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## Seasonal variation in fall-related emergency department visits by location of fall – United States, 2015

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### Abstract

**Introduction:** In the United States, fall-related emergency department (ED) visits among older adults (age 65 and older) have increased over the past decade. Studies document seasonal variation in fall injuries in other countries, while research in the United States is inconclusive. The objectives of this study were to examine seasonal variation in older adult fall-related ED visits and explore if seasonal variation differs by the location of the fall (indoors vs. outdoors), age group, and sex of the faller.

**Methods:** Fall-related ED visit data from the National Electronic Injury Surveillance System-All Injury Program were analyzed by season of the ED visit, location of the fall, and demographics for adults aged 65 years and older.

**Results:** Total fall-related ED visits were higher during winter compared with other seasons. This seasonal variation was found only for falls occurring outdoors. Among outdoor falls, the variation was found among males and adults aged 65 to 74 years. The percentages of visits for weather-related outdoor falls were also higher among males and the 65–74 year age group.

**Conclusions:** In 2015, there was a seasonal variation in fall-related ED visits in the United States. Weather-related slips and trips in winter may partially account for the seasonal variation.

**Practical Implications:** These results can inform healthcare providers about the importance of screening all older adults for fall risk and help to identify specific patients at increased risk during winter. They may encourage community-based organizations serving older adults to increase fall prevention messaging during winter.

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#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Publisher's Disclaimer: Disclaimer

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

## Keywords

Older adults; Elderly; Falls; Winter; Indoor; Outdoor

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## 1. Introduction

Fall-related emergency department (ED) visits among older adults (65 years and older) in the United States increased from 2.2 million in 2009 to 3.0 million in 2018 (Centers for Disease Control and Prevention [CDC], 2003). Each month an estimated 250,000 older adults were seen in an ED for a fall in 2018 (CDC, 2003). Studies in other countries found that a higher number of fall-related ED visits (Al-Azzani & Mak, 2016; Beynon, Wyke, Jarman, Robinson, Mason, & Murphy, 2011; Jung et al., 2018; Wareham et al., 2003) and fractures (Bulajic-Kopjar, 2000; Grønskag, Forsmo, Romundstad, Langhammer, & Schei, 2010) occur in the winter months when compared with other seasons. Findings on the seasonal variation of falls and related injuries in the United States are inconsistent. One study found that between 1986 and 1990, a higher rate of fall-related fractures was observed during winter compared with other seasons (Bischoff-Ferrari, Orav, Barrett, & Baron, 2007). In another study, there were no noted seasonal differences in the rate of fall-related ED visits during 2001–2002 (Stevens, Thomas, & Sogolow, 2007). While these outcomes differ (i.e., fall-related fracture and fall-related ED visit), there were no consistent findings of seasonal variation in fall-related injuries.

Past studies that examined winter falls focused on those that occurred outdoors due to weather-related factors (e.g., slips or trips on ice, snow, or freezing rain) (Bobb et al., 2017; Dey, Hicks, Benoit, & Tokars, 2010; Gevitz, Madera, Newbern, Lojo, & Johnson, 2017). These studies found that there was a higher risk for fall injuries during (Dey et al., 2010; Gevitz et al., 2017) and immediately after periods of snowfall or freezing rain (Bobb et al., 2017).

Irrespective of season, older adult falls and fall injuries occur more often indoors than outdoors (Boye et al., 2014; Leavy et al., 2013; Moreland, Kakara, Haddad, Shakya, & Bergen, 2020; Schiller, Kramarow, & Dey, 2007). Studies that find seasonal variation in falls or fall injuries often propose that, in addition to outdoor weather-related events, prolonged periods of time spent indoors during winter could be a cause for increased falls (Campbell, Spears, Borrie, & Fitzgerald, 1988; Jacobsen, Sargent, Atkinson, O’Fallon, & Melton, 1995; Leavy et al., 2013; Qian, Chau, Kwan, Lou, & Leung, 2019; Stevens et al., 2007; Wareham et al., 2003). A potential consequence of staying indoors for extended periods of time that could increase fall risk include low physical activity, which leads to diminished muscle strength and bone loss (Jacobsen et al., 1995; Leavy et al., 2013; Mondor, Charland, Verma, & Buckeridge, 2015; Qian et al., 2019; Stevens et al., 2007; Wareham et al., 2003). Other consequences may include seasonal affective disorder, a form of depression due to low light and isolation (Jacobsen et al., 1995; O’Hare, O’Sullivan, Flood, & Kenny, 2016), tripping over objects inside homes and disturbance in circadian rhythms due to low natural light in winter (Johansen, Boulton, & Neuburger, 2016; Vikman, Nordlund, Näslund, & Nyberg, 2011). However, there is limited research examining seasonal variation by location of fall to

support this discussion. Understanding seasonal variation by location could help us identify the factors driving seasonal variation, if any.

The objectives of this study were to examine seasonal variation in ED visits among adults age 65 and older and to explore if seasonal variation differs by the location (indoors vs. outdoors) of the fall, and the age and sex of the faller.

## 2. Methods

Data and narratives from the 2015 National Electronic Injury Surveillance System-All Injury Program (NEISS-AIP) were reviewed to determine the season and location of nonfatal falls that led to an ED visit among adults age 65 and older (NEISS, 2021). The NEISS-AIP is a nationally representative data system operated by the United States Consumer Product Safety Commission. It includes data from a sample of about 66 of 100 NEISS-participating hospitals in U.S. states and territories. NEISS-AIP captures data from a patient's initial ED visit for an injury. The data are then weighted to represent the U.S. population using the inverse probability of hospital selection in each stratum and adjusted for non-response (Schroeder & Ault, 2001). For each ED visit, the date of treatment, age, sex, primary diagnosis, precipitating cause of injury, intent of injury, and a 2-line free-form narrative describing the circumstance of injury are abstracted from the medical record. Only ED visits made by adults over the age of 65, and whose precipitating cause of injury was an unintentional fall, were included in this analysis making the initial sample size 38,654 ED visits. Date of treatment was used to define the season in which the fall occurred. Seasons were defined as spring (March – May), summer (June – August), autumn (September – November), and winter (December – February).

The narratives were used to create three additional variables: place of residence, fall location, and weather-related fall. This was done by dividing the 38,654 ED records into four groups. One of four researchers then reviewed each group. A codebook was developed (Appendix A) by reading 100 narratives and then updated for every 2,000 narratives read. A second researcher reviewed 10% of all narratives and the four researchers discussed coding discrepancies until they reached a consensus. Previous narratives were recoded based on changes made to the codebook.

### Place of residence –

If a narrative indicated that the fall occurred in a residential facility such as a nursing home, assisted living facility, or another type of facility, the person was considered non-community dwelling. If the narrative did not mention these keywords, the person was assumed to be community dwelling. There were nine cases where a fall occurred in a prison. These nine were excluded from the analysis reducing the sample size to 38,645.

### Fall location –

The location of the fall was then assessed for older adults who resided in the community ( $n = 34,336$ ). Location was coded as either indoor ( $n = 14,131$ ) or outdoor ( $n = 6,485$ ). Cases where the narratives did not have sufficient information to identify indoor or outdoor location were coded as unknown ( $n = 13,720$ ) (e.g., falls on stairs without any

additional information were difficult to determine if indoor or outdoor). Events classified as unknown were excluded from location-based analyses. Location was not analyzed among non-community dwelling adults given the small number of events that occurred outdoors ( $n = 51$ ).

### **Weather-related fall –**

Weather was classified for ED visits among community dwelling adults who sustained a fall outdoors. The ED visit for a fall was coded as potentially weather related ( $n = 1,092$ ) when a term indicative of weather (e.g., rain, snow, ice) was mentioned in the narrative or non-weather related ( $n = 5,393$ ) in their absence. Additional information on how narratives were coded for place of residence, fall location, and weather are included in the Appendix A.

Percentages and 95% confidence intervals were calculated for season in which the fall-related ED visit occurred, by place of residence, sex, and age group. For community-dwelling older adults, percentages were calculated for fall-related ED visits by location (indoor vs. outdoor), sex, and age group. For weather-related fall injuries, percentages and 95% confidence intervals were calculated for each sub-group of season, sex, and age. Percentages for each sub-group used the number of fall injuries sustained outdoors for that sub-group as the denominator. All analyses were weighted to be representative of the 2015 U.S. population. The conservative method of non-overlapping confidence intervals was used to estimate significant differences between categories. All analyses were performed using Survey Procedures in SAS version 9.4 (SAS Institute, Inc., Cary, NC, USA).

## **3. Results**

The 38,645 narratives represented 3.04 million fall-related ED visits among older adults in 2015. Around 65% of these visits were made by females (data not shown). Fall-related ED visits were more common in winter (26.2%; 95% CI = 25.7, 26.8) than in spring (24.8%, 95% CI = 24.3, 25.4), summer (24.7%, 95% CI = 24.1, 25.2), and autumn (24.3%, 95% CI = 23.7, 24.8) (Table 1). When examined by place of residence, both community and non-community dwelling older adults had more ED visits due to a fall during winter. However, a statistically significant difference was found only among the community dwelling adults. Among community-dwelling males, the percentage of fall-related ED visits was highest in winter (27.3%; 95% CI = 26.3, 28.4) compared with spring (24.8%; 95% CI = 23.9, 25.8), summer (24.3%; 95% CI = 23.3, 25.2), and autumn (23.6%; 95% CI = 22.6, 24.5).

Fall injuries were two times as common indoors ( $n = 14,131$ ) as outdoors ( $n = 6,485$ ) (Table 2). However, a higher percent of ED visits occurred due to a fall sustained outdoors during winter (29.8%, 95% CI = 28.4, 31.2) compared with spring (25.8%, 95% CI = 24.5, 27.1), summer (22.2%, 95% CI = 20.9, 23.4), and autumn (22.2%, 95% CI = 20.9, 23.5). Males had a higher percentage of outdoor injuries during winter (31.4%, 95% CI = 29.2, 33.6) compared with spring (26.4%, 95% CI = 24.3, 28.4), summer (20.7%, 95% CI = 18.8, 22.6), and autumn (21.5%, 95% CI = 19.6, 23.4). Older adults in the age group 65 to 74 had more ED visits due to an outdoor fall in winter compared with other seasons (Table 2).

Out of the 6,485 fall injuries that occurred outdoors, 1,092 were reported to be weather related. Around 97% of all weather-related injuries were attributed to slips or trips on ice or snow (data not shown). The remainder were due to rain. Fig. 1 shows that, out of all fall injuries sustained outdoors, 34.4% in the winter were weather related compared with 14.5% in spring, 0.9% in summer, and 1.5% in autumn. Out of all fall injuries sustained outdoors by males, a higher percentage (17.2%, 95%CI = 15.5, 18.9) were weather related than that for females (12.7%, 95%CI = 11.4, 13.9). Out of all fall injuries sustained outdoors by 65–74 year olds (18.9%, 95%CI = 17.2, 20.6), a higher percentage were weather related than for those who were 75–84 (11.6%, 95%CI = 10.1, 13.1) and 85 years and above (9.8%, 95%CI = 7.8, 11.7).

#### 4. Discussion

In 2015, there was seasonal variation in fall-related ED visits among older Americans, with a higher percentage of visits occurring in winter compared with any other season. By location, this seasonal variation was found only among falls sustained outdoors. That is, the percentage of ED visits due to falls that occurred outdoors was higher in winter than other seasons.

Previously, the two studies that investigated seasonal variation in the United States found conflicting results (Bischoff-Ferrari et al., 2007; Stevens et al., 2007). Bischoff-Ferrari et al. found that between 1986 and 1990, there was a higher incidence of all types of fractures during winter. Stevens et al. studied fall-related ED visits using 2001–2002 NEISS data. Though they found that the rates of fall-related ED visits were higher in winter, no statistical difference was found between the seasons. From 2001 to 2015, the age-adjusted rate of fall-related ED visits in NEISS-AIP increased by 37% (CDC, 2003). This relative increase in the number of fall-related ED visits could have powered the current study sufficiently to identify a statistical difference between the percent of fall-related ED visits in winter and other seasons.

The percentage of ED visits made due to a fall injury that was sustained outdoors, was higher in winter compared with other seasons. This may be due to adverse weather conditions. In the current study, about one-third of outdoor fall-related ED visits in winter were due to slips or trips on ice, in snow, or rain. No seasonal variation in ED visits from indoor falls was observed suggesting that prolonged periods of time spent indoors during winter may not be a contributing factor for seasonal variation. This is in line with a 2013 Swedish study that examined seasonal variation by location of falls. The study found that fractures sustained indoors tended to peak in February but the findings were not statistically significant (Leavy et al., 2013).

Among ED visits made due to an outdoor fall, seasonal variation was found in the 65–74 year age group with the percentage of such ED visits being higher in winter compared with other seasons. The percentage of outdoor falls related to a weather event like a slip or a trip on ice, in snow, or rain was also higher in this age group compared with older age groups. While we could not measure the amount of time an older adult spent indoors or outdoors, it might be that 65–74 year olds are more likely to go outside during adverse

weather. The percentage of older adults in the labor force increased drastically in the past few years (Centers for Disease Control and Prevention, 2015). The largest increase occurred in the younger age groups (Kromer & Howard, 2013). Twice as many 65–74 year olds were in the labor force in 2016, compared with those in the 75–84 year age group (Roberts, Ogunwole, Blakeslee, & Rabe, 2018). In addition, this subgroup of older adults tends to be more physically active than adults 75 and older (Keadle, McKinnon, Graubard, & Troiano, 2016). Therefore, they may have more exposure to weather-related risk factors whether it may be getting to and from work, shoveling a driveway, going out to purchase groceries, or other activities.

Similar to the 65–74 year age group, males had a higher percent of ED visits from outdoor falls in winter than in other seasons. Such a difference was not found among females. Additionally, a higher percentage of males sustained a fall-related injury during a weather-related event compared with females. In relation to this finding, studies have found mixed results. Some studies found that older males were more likely to fall and have fractures in winter and on snowy and icy surfaces than older females (Bischoff-Ferrari et al., 2007; Duckham et al., 2013), others found no differences between the sexes (Leavy et al., 2013; Morency, Voyer, Burrows, & Goudreau, 2012), and one found females had a higher percentage of fall-related fractures on ice or snow when compared with males (Al-Azzani & Mak, 2016).

Our study has at least six limitations. First, state or region variables were not available in the NEISS-AIP data so we could not examine seasonal variation by geographical weather patterns. Second, fall location was unknown for over a third (38.5%) of the sample. There was no seasonal variation observed in this subset of ED visits. No seasonal variation was found in any of the three age-groups or among the sexes (Appendix B). Third, only narratives that mentioned a weather-related event in the notes were considered weather related. Therefore, weather-related injuries may have been underestimated. Fourth, these data do not include all falls but only those that warranted ED care. Fifth, the amount of time an older adult spent indoors or outdoors could not be measured. Sixth, this analysis being descriptive in nature, used non-overlapping confidence intervals to describe differences. A formal hypothesis test could have identified additional differences that would have been overlooked by comparing confidence intervals.

## 5. Conclusion

In 2015, over 3 million older adults went to the ED for a fall injury. This study found that there was seasonal variation with 26.2% of these ED visits occurring in winter. This may be in part due to adverse weather in winter such as ice, snow and rain that could increase fall risk. Interventions to reduce the risk posed by weather such as removing snow, treating sidewalks with salt or sand (Al-Azzani & Mak, 2016; Morency et al., 2012; Stansbury et al., 1995), promoting work closures or delayed openings during bad weather (Gevitz et al., 2017), utilizing weather alerts as a public health tool (Mondor et al., 2015), and encouraging the use of gait stabilizing footwear (McKiernan, 2005) have been proposed by others. Except for the use of gait stabilizing footwear (McKiernan, 2005), these interventions have not been evaluated for fall prevention.

## 6. Practical Implications

While it is important to consider potential risk factors such as adverse weather, fall risk increases as the number of risk factors increase (Ambrose, Paul, & Hausdorff, 2013). Therefore, it is important to identify all modifiable fall risk factors such as impaired vision, medications that increase fall risk, and gait and balance difficulties. CDC's STEADI (Stopping Elderly Accidents, Deaths, and Injuries) initiative ([www.cdc.gov/steady](http://www.cdc.gov/steady)) recommends a physician-directed approach to identify older adult patients who may be at increased risk for a fall. Acknowledging the potentially increased risk of an outdoor fall during winter, for some segments of the older adult population, may help providers address and intervene to reduce their patients' unique fall risk. These results may encourage community-based organizations serving older adults to increase fall prevention messaging during winter.

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## Appendix A.: Seasonal variation by location of fall narrative codebook

Residential status (3 options)

- Residential facility (non-community), includes:
  - nursing home, skilled nursing facility, extended care facility, long term care, assisted living, hospice, rehab, detox, or Alzheimer's unit, convalescent home, group home, then these are coded as nursing home. If it doesn't mention this assume it didn't happen in a nursing home
- Community, includes:
  - Doesn't specifically mention nursing home.
  - Adult day care or senior center
  - If visiting a family member in a nursing home then community
- Prison, includes:
  - Jail, prison or corrections facility

Location (3 options)

- Indoor, includes:
  - Rooms in a house or apartment: bedroom, kitchen, living room, bathroom



- Stairs: any mention of stairs or steps where evident they are indoors, otherwise outdoors or unknown. If stairs have carpet then indoors, if stairs have baseboards then indoors.
- Public places: restaurant, store, hotel, jail, church, work, lobby/lounge, stairs in public place, escalator, elevator (had to be apparent that these occurred inside) If “at public place”, for example fell “at restaurant” assume inside.
- Recreation area: bowling alley, gym, sports courts where evident they were inside
- Unspecified: Any mention of cabinets, sink, lamp, AC, heater, cleaning house, Hoyer lift, or fall out of a window assume indoor. Falls to the floor or carpet is indoor, except concrete/cement floor
- Outdoor, includes:
  - Yard, porch, garage, balcony, ramp, and stairs if evident they are outside.
  - Recreation area: parks, lakes, camping, rivers, outside sports courts, RV/camper, tent, national park, tree stand, beach, and farm.
  - Public places: sidewalk, parking lot, curb, outdoor work place, bus, subway, metal grate, stairs outside a public place, street, and driveway.
  - Any mention of falls to grass, gravel, rocks, ditch, shed, mud, ice, snow, rain, falling off ladder or a platform that is greater than 7 feet, uneven concrete.
- Unknown: Can’t tell if location is inside or outside, or if stairs are inside or outside. When a fall happens on a concrete/cement floor, ground. While coming in or out of a place (and can’t determine whether the fall happened inside or outside), playing pickle ball, at train station/-catching train. When fall is associated with electric cord (unless more context provided), window sills, and ramps in public places.

### **Weather:**

If any mention of ice, snow, rain, hail, heat or any other term related to weather, then mention the term.

### **Appendix B**

Characteristics of community dwelling older adults who sought emergency department care for a fall by season and unknown location – National Electronic Injury Surveillance System – All Injury Program, 2015.



Characteristics	Total <i>n</i>	Spring (March-May)		Summer (June-August)		Autumn (September-November)		Winter (December-February)	
		%	95%CI	%	95%CI	%	95%CI	%	95%CI
Total	13,720	24.8	(23.9–25.7)	25.4	(24.5–26.4)	24.7	(23.8–25.6)	25.1	(24.1–26.0)
Gender									
Male	4,897	24.9	(23.3–26.5)	25.2	(23.7–26.8)	24.3	(22.7–25.8)	25.6	(24.0–27.2)
Female	8,823	24.7	(23.6–25.9)	25.5	(24.4–26.7)	24.9	(23.8–26.1)	24.8	(23.7–26.0)
Age-group									
65–74	5,256	24.3	(22.8–25.8)	26.7	(25.1–28.2)	24.0	(22.6–25.5)	25.0	(23.5–26.6)
75–84	4,583	25.6	(24.0–27.2)	24.1	(22.5–25.6)	25.3	(23.7–26.9)	25.1	(23.5–26.7)
85+	3,881	24.5	(22.8–26.2)	25.4	(23.7–27.2)	24.9	(23.1–26.6)	25.2	(23.4–26.9)

*n* - Unweighted sample size.

% - Weighted percent.

95%CI - 95% Confidence interval.

## Biographies

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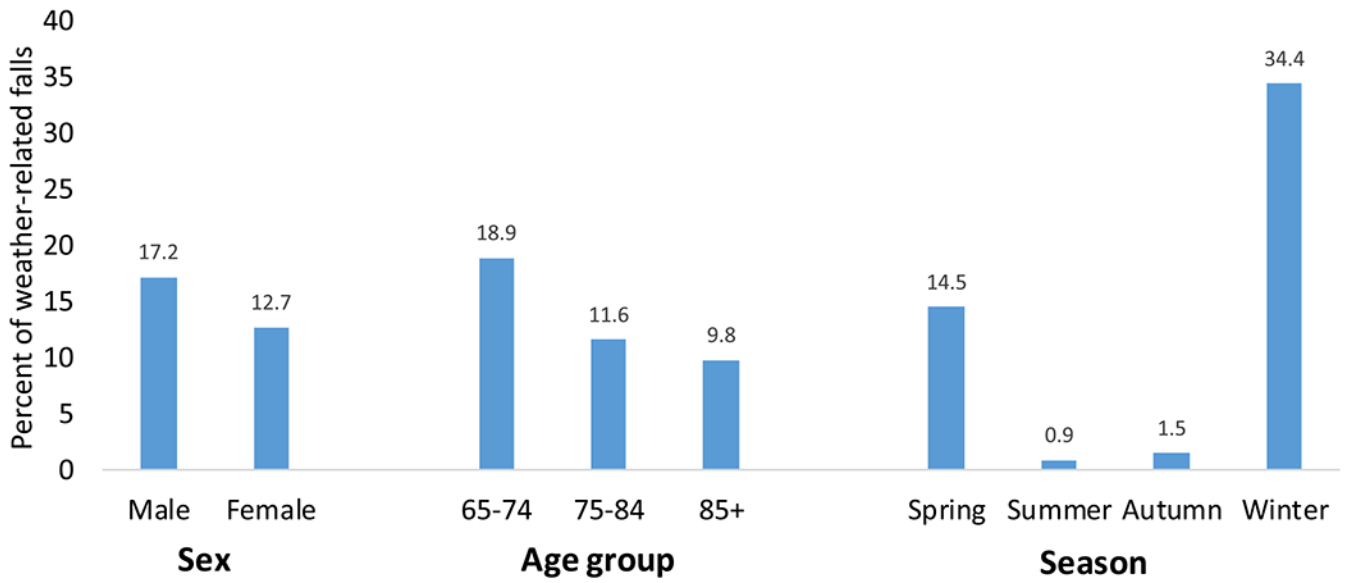
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**Fig. 1.** Characteristics of community dwelling older adults who sought emergency department care for weather-related falls - National Electronic Injury Surveillance System – All Injury Program, 2015.

Sample for this figure includes only those older adults who made an ED visit due to a fall sustained outdoors ( $n = 6,485$ ).

Percent for each sub-group was calculated with the denominator as the number of older adults who made an ED visit due to a fall sustained outdoors in that sub-group. E.g., Out of all the fall injuries sustained by males in the outdoors, 17.2% were weather-related and 82.8% (not shown) were not weather-related.

**Table 1**

Characteristics of older adults with a fall-related emergency department visit by season and place of residence – National Electronic Injury Surveillance System – All Injury Program, 2015.

Characteristic	Spring (March-May)		Summer (June-August)		Autumn (September-November)		Winter (December-February)			
	%	95%CI	%	95%CI	%	95%CI	%	95%CI		
<b>Total</b>	38,645		24.8	(24.3, 25.4)	24.7	(24.1, 25.2)	24.3	(23.7, 24.8)	26.2	(25.7, 26.8)
<b>Community Dwelling Older Adults</b>										
<b>Total</b>	34,336		24.8	(24.3, 25.4)	24.8	(24.3, 25.4)	24.2	(23.6, 24.7)	26.2	(25.6, 26.8)
<b>Sex</b>										
Male	12,083		24.8	(23.9, 25.8)	24.3	(23.3, 25.2)	23.6	(22.6, 24.5)	27.3	(26.3, 28.4)
Female	22,253		24.8	(24.1, 25.6)	25.0	(24.3, 25.8)	24.5	(23.8, 25.2)	25.6	(24.9, 26.4)
<b>Age Group</b>										
65-74	12,591		25.0	(24.0, 25.9)	25.1	(24.1, 26.1)	23.4	(22.5, 24.4)	26.5	(25.5, 27.5)
75-84	11,716		25.6	(24.6, 26.6)	24.0	(23.0, 24.9)	24.3	(23.3, 25.3)	26.2	(25.1, 27.2)
85+	10,029		23.8	(22.8, 24.8)	25.3	(24.2, 26.4)	24.9	(23.8, 26.0)	26.0	(24.9, 27.1)
<b>Non-Community Dwelling Older Adults</b>										
<b>Total</b>	4309		24.7	(23.0, 26.3)	24.0	(22.4, 25.7)	25.1	(23.4, 26.8)	26.2	(24.5, 27.9)
<b>Sex</b>										
Male	1271		25.2	(22.1, 28.3)	26.9	(23.7, 30.1)	20.5	(17.6, 23.4)	27.5	(24.2, 30.7)
Female	3038		24.5	(22.5, 26.4)	22.9	(21.0, 24.8)	26.9	(24.9, 28.9)	25.7	(23.7, 27.7)
<b>Age Group</b>										
65-74	530		25.6	(20.7, 30.4)	20.7	(16.3, 25.1)	24.3	(19.6, 29.0)	29.5	(24.2, 34.7)
75-84	1184		25.9	(22.7, 29.1)	24.4	(21.2, 27.6)	25.9	(22.7, 29.2)	23.8	(20.5, 27.0)
85+	2595		24.0	(21.9, 26.1)	24.4	(22.3, 26.5)	24.9	(22.8, 27.0)	26.7	(24.5, 28.9)

n - Unweighted sample size.

% - Weighted percent.

95%CI - 95% Confidence interval.

**Table 2**

Characteristics of community dwelling older adults who sought emergency department care for a fall by season and indoor/outdoor location – National Electronic Injury Surveillance System – All Injury Program, 2015.

Characteristic	Total n	Spring (March-May)		Summer (June-August)		Autumn (September-November)		Winter (December-February)	
		%	95%CI	%	95%CI	%	95%CI	%	95%CI
<b>Fall Injury Occurred Indoors</b>									
Total	14,131	24.4	(23.6, 25.3)	25.4	(24.5, 26.3)	24.6	(23.7, 25.5)	25.6	(24.7, 26.5)
Sex									
Male	4392	23.8	(22.2, 25.4)	25.5	(23.8, 27.1)	24.1	(22.5, 25.7)	26.7	(25.0, 28.3)
Female	9739	24.7	(23.7, 25.8)	25.3	(24.2, 26.4)	24.8	(23.7, 25.9)	25.1	(24.0, 26.2)
Age group									
65-74	4334	25.0	(23.4, 26.6)	25.7	(24.1, 27.3)	24.5	(22.9, 26.2)	24.8	(23.1, 26.4)
75-84	4880	25.3	(23.8, 26.8)	24.6	(23.1, 26.1)	24.3	(22.8, 25.8)	25.8	(24.2, 27.3)
85+	4917	23.0	(21.6, 24.5)	25.9	(24.3, 27.4)	24.9	(23.3, 26.4)	26.2	(24.6, 27.8)
<b>Fall Injury Occurred Outdoors</b>									
Total	6485	25.8	(24.5, 27.1)	22.2	(20.9, 23.4)	22.2	(20.9, 23.5)	29.8	(28.4, 31.2)
Sex									
Male	2794	26.4	(24.3, 28.4)	20.7	(18.8, 22.6)	21.5	(19.6, 23.4)	31.4	(29.2, 33.6)
Female	3691	25.4	(23.6, 27.1)	23.2	(21.5, 24.9)	22.7	(21.0, 24.4)	28.7	(26.9, 30.5)
Age group									
65-74	3001	26.1	(24.1, 28.1)	21.7	(19.9, 23.6)	20.8	(18.9, 22.6)	31.4	(29.3, 33.5)
75-84	2253	26.1	(23.8, 28.3)	22.4	(20.3, 24.6)	22.5	(20.3, 24.6)	29.0	(26.7, 31.3)
85+	1231	24.5	(21.6, 27.5)	22.7	(19.8, 25.6)	25.2	(22.1, 28.2)	27.6	(24.5, 30.7)

n - Unweighted sample size.

% - Weighted percent.

95%CI - 95% Confidence interval.