

# Falls from furniture.

On average, each day more than 60 people visit an emergency department for injuries due to falling from furniture. Seniors and children represent the majority of cases.

## Results

During the 2005/06 fiscal year, there were a total of 21,126 emergency department visits and 2,510 hospitalizations for injuries due to falling from furniture. For this analysis, falls from beds, chairs, as well as other standard household furniture were included. (See Methods Section for Data Sources). These numbers translate into provincial rates of 180.7 per 100,000 population for emergency department visits and 17.6 per 100,000 for hospitalizations (Table 1).

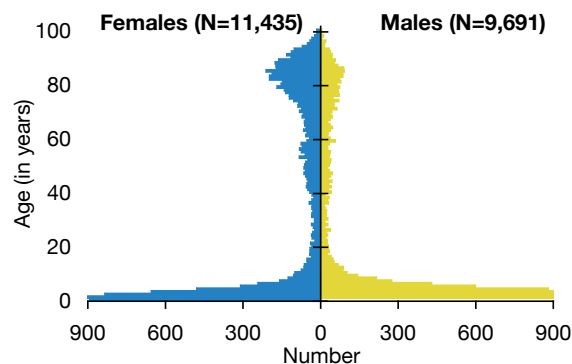
For emergency department visits, peaks in the numbers of falls from furniture were observed across the lifespan. Specifically, the numbers were highest among males and females under 5 years of age, with a slightly higher representation among males in this age group compared to females (Figure 1). Children under 10 years of age also had high numbers of emergency department visits for falls from furniture compared to their older counterparts, with males once again representing a greater proportion of these incidents. In contrast, for hospitalizations, injuries peaked among females 75 years of age and older.

A wide range of injuries result from falling from furniture. The leading three injuries occurred to the head, upper limb, and lower limb respectively for emergency department visits and to the lower limb, upper limb, and head respectively for hospitalizations (Figure 2). More specifically, the most common type of injury to each of these bodily regions were fracture of the femur, fracture of the shoulder and upper arm, and intracranial injury.

Injury rates varied by region, with the highest rate of both emergency department visits and hospitalizations for injuries due to falling from furniture, reported in the Northern region of Ontario (Table 1). In all regions, the highest rate of emergency department visits were seen among children under five years of age. For all regions, the highest rate of hospitalizations were seen among seniors over 80 years of age (Table 2).

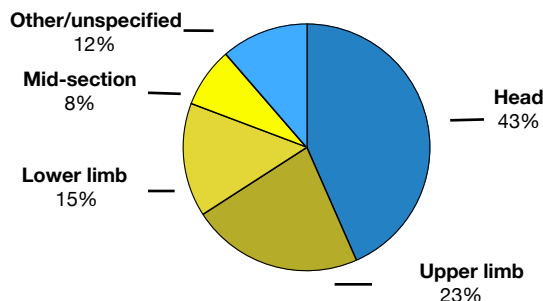
Over 80% of individuals who visited an emergency department for injuries due to falling from furniture were discharged to their place of residence. Approximately 10% were admitted into a reporting facility as an inpatient directly from ambulatory care. For hospitalized cases, approximately 17% were transferred to another

**FIGURE 1. Emergency department visits for falls from furniture by age and sex (Ontario, 2005/2006)**

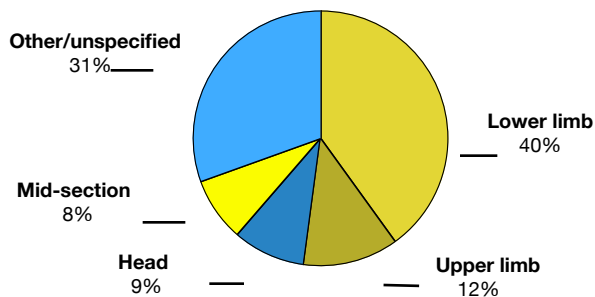


**FIGURE 2. Nature of injuries due to falls from furniture (Most responsible diagnosis, Ontario, 2005/2006)**

### Emergency Department Visits



### Hospitalizations



**TABLE 1. Regional comparison of falls from furniture (Ontario, 2005/06)**

	South West	Central South	Central West	Central East	Toronto	East	North	Ontario
<b>Emergency Department Visits</b>								
Number	3,126	2,208	3,041	3,518	3,869	3,047	1,981	21,126
Rate per 100,000 <sup>a</sup>	208.1	191.8	139.4	174.5	157.8	196.5	246.0	180.7
Average Age	32	35	27	30	32	35	35	32
% Male	44	45	47	46	47	44	45	46
<b>Hospitalizations</b>								
Number	437	251	339	375	418	373	296	2,510
Rate per 100,000 <sup>a</sup>	21.5	16.1	15.5	16.6	13.3	18.5	27.5	17.6
Average Age	71	69	60	69	66	70	70	68
% Male	35	37	38	36	42	35	37	37

a. Age-standardized rate per 100,000 population. Note: Region of residence unknown/outside of Ontario for 336 emergency department visits and 21 hospitalizations.



## Ontario Injury Compass

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compass@oninjuryresources.ca

TABLE 2. Regional comparison of falls from furniture, by age group (Ontario, 2005/06)

	South West	Central South	Central West	Central East	Toronto	East	North	Ontario
<b>Emergency Department Visits- Rate per 100,000<sup>a</sup></b>								
<5 years	1,480.1	1,322.6	1,008.4	1,200.1	1,185.0	1,366.6	1,587.7	1,272.1
5-14 years	202.7	190.9	126.5	183.9	143.8	176.5	241.8	174.4
15-24 years	51.0	54.1	27.1	41.2	23.5	38.2	64.6	39.8
25-49 years	50.8	42.0	24.3	35.3	29.5	38.4	67.5	37.1
50-64 years	71.1	82.7	44.6	65.7	64.5	88.7	112.0	71.7
65-79 years	204.8	204.9	140.1	163.5	179.9	225.3	266.6	193.5
80+ years	921.0	823.2	801.3	912.4	665.9	992.8	1,050.7	858.1
<b>Hospitalizations- Rate per 100,000<sup>a</sup></b>								
<5 years	41.9	44.5	43.5	29.1	36.9	36.7	49.8	40.0
5-14 years	4.3	1.9	4.8	3.6	5.4	5.3	3.6	4.4
15-24 years	1.4	1.8	0.3	0.7	0.6	0.9	0.8	0.8
25-49 years	2.8	2.3	1.2	1.7	1.3	1.8	3.0	1.8
50-64 years	11.0	8.1	8.7	6.8	8.2	9.5	23.6	9.8
65-79 years	65.4	48.0	41.2	55.2	34.7	60.3	94.6	53.9
80+ years	402.2	263.4	265.3	306.4	227.0	330.4	428.3	305.4

a. Age-specific rate per 100,000 population. Note: Region of residence unknown/outside of Ontario for 336 emergency department visits and 21 hospitalizations.

facility providing inpatient hospital care, which includes acute, sub acute, and rehabilitation care. An additional 26% were transferred to a long term care facility. Approximately 30% were discharged home and another 14% were discharged home with support services. Fewer than 1% of individuals died after arrival in the emergency department and close to 10% died after hospital admission. The 2,510 hospitalized cases accounted for more than 24,778 days in acute care hospitals with an average length of stay of 9.87 days.

## Discussion

This Compass highlights patterns of injuries due to falls from furniture for emergency department visits and hospitalizations. Falls have been identified as a leading cause of unintentional injury in past Ontario Injury Compass issues (e.g., Injuries among Children, Youth, and Seniors) and in an Ontario report of injuries among seniors.<sup>1</sup> Refer to past issues of the Ontario Injury Compass for other fall-related topics. Past issues are available at: [www.OnInjuryResources.ca](http://www.OnInjuryResources.ca).

All categories of falls are common among Ontarians of all ages and can happen anywhere (e.g., in the home, at work, or outdoors). As well, there are likely thousands of other falls, including those from furniture, that go unreported or are cases where people seek medical attention at after-hour clinics or from their family physician.

As illustrated in this Compass, children and seniors are at a high risk of suffering injuries from falls from furniture. Seniors, who are injured from falling, have a higher rate of being admitted to hospital than any other age group, illustrating the severity of injuries experienced by this age group. In addition, almost 10% die after admission, which warrants attention in terms of implementing preventive strategies to reduce the incidence of these types of falls. With respect to children, Safe Kids Canada is currently hosting its annual 'Safe Kids' Week'. This year, it is devoted to the topic of home product safety. Tips, including those from this organization are outlined in the 'Managing the risk' section, with more detail available on the Safe Kids Canada website.<sup>2</sup>

## References

1. Ontario Injury Prevention Resource Centre. Injuries among Seniors in Ontario: A Descriptive Analysis of Emergency Department and Hospitalization Data. Toronto: Ontario Injury Prevention Resource Centre, 2007.
2. Safe Kids Canada. Safe Kids Week 2009. Home Product Safety. <http://www.safekidscanada.ca/safekidsCanada/>
3. Health Canada. Consumer Product Safety. 2009. <http://www.hc-sc.gc.ca/cps-spc/index-eng.php>

## Managing the risk

Public Health can work with physicians, parents, OTs, PTs, and other community groups, to ensure the following messages are communicated effectively:

- ❖ Be certain that furniture, especially cribs/child beds do not have associated recalls. Keep in mind that just because it is available on the market does not mean it is safe.<sup>2</sup> See Health Canada website for recall information.<sup>3</sup>
- ❖ Supervise young children at all times.
- ❖ Do not allow a child on the top bunk before age six.<sup>2</sup>
- ❖ When child proofing your home:
  - Keep in mind that kids don't always use products the way they were meant to be used, including household furniture.<sup>2</sup> Look at your house from the eyes of a child.<sup>2</sup> For example, a child may see a bookcase and think of it as a ladder to climb on. See: <http://www.safekidscanada.ca/SKCFForPartners/custom/HomeProductBrochure.pdf>
  - Contact relevant organizations in your community to get tips. Some will send a representative to your home to help you childproof it.

- ❖ Ensure all furniture is sturdy and firmly anchored to the ground or wall.
- ❖ Seniors taking blood pressure medication should always sit on the bed for 10 seconds after waking up, and before standing up, to allow the blood to reach the head.<sup>4</sup>
- ❖ Use alcohol and medications wisely. Some medications including "over the counter" ones can induce drowsiness or dizziness. Check with pharmacist or doctor.
- ❖ Have regular health check-ups. For example, changes in vision and hearing could lead to a fall.

### For Further Information

Safe Kids Canada  
[www.safekidscanada.ca](http://www.safekidscanada.ca)  
Health Canada  
<http://www.hc-sc.gc.ca/cps-spc/index-eng.php>  
Ontario Neurotrauma Foundation  
[www.onf.org](http://www.onf.org)  
ThinkFirst Foundation of Canada  
[www.thinkfirst.ca](http://www.thinkfirst.ca)  
SMARTRISK  
[www.smartrisk.ca](http://www.smartrisk.ca)  
Ontario Injury Prevention Resource Centre  
[www.OnInjuryResources.ca](http://www.OnInjuryResources.ca)

## Methods

Emergency department data were obtained from the National Ambulatory Care Reporting System and acute care hospitalization data were obtained from the Discharge Abstract Database at the Canadian Institute for Health Information for the 2005/06 fiscal year. ICD-10 coding (W06-W08) was used to isolate all emergency department visits and hospitalizations for falls from furniture. Note that some persons were seen in an emergency department and then admitted to hospital; however, persons can be admitted to hospital without visiting an emergency department. Regions were defined according to place of residence using the Ontario Ministry of Health Region Codes. Deaths occurring outside of the hospital setting were not included in this analysis.