



## Treadmill-related injury

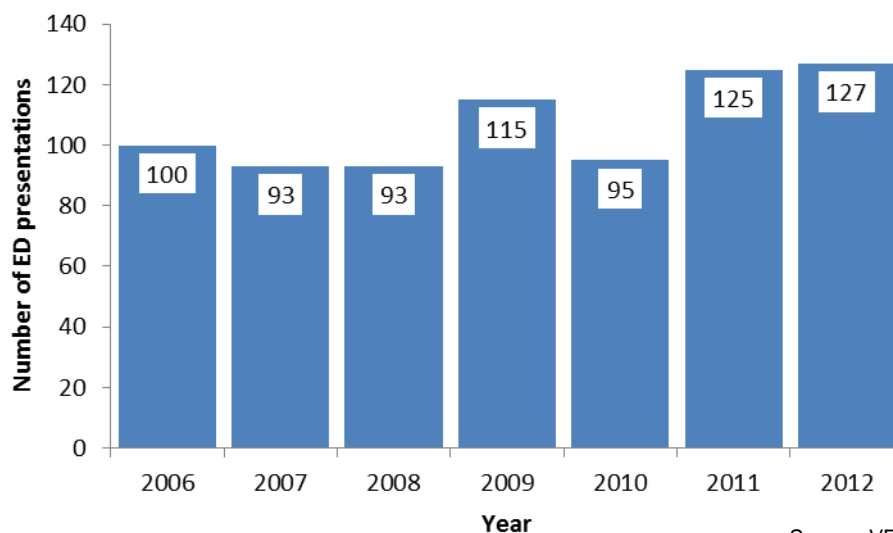
**Data supplied by the Victorian Injury Surveillance Unit, Monash Injury Research Institute.**

Data were selected from the Victorian Emergency Minimum Dataset (VEMD) which is collected from the 39 Victorian hospitals with a 24-hour emergency service. Data quality varies across the hospitals so the counts reported here are underestimates.

**Data source:** Victorian Emergency Minimum Dataset (VEMD) January 2006 – December 2012 (7 years)  
**Search Strategy:** Injury associated with treadmills were identified by searching the VEMD for cases using the text term "treadmill" and spelling variations, contained in the 250 character 'Description of Injury Event' field. Selected cases were checked and any irrelevant cases were excluded from the dataset prior to analysis.

**Frequency:** In the seven years between January 1, 2006 and December 31, 2012 there were 748 treadmill related emergency department (ED) presentations, an average of 107 per year.

**Figure 1 ED presentations for treadmill related injury by year 2006-2012 (n=748)**

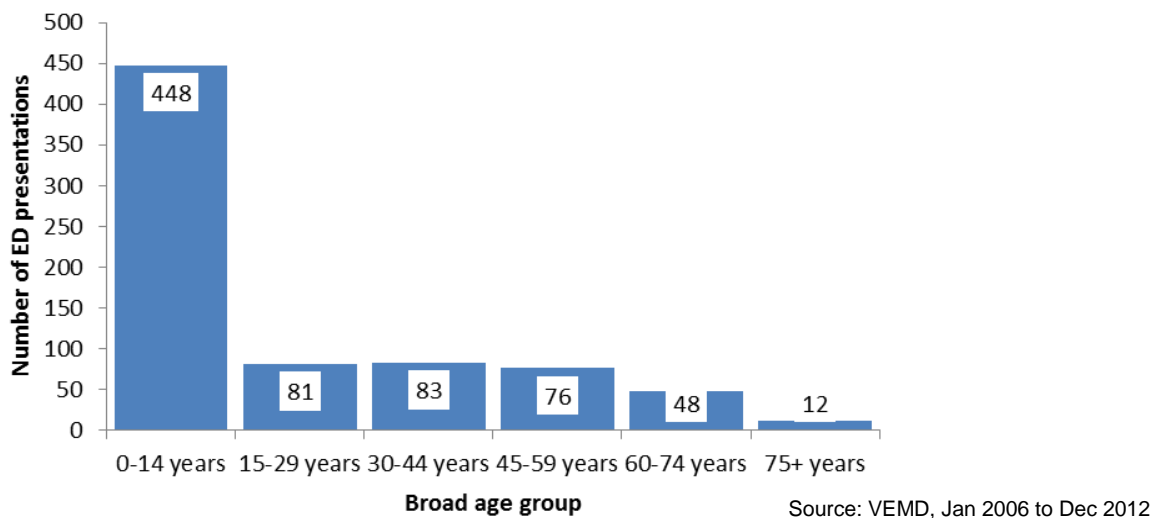


Source: VEMD, Jan 2006 to Dec 2012

**Gender:** Males (52%) presented slightly more frequently than females (48%).

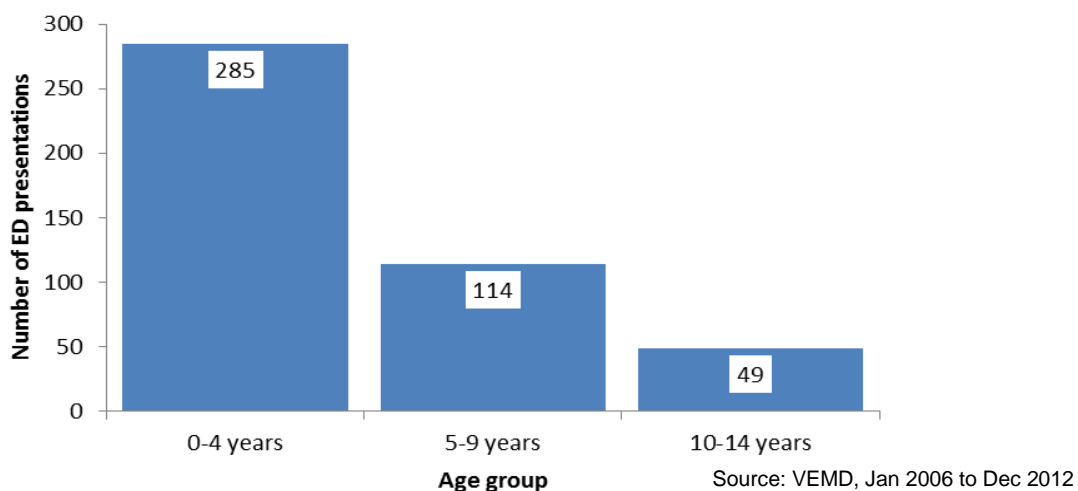
**Age:** 0-14 year olds account for 60.0% of all presentations.

**Figure 2 ED presentations related to treadmills by broad age group (n=748)**



**Age:** 0-4 year olds account for 63.6% of ED presentations among the 0-14 year age group, and 38.1% of all presentations.

**Figure 3 ED presentations related to treadmills by age group (0-14) (n=448)**

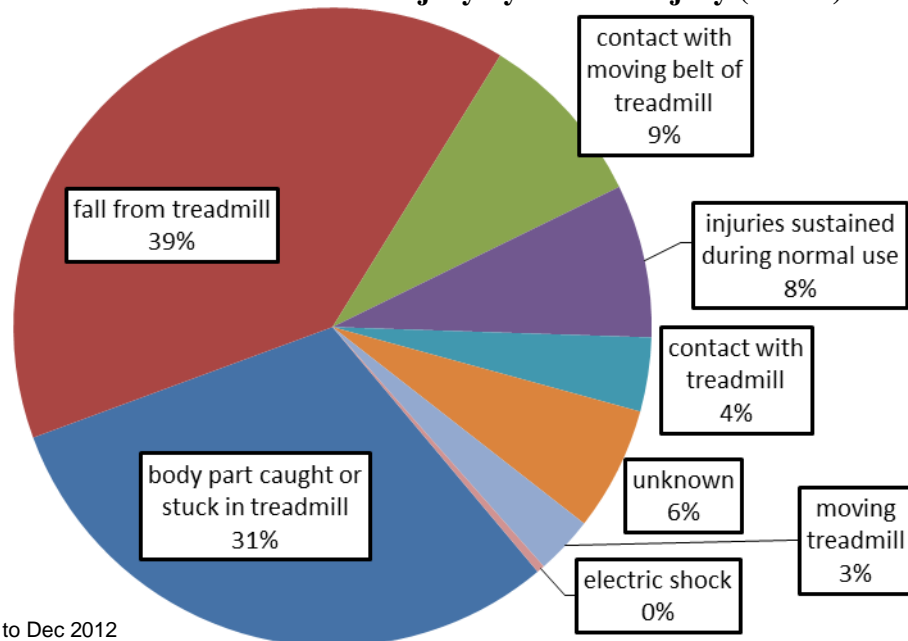


**Sample of case narratives:**

- Skin removed from palm of hand after hand crushed in treadmill.
- Trauma to fingers after placing hand under a running treadmill.
- Fell off treadmill then got fingers caught in belt.
- Was on treadmill when it stopped causing the patient to run into the arm of the treadmill, patient has been sore since the incident.
- Fell from treadmill and teeth went through lip.
- Was playing and touched hand to moving treadmill, now friction burns to fingers.
- Running on treadmill which collapsed causing a jolt through body resulting in back pain.
- Moving treadmill and dropped it on foot.

**Cause:** The most common cause of injury was fall from treadmill (39%).

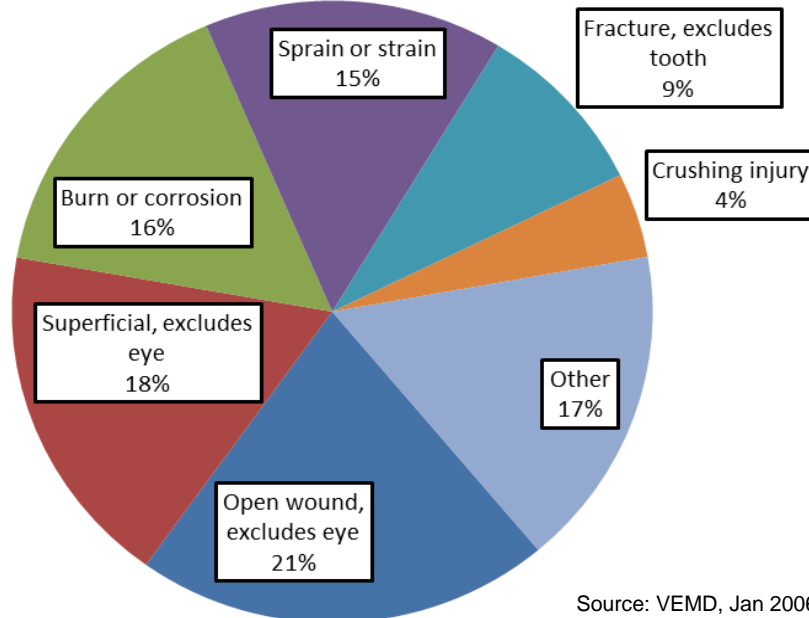
**Figure 3 ED presentations for treadmill related injury by cause of injury (n=748)**



Source: VEMD, Jan 2006 to Dec 2012

**Injury type:** Open wounds (21%) were the most frequent injury type, followed by superficial injury (18%).

**Figure 3 ED presentations for treadmill related injury by type of injury (n=748)**



Source: VEMD, Jan 2006 to Dec 2012

**Body site:** The most commonly injured body site was hands (38%).

**Safety tips:** Children are overrepresented. Do not let children near exercise equipment when in use or when not in use.