minibikes, etc.	Mechanical - Tip Over / Instability / Rollover	174
7	Cooking ranges, ovens, etc.	Thermal – Fire-Related	165
8	Heating stoves & space heaters	Thermal – Fire-Related	129
9	ATV's, mopeds, minibikes, etc.	Mechanical – Collision	116
10	Bicycles & accessories	Mechanical – Collision	112
11	Hot tubs, spas, whirlpools	Mechanical – Submersion	97
12	Bicycles & accessories	Mechanical – Fall (e.g. while riding)	94
13	Electric fixt., lamps & equip	Thermal – Fire-Related	78
14	Lawn mowers, all types	Mechanical - Tip Over / Instability / Rollover	71
14	Miscellaneous	Thermal - Not Fire-Related	71
16	ATV's, mopeds, minibikes, etc.	Mechanical – Fall (e.g. while riding)	68
17	Beds, mattresses, pillows	Mechanical - Entanglement/Entrapment	59
17	Chairs, sofas & sofa beds	Thermal – Fire-Related	59
19	Bathtub & shower structures	Thermal - Not Fire-Related	54
20	Beds, mattresses, pillows	Thermal – Fire-Related	42

Reported fire-related fatalities often involved two products, the ignition source and the first product ignited, so we find quite a few product hazard combinations involving ‘Thermal – Fire-Related’ in Table 2. Conversely, despite mechanical hazards accounting for over half of all non-fall fatality reports, fewer mechanical hazard patterns appear in Table 2 because mechanical hazards were subcategorized into specific mechanical hazard types.

When considering product hazard combinations for reported non-fall senior fatalities, submersions in swimming pools and submersions in bath tubs were numbers 1 and 3 in Table 2 with 379 and 253 fatalities respectively. There were also 97 reported submersions in Hot tubs, spas, and whirlpools, which makes up the eleventh most frequently reported product hazards associated with senior non-fall fatalities.

There were 293 fatalities reported associated with fire igniting clothing, which was the second most common product hazard combination reported in Table 2. Clothing fires involved a wide range of indoor and outdoor fire-related activities, with 96 reported clothing fires ignited by 'Cooking, ranges, ovens, etc.' and 62 reported clothing fires ignited by 'Cigarettes, etc., lighters, fuel.' Fires associated with 'Cigarettes, etc., lighters, fuel' and 'Home fires/CO/gas vapors with unknown product' ranked fourth and fifth in Table 2 respectively, with 252 and 244 fatalities reported.

The product group 'Home fires/CO/gas vapors with unknown product' includes incidents occurring in an unknown location in the home in which the ignition product is unknown. If additional details were known in these reported fatalities, then the 244 fire-related fatalities in this group would have probably added to other product group counts, such as cooking or heating product groups.

Fires involving 'Cooking ranges, ovens, etc.' and 'Heating stoves & space heaters' ranked 7 and 8 in Table 2 with 165 and 129 fatalities reported respectively. Of the 294 reported fire-related fatalities in these 2 groups, 119 ignited clothing.

'ATV's, mopeds, minibikes, etc.' had the most overall senior non-fall fatalities as a product group with 400 reported deaths, but because mechanical hazards were further subcategorized in Table 2, the group appears three places with different mechanical hazards. 'ATV's, mopeds, minibikes, etc.' accounts for the sixth, ninth and sixteenth most reported product hazard fatalities, with hazards: 'Mechanical - Tip Over / Instability / Rollover' (174 fatalities), 'Mechanical - Collision' (116 fatalities), and 'Mechanical - Fall' (e.g. presumably while riding) (68 fatalities) fatalities, respectively. Among the 'ATV's, mopeds, minibikes, etc.' non-fall fatality reports, powered scooters or mobility wheelchairs accounted for 3 tip over or roll over deaths, 18 collision deaths, and 37 mechanical fall fatalities, presumably while riding.

Bicycle collisions and falls while riding were numbers 10 and 12 in the table with 112 and 94 reported fatalities respectively, and bicycles as a product group ranked 7th overall for senior non-fall fatalities with 217 reports.

Electric lamps and equipment was number 13 in Table 2 with 78 fire-related fatalities, while tied at number 14 are lawn mower rollovers and hot water scalding deaths in the miscellaneous product group with 71 fatalities each (hot water exists as a NEISS product code, in part to capture scenarios where the product involved may be unknown, for example when hot water is spilled which can imply a more specific consumer product was involved). Bathtub and shower structure scalding fatalities were number 19 in the

table with 54 fatalities, all of which were also coded in the miscellaneous product group due to hot water.

Bed, mattress, or pillow entanglements or entrapments were tied at number 17 with fires igniting chairs, sofas and sofa beds at 59 reported fatalities each. Fire-related fatalities involving beds, mattresses, or pillows were number 20 in the product hazard table, with 42 fatalities.

Appendix

The full list of products from the NEISS that make up each product group used in this report with the number of non-fall fatalities for each product group involved is shown below in Table A¹². A single non-fall fatality may appear more than once in Table A because up to two consumer products can be associated with a single report.

Table A – Product Groups and their NEISS Product Codes with the Number of Non-Fall Senior Fatalities Associated with Each Group

Product Group	Product Codes	Non-Fall Total
Air conditioners	381	14
Alarms & escape equipment	701, 702, 704, 711, 712, 713	0
All nursery equipment	1502, 1509-1512, 1515, 1517, 1519, 1520, 1524-1528, 1531, 1533-1537, 1539, 1542, 1544, 1548-1551, 1553, 1555, 1555	1
All toys	1301, 5016	0
Amusement attractions (incl. Rides)	1293, 3293-3295	1
Archery	1235	0
ATV's, mopeds, minibikes, etc.	1744, 3202, 3213, 3215, 3258, 3259, 3285-3288, 3296, 5035, 5036, 5044	400
Auto tools, accessories, chemicals	821, 955, 966, 967, 978	7
Automatic doors, openers	137, 138	5
Baby carriages, walkers, etc.	1505, 1508, 1522	0
Barbecue grills, stoves, equipment	917, 1232, 1247, 1285, 1689, 3218, 3229, 3230, 3233, 3248, 3249	18
Baseball/softball	3228, 3240, 3270, 5034, 5041	2
Basketball	3226, 3242, 3267	0
Bathtub & shower structures	610, 611, 648, 649, 657, 699, 4030	330
Batteries, all types	884, 889, 891, 892	1
Battery chargers	883	0
Beach, picnic, camping equipment	3214, 3250, 3252, 4016, 5029, 5037	1
Beds, mattresses, pillows	601, 661, 662, 694, 4009, 4010, 4050, 4064, 4069, 4072, 4073, 4075, 4076, 4082	102
Bicycles & accessories	1202, 1205, 5033, 5040	217
Billiards or pool	1260	0
Blankets	110, 132, 689, 4008	10
Bowling	1206	2
Boxing	1207	0
Business, office machines, equipment	571, 709	0
Cabinets or door hardware	1820	1
Cans, other containers	131, 980, 981, 1103, 1107, 1112, 1116, 1123, 1125,	32

¹² U.S. CPSC, 2015 NEISS Product Code Comparability Table, January 2015.

Product Group	Product Codes	Non-Fall Total
Cans, other containers (continued)	1127, 1133, 1135, 1138, 1141	
Carpets & rugs	612, 613, 676	1
Ceilings, walls, panels (inside)	1884	13
Chain saws	1411	13
Chains	885	1
Chairs, sofas & sofa beds	670, 671, 679, 680, 4015, 4017-4024, 4052, 4053, 4074, 4079	69
Children's sports/hobby equipment	1306, 1318, 1319, 1322, 1356, 1362, 1376, 1393	0
Chimneys, fireplaces	316, 334, 336, 342, 346, 372, 373, 378	25
Cigarettes, etc., lighters, fuel	940, 1604, 1687, 1688, 1690, 1728, 1730, 1731, 1909	252
Cleaning agents (exc. Soaps)	930, 945, 951, 953, 954, 956, 977	16
Cleaning equip, non-caustic/detergent	459, 480, 1143	1
Clothing, all	1615, 1644-1647, 1658, 1677, 2440	304
Cooking ranges, ovens, etc.	202, 204, 250, 257, 259-262, 264-267, 273, 278-281	186
Cookware, pots & pans	460, 461, 465, 466	6
Counters & counter tops	1864	0
Cribs, playpens, baby gates	1506, 1513, 1529, 1543, 1545	0
Curling (activity, etc.)	3282	0
Cutlery, knives, unpowered	464, 836	1
Darts	1248, 3289-3291	0
Desks, cabinets, shelves, racks	604, 692, 693, 4056	18
Dollies, carts	1679, 1680, 1684	3
Drain, oven cleaners, caustics	929, 936, 942, 968, 969	5
Drapery rods & accessories	4055	0
Drinking glasses	424, 454, 475, 478	0
Drug poisonings to children under 5	1914-1916, 1923, 1927-1932, 1940	2
Electric fixt., lamps & equipment	627, 628, 684, 685, 4036, 4039, 4041, 4042, 4061-4063, 4070, 4071, 4081, 4083	95
Electric trains, cars	1332, 1383	0
Elevators, other lifts	1814, 1889-1891	6
Engines, non-automotive	819, 820	1
Exercise & equipment	1200, 3265, 3277, 3299	6
Fans (exc. Stove exhaust fans)	380	4
Fences	1871	5
Fencing	3260	0
Fireplace equipment	663	0
Fireworks & flares	1313, 1718	0
Fishing	3223	6

Product Group	Product Codes	Non-Fall Total
Football	1211, 3227, 3244, 3269	0
Fuel-burning lighting equipment & fuels	963-965, 4060	10
Furnaces	309-311, 318, 322, 384	45
Gasoline & diesel fuels	910, 962	20
Generators & utility meters	606, 4084	42
Glass bottles & jars	1102, 1120, 1122, 1134, 1136, 1140	0
Glass doors, windows & panels	609, 1823, 1825, 1826, 1836, 1867, 1873, 1875, 1882, 1883, 1892, 1894	8
Golf	1212, 1213	52
Grooming devices	932, 1602, 1605, 1613, 1625, 1637, 1638, 1641, 1651, 1659, 1662, 1678, 1682, 1683	1
Group - cardboard bags / plastic bags / aluminum foil	1114, 1128, 1130-1132, 1137, 1139, 1142, 1144	3
Hand garden tools	1403, 1415, 1449, 1450, 1453, 1455	4
Handrails, railings & banisters	1829	2
Hatchets & axes	1426	0
Heating stoves & space heaters	312, 348, 366-370, 386, 388, 389, 391-394, 399, 1255	177
High chairs, youth chairs	1518, 1555, 1556	0
Hockey, all kinds	1279, 1295, 3245, 3272, 5032	0
Hoists, lifts, jacks, etc.	814	16
Holders for personal items	419, 1623, 1719, 5011	0
Holiday, party supplies	1701, 1711, 1712, 1714, 1720, 1729, 1736	4
Home fires/CO/gas vapors with unknown product	1841, 1866, 1898, 1899	279
Horseback riding activity, equipment	1239	1
Horseshoes	1257	0
Hot tubs, spas, whirlpools	698	99
Ice or snow boating	3247	0
Infrared lamps, saunas	1609, 1612, 1634	2
Insulation	1803	0
Irons, clothes steamers (not toys)	108, 238, 239, 247, 255, 277	0
Lacrosse, rugby, misc. Ball games	1215, 1276, 1282, 3234-3236	0
Ladders, stools	618-620, 688, 4003, 4025, 4026, 4032, 4033, 4077, 4078, 4080	7
Lawn and garden care equipment	1406, 1407, 1413, 1414, 1417, 1425, 1430-1432, 1445, 1447, 1459, 1460, 1465, 1466	18
Lawn mowers, all types	1401, 1402, 1422, 1434, 1440, 1446, 1448	150
Lumber & paneling, separate	1885	0
Martial arts	3257	0
Massage devices	1610	2

Product Group	Product Codes	Non-Fall Total
Mirrors & mirror glass	4004	0
Misc. Construction materials	706, 1811, 1876	8
Misc. Decorating items	434, 623, 652-654, 4043, 4065, 4067	3
Misc. Heating, cooling equipment	340, 365, 390, 4005	5
Misc. Hobby equipment	514, 529, 532, 533, 536, 549, 555, 562, 564-567, 569, 570, 926, 982, 1124, 1240, 1715, 1734, 1737	6
Misc. Household appliances	112-116, 214, 252, 304-307, 482	6
Misc. Household covers and fabrics	617, 638, 650, 651, 666, 667, 1863, 4002, 4045, 4051, 4054	24
Misc. Personal use items	1554, 1606, 1608, 1616, 1620, 1622, 1629, 1630, 1643, 1650, 1654, 1660, 1669, 1671, 1685, 1686, 1706, 1707, 1710, 1742, 1913, 1926, 2640, 5555	4
Miscellaneous	136, 139, 687, 707, 890, 1023, 1053, 1145, 1294, 1726, 1732, 1733, 1735, 1738, 1741, 1821, 1855, 1857, 1865, 1934, 4047	76
Miscellaneous household chemicals	125, 909, 914, 920, 921, 927, 938, 952, 957, 970, 973-975	5
Miscellaneous housewares	232, 408, 413, 416, 420, 422, 428, 432, 435, 436, 438, 443, 450, 462, 463, 477, 639, 669, 710, 941, 1705, 1739, 1740	36
Miscellaneous sports	1208, 1269-1272, 3231, 3237, 3254, 3263, 3278	0
Miscellaneous toys	1309, 1310, 1325, 1326, 1334, 1335, 1342, 1344-1347, 1349, 1350, 1354, 1365, 1381, 1389, 1390, 1392, 1394, 1395, 5004, 5006, 5007, 5010, 5013, 5015, 5018-5021	0
Miscellaneous workshop equipment	815, 822, 823, 835, 847, 852, 854, 877, 886, 888, 925, 4802	8
Mountain climbing	1258	0
Nails, carpet tacks, etc.	1819	1
Non-glass doors & panels	1827, 1845, 1849, 1854, 1858, 1879, 1880, 1886, 1893	10
Nonpowder guns, bbs & pellets	1237, 1936, 3203	0
Other misc. Furniture & accessories	672, 4011, 4013, 4014, 4058	4
Other power lawn equipment	1062, 1405, 1408, 1433, 1435, 1441, 1457, 1458, 1461	70
Outdoor elect. Lighting equipment	1452	2
Outside attached struct. & materials	1808, 1812, 1816, 1828, 1888, 1895	3
Outside unattached structures	1830, 1887	2
Paints, solvents, lubricants	908, 913, 915, 933, 937, 960, 961, 972	2
Pipes, heating & plumbing	371, 374	2
Playground equipment	1234, 1242-1244, 3219, 3246, 3273	0
Polishes, waxes	904, 905, 931, 958, 959	0
Porches, open side floors, etc.	1817	1
Power home tools, exc. Saws	803-805, 807-809, 855, 856, 865, 869, 871, 873, 876, 887, 897, 971, 984	8
Power home workshop saws, all	832, 841-845, 863, 864, 872, 875, 894, 895	5

Product Group	Product Codes	Non-Fall Total
Projectile or flying toys	1314, 1317, 1338, 1352, 1399, 5001, 5017	0
Protection devices	1607, 1617-1619	0
Pumps	1462, 1818	11
Racquet sports	3222, 3256, 3284	5
Radiators, all	379	6
Razors, shavers, razor blades	1661, 1664, 1667	0
Refrigerators, freezers	263, 276	12
Scales (not baby)	4059, 4066, 4068	0
School supplies	2300	0
Shuffleboard	3261	0
Skateboards	1333	1
Skating, all kinds	3216, 3217, 3255, 3297	0
Skewers and picks	427, 429, 431	0
Small kitchen appliances	212, 213, 215-219, 221-224, 227, 231, 234-237, 240-242, 268-271, 274, 275, 401, 405, 412, 421, 444, 452, 453, 469, 471, 481	15
Snowmobiles	1290	18
Snow skiing	3283, 5031	2
Soaps, detergents	934, 949, 976, 979, 983	3
Soccer	1267, 3225, 3241, 3271	0
Sound recording & reproducing equipment	530, 531, 545-547, 550, 552, 555, 556, 555, 559, 561, 563, 573, 575	1
Stairs, ramps, landings, floors	1807, 1840, 1842, 1843	2
Swimming activity, pools, equipment	1246, 1275, 1277, 1278, 1284, 3211, 3221, 3251, 3262, 3274, 3276, 3279, 5043	383
Tables, all types	4057	14
Tableware & accessories	417, 474	2
Television sets, stands	519, 572, 574, 576	3
Toboggans, sleds, snow discs, etc.	1217, 1273, 1274, 1299	0
Toy chests, boxes	1353	0
Track & field activities, equipment	1268, 5030	0
Trampolines	1233	0
Trimmers, small power garden tools	1404, 1409, 1427, 1454, 1456, 1463, 1464	3
Unicycles	1283	0
Volleyball	1266, 3220, 3243, 3268	2
Wagons, other ride-on toys	1327-1330, 1398, 5005, 5042	5
Washers & dryers	101-103, 106, 107, 126, 127, 135, 140	10
Water heaters	118, 119, 133, 134, 308	17
Water skiing, tubing, surfing	1261, 1264, 3200, 3292	4

Product Group	Product Codes	Non-Fall Total
Welding, soldering, cutting tools	812, 831, 859, 866-868, 874, 896	15
Window, door sills, frames	1870, 1878	4
Wires, cords, not specified	837	0
Workshop chemicals	833	0
Workshop manual tools	827-830, 834, 857, 858, 862, 870, 878-882, 893, 898, 899	8

The full list of specific hazard pattern categories used to classify each non-fall fatality in this report are shown in Table B, from which the more general hazard patterns in Table 1 were derived.

Table B – 2009-2011 Specific Hazard Patterns for Senior Non-Fall Fatalities*

Hazard	65-74	75-84	85+	Male	Female	Total	%¹³
Chemical - CO Poisoning	80	63	38	123	58	181	5%
Chemical – Not CO Poisoning	17	17	14	25	23	48	1%
Chemical – Caustic/Corrosive	2	2	1	3	2	5	0%
Chemical - Poisoning - Other Gases/Vapors	7	6	3	7	9	16	0%
Chemical - Poisoning - Other Liquid/Solid	8	9	10	15	12	27	1%
Electrical - Electric Shock/Electrocution	17	10	1	25	3	28	1%
Mechanical	817	677	384	1,338	540	1,879	55%
Mechanical – Collision	164	128	42	266	68	334	10%
Mechanical - Crushing/Pinching	32	14	7	52	1	53	2%
Mechanical – Entanglement/Entrapment	37	38	59	58	76	134	4%
Mechanical - Explosion (pressure related)	0	1	0	0	1	1	0%
Mechanical – Fall	88	67	40	168	27	195	6%
Mechanical - Sharp or Pointed Objects	8	13	12	21	12	33	1%
Mechanical - Struck by	15	11	5	28	3	31	1%
Mechanical – Submersion	311	284	177	449	323	772	23%
Mechanical - Tip Over / Instability / Rollover	145	104	33	259	23	283	8%
Mechanical – Unknown/Other	17	17	9	37	6	43	1%
Thermal – Fire-Related	401	426	272	591	512	1,103	32%
Thermal – Explosion	28	18	8	41	13	54	2%
Thermal – Fire	354	381	249	497	491	988	29%
Thermal - Flammable liquids, gases & vapors	7	10	8	23	2	25	1%
Thermal - Other Flammable Materials	0	1	0	0	1	1	0%
Thermal – Outdoor Fire	12	16	7	30	5	35	1%
Thermal – Not Fire-Related	28	38	48	50	64	114	3%
Thermal	0	2	0	1	1	2	0%
Thermal - Extreme Cold	0	1	0	0	1	1	0%
Thermal - Hot liquid or steam	18	24	32	28	46	74	2%
Thermal - Hot Surface	10	11	16	21	16	37	1%
Other	22	17	8	37	10	47	1%
Total	1,382	1,248	765	2,189	1,210	3,400	

*There were 5 senior non-fall fatality reports with an unknown age and 1 with an unknown gender. Of the 5 unknown age fatalities, 4 had ‘Thermal – Fire’ and 1 had ‘Mechanical - Tip Over / Instability / Rollover’ as the hazard pattern. The unknown gender fatality had ‘Mechanical - Tip Over / Instability / Rollover’ as the hazard pattern.

¹³ Percentages do not sum to 100, due to rounding.