

Supplementary table 3. Detailed study results

First author	Principal findings
Castro	Use of high heels at least twice a week was not associated with foot pain, $p > 0.05$
Chaiklieng	Use of high heels was associated with increased risk of Repetitive Strain Injury, $p = 0.04$, OR = 1.60
Chua	Use of high heels was associated with increased risk of foot pain, $p = 0.03$, OR = 1.60
Dawson (2003)	High heels wearing parameters were not associated with OA case status at $p < 0.05$ level
Dawson (2002)	High heels wearing parameters were not associated with hallux valgus and foot pain at $p < 0.05$. Age at onset of wearing 2.54cm high heels marginally associated with hallux valgus at $p = 0.05$
Dufour	After adjustment for other risk factors, past use of high heels characterised as 'sometimes' (OR = 1.24, $p < 0.05$) and 'always' (OR = 1.47, $p < 0.05$) were associated with increased risk of hallux valgus
Gabell	Heel height habit was among the top 2 predisposing factors for falls (9 falls by 5 unique participants), even though no participant was wearing high heels at the time of the fall. Former wearing of high heels was associated with increased occurrence of multiple vs single falls ($p < 0.05$)
Hong	Increased heel height was negatively associated with comfort perception ($F = 56.8$, $p < 0.01$)
Keegan	Narrow heel width and medium/high heel height were associated with increased risk of fracture at all sites. Adjusted ORs for narrow heel width vs medium/wider width = 2.6 for foot fracture, 4.7 for distal forearm, 2.3 for proximal humerus, and 3.4 for pelvis. Adjusted ORs for medium/high heel height vs flat/low/no shoes = 2.0 for foot fracture, 1.7 for distal forearm, 1.5 for proximal humerus, 1.5 for pelvis and 1.7 for shaft of the tibia/fibula
McWilliams	After adjustment for age and BMI, use of high heels was not significantly associated with OA case status ($p > 0.05$)
Menz	22% of women wore heels over 2.5cm outdoors and this was significantly associated with hallux valgus (OR = 2.48, $p < 0.05$). 57% regularly wore heels over 5.08cm in the past but this was not associated with current hallux valgus
Moore	There were 3294 emergency department presentations clinically attributed to first party injury from high heels, which given the sampling weight of the database provides a US-wide whole population estimate of 123,355 presentations over a 10 year period. 4737 presentations (4%) involved children aged 0-9, 17530 (14%) for age 10-19, 41003 (33%) for age 20-29, 24767 (20%) for age 30-39, 16750 (14%) for age 40-49 and 18570 (15%)

for age ≥ 50 . 121718 injuries (98%) were assessed as not severe and 1638 injuries (2%) were assessed as severe. 65123 injuries (53%) were strains or sprains, 23917 (19%) were fractures, 16835 (14%) were contusions or lacerations and 17480 (14%) were classed as other. 48474 injuries (39%) were to the ankle, 40405 (33%) were to the foot, 8563 (7%) were to the knee, 7637 (6%) to the shoulder and upper extremity, 6696 (5%) to the trunk, 6207 (5%) to the head and neck, 4930 (4%) to the leg and 444 (<1%) were classified as other

- Nagata Injury count differed more as a function of age in women than men and lower extremity injuries were more common in women. 74% of injuries to women under the age of 24 involved high or semi-high heels. Women wearing these shoes were particularly prone to catch the heel on the edge of the steps.
- Nguyen Women who reported high heels as their predominant shoe during age 20-64 had 20% increased likelihood of hallux valgus ($p < 0.05$)
- Sherrington Only 2% of participants were wearing high heels at the time of their fall-related hip fracture. No association was found between tripping or slipping and use of high heels
- Tencer Fall risk was positively associated with heel height above 2.50cm (OR = 1.90, $p < 0.05$). Associations between fall risk and both heel width and critical angle were not significant
- Williams 49 emergency department presentations were clinically attributed to being stepped on by a second party high-heeled shoe and 16 attributed to assault with a second party high-heeled shoe. There were 240 presentations relating to first party use of high heels, 98% of which occurred in women and 2% in men. 123 (51%) first party injury presentations concerned the ankle, 63 (26%) concerned the foot including toes, 15 (6%) the knee, 6 (3%) the wrist and 5 (2%) each of the lower leg and face excluding eye. The most common mechanism of injury was a fall from a height of <1 m ($n = 177$, 74%). 2 (1%) involved children aged 0-4, 6 (3%) for age 5-9, 4 (2%) for age 10-14, 24 (10%) for age 15-19, 63 (26%) for age 20-24, 46 (19%) for age 25-29, 19 (8%) for age 30-34, 25 (10%) for age 35-39, 15 (6%) for age 40-44, 16 (7%) for age 45-49, 8 (3%) for age 50-54, 4 (2%) for age 55-59, 3 (1%) for age 60-64, 2 (1%) for age 65-69, 2 (1%) for age 70-74 and 1 (<1%) for age 80 or over. Presentations were more common at the weekend than during the week ($p < 0.001$). The estimated cost of first party injury presentations was \$ 71,579.62
- Yung-Hui Increased heel height was negatively associated with comfort perception ($F = 46.8$, $p < 0.01$)

OA = osteoarthritis, OR= odds ratio