

Table 1: Demographic profile of major trauma among 20–65-year-olds (1 July 2017 to 30 June 2020), n=4,186.*

Variables	Total n (%)	Rate per 100,000 (95% CI)	Survived n (%)	Rate per 100,000 (95% CI)	Died n (%)	Rate per 100,000 (95% CI)
Total events	4,186	49.5 (48.0–51.0)	3,951 (94.4%)	46.7 (45.3–48.2)	235 (5.6%)	2.8 (2.4–3.2)
Sex						
Female	980 (23.4%)	22.8 (21.4–24.3)	922 (94.1%)	21.5 (20.1–22.9)	58 (5.9%)	1.3 (1.0–1.7)
Male	3,206 (76.6%)	77.0 (74.4–79.7)	3,029 (94.5%)	72.7 (70.2–75.4)	177 (5.5%)	4.3 (3.7–4.9)
Ethnicity						
Māori	971 (23.2%)	79.2 (74.4–84.3)	904 (93.1%)	73.7 (69.1–78.7)	68 (7.0%)	5.5 (4.4–7.0)
Non-Māori	3,215 (76.8%)	44.4 (42.9–46.0)	3,047 (94.8%)	42.1 (40.6–43.6)	167 (5.2%)	2.3 (2.0–2.7)
Age group (in years)						
20–24	547 (13.1%)	55.7 (51.3–60.6)	518 (94.7%)	52.8 (48.4–57.5)	31 (5.7%)	3.2 (2.2–4.5)
25–29	536 (12.8%)	50.4 (46.3–54.8)	510 (95.1%)	47.9 (43.9–52.3)	27 (5.0%)	2.5 (1.7–3.7)
30–34	436 (10.4%)	44.8 (40.8–49.2)	411 (94.3%)	42.2 (38.3–46.5)	25 (5.7%)	2.6 (1.7–3.8)
35–39	319 (7.6%)	35.5 (31.8–39.6)	307 (96.2%)	34.1 (30.5–38.2)	12 (3.8%)	1.3 (0.8–2.3)
40–44	386 (9.2%)	43.7 (39.5–48.2)	363 (94.0%)	41.1 (37.0–45.5)	23 (6.0%)	2.6 (1.7–3.9)
45–49	437 (10.4%)	44.8 (40.8–49.2)	404 (92.4%)	41.4 (37.6–45.7)	33 (7.6%)	3.4 (2.4–4.8)
50–54	490 (11.7%)	52.1 (47.7–56.9)	475 (96.9%)	50.5 (46.2–55.3)	15 (3.1%)	1.6 (1.0–2.6)
55–59	543 (13.0%)	58.4 (53.7–63.5)	507 (93.4%)	54.5 (50.0–59.5)	36 (6.6%)	3.9 (2.8–5.4)
60–65	492 (11.8%)	60.5 (55.4–66.1)	456 (92.7%)	56.1 (51.1–61.4)	36 (7.3%)	4.4 (3.2–6.1)

CI = confidence interval.

* Rates are annualised across the 3 years of data, using the New Zealand Census population counts for the 2018 population of adults aged 20–65 years.

Table 2: Characteristics and outcomes of major trauma among 20–65-year-olds (1 July 2017 to 30 June 2020), n=4,186.

Variables	Total n (%)	Rate per 100,000 (95% CI)	Survived n (%)	Rate per 100,000 (95% CI)	Died n (%)	Rate per 100,000 (95% CI)
Mechanism of injury						
Transport incident	2,591 (61.9%)	30.6 (29.5–31.8)	2,468 (95.3%)	29.2 (28.0–30.3)	123 (4.7%)	1.5 (1.2–1.7)
Car occupant	1,032 (24.7%)	12.1 (11.4–12.9)	973 (94.3%)	11.5 (10.8–12.2)	59 (5.7%)	0.7 (0.5–0.9)
Motorcyclist	645 (15.4%)	7.6 (7.1–8.2)	613 (95.0%)	7.2 (6.7–7.8)	32 (5.0%)	0.4 (0.3–0.5)
Bicyclist	359 (8.6%)	4.2 (3.8–4.7)	351 (97.8%)	4.2 (3.7–4.6)	8 (2.2%)	0.09 (0.04–0.2)
Pedestrian	147 (3.5%)	1.7 (1.5–2.0)	135 (91.8%)	1.6 (1.3–1.9)	12 (8.2%)	0.14 (0.07–0.2)
Fall	762 (18.2%)	9.0 (8.4–9.7)	713 (93.5%)	8.4 (7.8–9.1)	49 (6.5%)	0.6 (0.4–0.8)
Fall from building	133 (3.2%)	1.6 (1.3–1.9)	125 (94.0%)	1.5 (1.2–1.8)	8 (6.0%)	0.1 (0.05–0.2)
Fall via slipping	102 (2.4%)	1.2 (1.1–1.5)	94 (92.2%)	1.1 (0.9–1.4)	8 (7.8%)	0.1 (0.05–0.2)
Fall from ladder	92 (2.2%)	1.1 (0.9–1.3)	87 (94.6%)	1.1 (0.8–1.3)	5 (5.4%)	0.07 (0.03–0.2)
Fall involving a pedestrian conveyance.*	65 (1.6%)	0.8 (0.6–1.0)	62 (95.4%)	0.7 (0.6–0.9)	3 (4.6%)	0.03 (0.01–0.1)
Assault	423 (10.1%)	5.0 (4.5–5.5)	399 (94.3%)	4.7 (4.3–5.2)	24 (5.7%)	0.3 (0.2–0.4)
Self-harm	107 (2.6%)	1.3 (1.0–1.5)	94 (87.9%)	1.1 (0.9–1.4)	13 (12.1%)	0.2 (0.1–0.3)
Other**	303 (7.2%)	3.6 (3.2–4.0)	277 (91.4%)	3.3 (2.9–3.7)	26 (8.6%)	0.3 (0.2–0.5)
Place of injury occurrence						
Street and highway	2,254 (53.9%)	26.6 (25.6–27.8)	2,126 (94.3%)	25.1 (24.1–26.2)	128 (5.7%)	1.5 (1.3–1.8)
Home	624 (14.9%)	7.4 (6.8–8.0)	579 (92.8%)	6.8 (6.3–7.4)	45 (7.2%)	0.5 (0.4–0.7)
Sports/athletics area	277 (6.6%)	3.3 (2.9–3.7)	270 (97.5%)	3.2 (2.8–3.6)	7 (2.5%)	0.1 (0.04–0.2)

Table 2 (continued): Characteristics and outcomes of major trauma among 20–65-year-olds (1 July 2017 to 30 June 2020), n=4,186.

Variables	Total n (%)	Rate per 100,000 (95% CI)	Survived n (%)	Rate per 100,000 (95% CI)	Died n (%)	Rate per 100,000 (95% CI)
Beach/forest/country	242 (5.8%)	2.9 (2.5–3.2)	233 (96.3%)	2.8 (2.4–3.1)	9 (3.7%)	0.1 (0.1–0.2)
Farm	231 (5.5%)	2.7 (2.4–3.1)	226 (97.8%)	2.7 (2.3–3.0)	5 (2.2%)	0.1 (0.02–0.1)
Industrial/construction	102 (2.4%)	1.2 (1.0–1.5)	90 (88.2%)	1.0 (0.9–1.3)	12 (11.8%)	0.1 (0.1–0.2)
Trade/service area	90 (2.2%)	1.0 (0.9–1.3)	87 (96.7%)	1.0 (0.8–1.3)	3 (3.3%)	0.03 (0.01–0.1)
Other***	366 (8.7%)	4.3 (3.9–4.8)	340 (92.9%)	4.0 (3.6–4.5)	26 (7.1%)	0.3 (0.2–0.4)
Dominant injury type						
Blunt force	3,904 (93.26%)	46.1 (44.7–47.6)	3,704 (94.9%)	43.8 (42.4–45.2)	200 (5.1%)	2.4 (2.1–2.7)
Burn	64 (1.53%)	0.8 (0.6–1.0)	48 (75%)	0.6 (0.4–0.8)	16 (25.0%)	0.2 (0.1–0.3)
Penetrating	218 (5.21%)	2.6 (2.3–2.9)	199 (91.3%)	2.3 (2.0–2.6)	19 (8.7%)	0.2 (0.1–0.4)
Intent						
Unintentional	3,617 (86.4%)	42.7 (41.4–44.2)	3,426 (94.7%)	40.5 (39.2–41.9)	191 (5.3%)	2.3 (2.0–2.6)
Intentional	540 (12.9%)	6.4 (5.9–6.9)	503 (93.1%)	5.8 (5.4–6.4)	37 (6.9%)	0.43 (0.3–0.6)

CI = confidence interval.

*Pedestrian conveyances including and not limited to roller skates, skateboards, scooters, skis and ice skates.

**Other = animate mechanical forces (e.g., being bitten by a horse), inanimate mechanical forces (e.g., being crushed between objects, being struck by a falling object), injury by fire, smoke, forces of nature, electrocutions, injuries of undetermined intent, accidents while engaged in sport, accidental poisoning and accidents unspecified.

***Other = areas of water in a natural environment (e.g., lakes, rivers), residential institutions, schools and other educational institutions, public administration buildings and unspecified places of occurrence.

Table 3: Demographic profile by Injury Severity Score among 20–65-year-olds (1 July 2017 to 30 June 2020), n=4,186.

	Low (ISS 13–24) n (%)	Medium (ISS 25–48) n (%)	High (ISS >49) n (%)
Total	3,158 (75.4%)	960 (22.9%)	68 (1.6%)
Died	42 (17.9%)	156 (66.4%)	37 (15.7%)
Sex			
Female	724 (73.9%)	242 (24.7%)	14 (1.4%)
Male	2,434 (75.9%)	718 (22.4%)	54 (1.7%)
Ethnicity			
Māori	698 (71.0%)	255 (26.3%)	18 (2.8%)
Non-Māori	2,460 (76.5%)	705 (21.9%)	50 (1.6%)
Age group (in years)			
20–24	400 (73.1%)	138 (25.2%)	9 (1.6%)
25–29	385 (71.8%)	146 (27.2%)	5 (0.9%)
30–34	315 (72.2%)	111 (25.5%)	10 (2.3%)
35–39	236 (74.0%)	79 (24.8%)	4 (1.3%)
40–44	286 (74.1%)	89 (23.1%)	11 (2.8%)
45–49	332 (76.0%)	97 (22.2%)	8 (1.8%)
50–54	397 (81.0%)	90 (18.4%)	3 (0.6%)
55–59	416 (76.6%)	115 (21.2%)	12 (2.2%)
60–64	391 (79.5%)	95 (19.3%)	6 (1.2%)
Length of stay			
<1 day	99 (57.2%)	51 (29.5%)	23 (13.3%)
1–3 days	508 (83.8%)	94 (15.5%)	4 (0.7%)
4–7 days	755 (83.9%)	142 (15.8%)	3 (0.3%)
>7 days	1,478 (69.5%)	612 (28.8%)	37 (1.7%)
Mechanism of injury			
Transport incident	1,989 (76.8%)	559 (21.6%)	43 (1.6%)
Fall	569 (74.7%)	184 (24.1%)	9 (1.1%)
Assault	319 (75.4%)	101 (23.9%)	3 (0.7%)
Self-harm	65 (60.7%)	35 (32.7%)	7 (6.6%)

Table 3 (continued): Demographic profile by Injury Severity Score among 20–65-year-olds (1 July 2017 to 30 June 2020), n=4,186.

	Low (ISS 13–24) n (%)	Medium (ISS 25–48) n (%)	High (ISS >49) n (%)
Total	3,158 (75.4%)	960 (22.9%)	68 (1.6%)
Other*	216 (71.3%)	81 (26.7%)	6 (2.0%)
Dominant injury type			
Blunt force	2,983 (76.4%)	864 (22.1%)	57 (1.5%)
Burn	25 (39.1%)	31 (48.4%)	8 (12.5%)
Penetrating	150 (68.8%)	65 (29.8%)	3 (1.4%)

*Other = animate mechanical forces (e.g., being bitten by a horse), inanimate mechanical forces (e.g., being crushed between objects, being struck by a falling object), injury by fire, smoke, forces of nature, electrocutions, injuries of undetermined intent, accidents while engaged in sport, accidental poisoning and accidents unspecified.