

Emergency Department Injury and Violence Data across Lancashire

January 2019 to December 2022

May 2023

Jennifer Germain, Jane Webster, Ann Lincoln and Mark Whitfield



Public Health Institute, Faculty of Health, Liverpool John Moores University,
3rd Floor Exchange Station, Tithebarn Street, Liverpool, L2 2QP.

www.ljmu.ac.uk/phi

TIIG@ljmu.ac.uk

0151 231 4500

twitter.com/TIIG_PHI

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Public Health Institute (PHI), Liverpool John Moores University (LJMU), *World Health Organization Collaborating Centre for Violence Prevention*, 3rd Floor Exchange Station, Tithebarn Street, Liverpool, L2 2QP

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For further information contact Jennifer Germain: j.s.germain@ljmu.ac.uk

About this report

The Trauma and Injury Intelligence Group (TIIG) is an injury and violence surveillance system covering areas across England and Wales and providing access to reliable health data. TIIG are commissioned by Lancashire County Council and Lancashire Constabulary to provide monthly Emergency Department (ED) data. This report provides an overview of injury and violence ED data across Lancashire between January 2019 and December 2022.

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Trauma and Injury Intelligence Group

The [Trauma and Injury Intelligence Group](#) (TIIG) is an injury and violence surveillance system covering areas across England and Wales. TIIG sits within the Public Health Institute at Liverpool John Moores University and as part of a World Health Organization (WHO) collaborating centre for violence prevention. TIIG provides access to reliable Emergency Department (ED) and ambulance data, on a monthly basis, working to collate, process and analyse data, as well as improve the quality of data collected, for local partners to use in their injury and violence prevention work (Figure 1). This work is underpinned by [Information Sharing to Tackle Violence](#) (ISTV; ISB1594) guidance, which is a small de-identified dataset collected by EDs and shared with local Community Safety Partnerships (CSP), covering all ED attendances resulting from violent incidents.

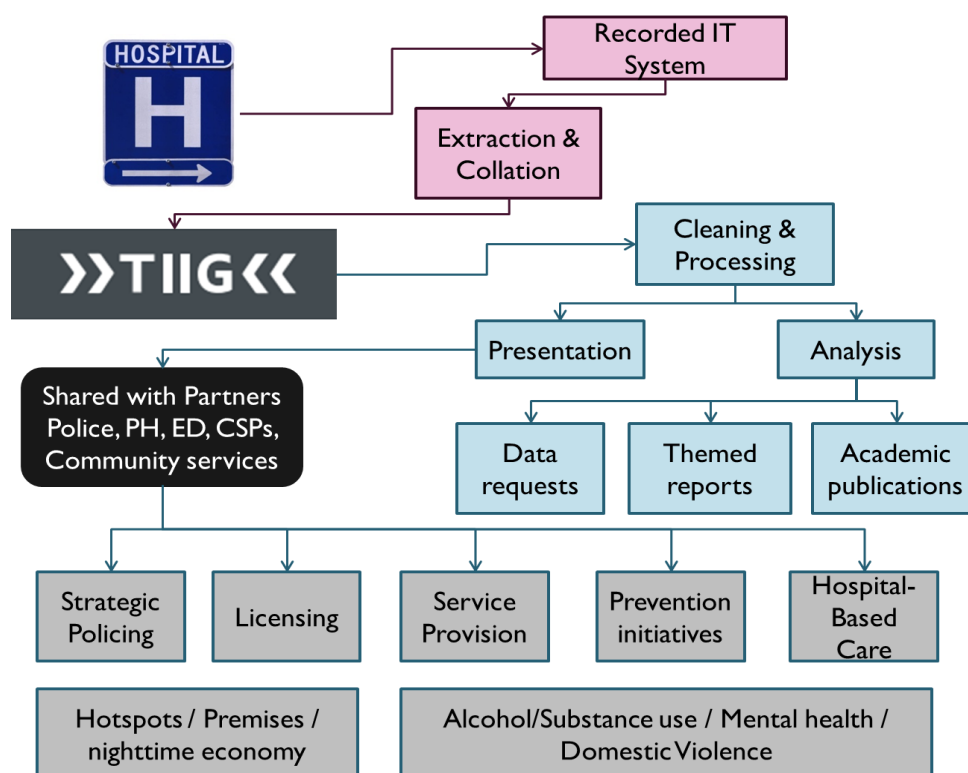


Figure 1. TIIG process overview

TIIG are commissioned by Lancashire County Council and Lancashire Constabulary. Record level non patient identifiable data is shared with the [Multi Agency Data Exchange](#) (MADE) at Lancashire County Council and provided to local partners in aggregate form, alongside ambulance data, police data and other key data sources. This report provides an overview of Lancashire injury and violence ED attendances between January 2019 and December 2022.

Injury and Violence Emergency Department Data (Jan 19-Dec22)

All attendance data

Between January 2019 and December 2022, there were 544,957 injury and violence attendances to Lancashire EDs. Here we are reporting on data for Lancashire-14, which comprises all 12 lower tier local authorities within the Lancashire County Council footprint, as well as Blackpool and Blackburn with Darwen unitary authorities.

Geography of residence

Table 1 shows that across the three-year combined period, the highest proportion of attendances were to Burnley General Hospital (109,209; 20%), followed by Royal Blackburn Urgent Care Centre (84,950; 16%).

Table 1. Lancashire injury and violence attendances by ED and year (January 2019 to December 2022)

ED/Year	2019	2020	2021	2022	Total	%
Burnley General Hospital	30339	27022	25898	25950	109209	20%
Royal Blackburn Urgent Care Centre (UCC)	28052	17900	17751	21247	84950	16%
Royal Preston Urgent Care Centre (UCC)	13694	11698	13062	14494	52948	10%
Blackpool Victoria Hospital	12219	11074	13358	12769	49420	9%
Accrington Victoria Hospital (MIU)	16181	5648	10538	12741	45108	8%
Royal Blackburn Hospital	8573	7283	9060	12500	37416	7%
Ormskirk Urgent Care Centre	11535	10066	8065	7313	36979	7%
Royal Preston Hospital	10744	6883	8059	7945	33631	6%
Chorley & South Ribble Hospital	11826	3691	6984	8704	31205	6%
Royal Lancaster Infirmary	8867	5233	4876	4732	23708	4%
Skelmersdale Walk in Centre	5669	2788	3667	3550	15674	3%
Chorley Urgent Care Centre (UCC)	1277	5559	4163	3357	14356	3%
Ormskirk & District General Hospital	2956	2038	2595	2764	10353	2%
Total	161932	116883	128076	138066	544957	100%

Nine in ten (492,148) of attendees reside in Lancashire with 7% (39,567) residing outside Lancashire and 2% (13,242) unknown. Of Lancashire residents, (Table 2) the highest number of attendances came from those living in Burnley (64,611; 13%) and Blackburn with Darwen (62,333; 13%). Of those attendees from outside Lancashire, the highest proportion came from Sefton (12,181).

Table 2. Lancashire resident injury and violence attendances by Local Authority (January 2019 to December 2022)

Local Authority	N	%
Burnley	64611	13%
Blackburn with Darwen	62333	13%
Hyndburn	53316	11%
Pendle	47193	10%
Preston	44397	9%
West Lancashire	43031	9%
Chorley	37026	8%
South Ribble	34134	7%
Blackpool	25449	5%
Ribble Valley	19843	4%
Rosendale	17972	4%
Lancaster	16744	3%
Wyre	15020	3%
Fylde	11079	2%
Total	492148	100%

For Lancashire residents (Table 3), the highest number of attendees came from Chorley 008A, (2,389; <1%), followed by Hyndburn 006H (1,958 <1%) and Burnley 014B (1,754; <1%).

Table 3. Lancashire resident injury and violence attendances top 10 LSOAs (January 2019 to December 2022)

LSOA	N	%
Chorley 008A	2389	0.4%
Hyndburn 006H	1958	0.4%
Burnley 014B	1754	0.3%
Pendle 011C	1638	0.3%
Hyndburn 006B	1631	0.3%
Pendle 011A	1630	0.3%
Pendle 013A	1613	0.3%
Burnley 002D	1568	0.3%
Hyndburn 006F	1559	0.3%
Burnley 010C	1555	0.3%

Demographics

Of all attendances (N=544,957), 52% were male (285,526) and 48% were female (259,298); men were slightly overrepresented when compared to Lancashire [population estimates](#) (male; 49%, female; 51%). The remaining attendees did not have a sex recorded (133). The highest proportion of attendances were from those aged 75 years and over (70,329; 13%), followed by those aged between 10 and 14 years (46,350; 9%) and those aged between 0 and 4 years (41,808; 8%); which is higher for all when compared to population estimates, (75 and over; 9%, 10 to 14; 6% and 0 to 4 years; 5%). Where both age and gender were collected (544,806), figure 2 shows that the highest number of attendances overall came from women aged 75 years and over (27,913; 8%). It should be noted however that figure 2 represents all injury types and both gender and age profiles differ by injury group type, please see figures 7 and 8 for a more detailed breakdown.

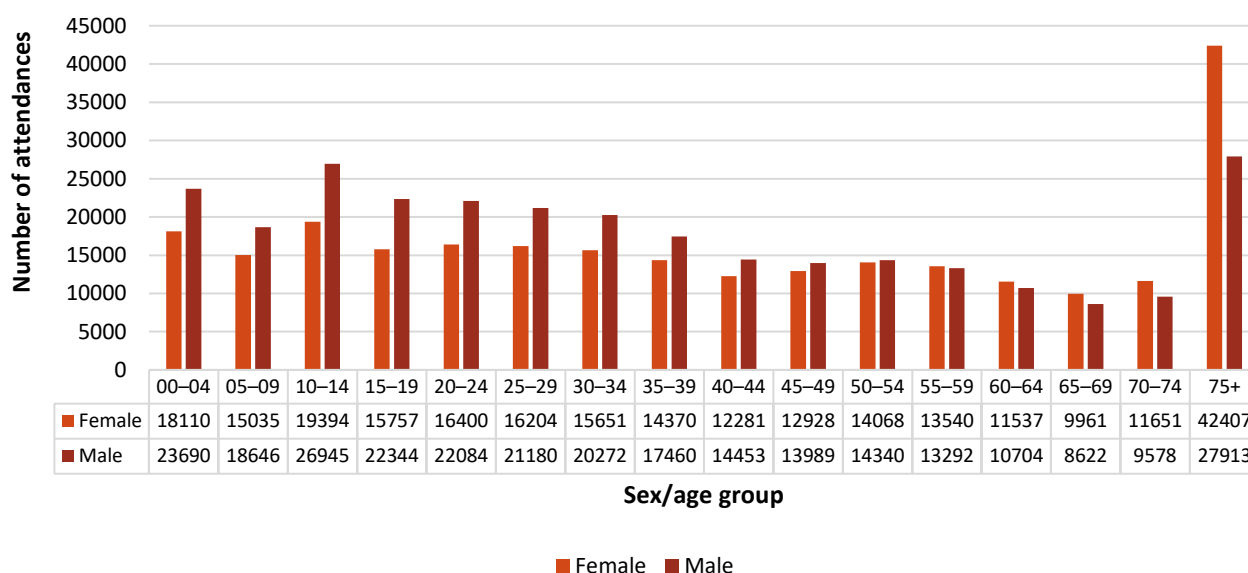


Figure 2. Lancashire injury and violence attendances by sex and age group (January 2019 to December 2022)

Over half of attendees had an ethnicity recorded (300,393; 55%). Of those attendees, 85% (256,399) were White British, 5% were Pakistani (16,234), 3% were of other White ethnicity (9,722) and 2% were Indian (5,104; Table 4). These figures are similar to population estimates for White British (87%), Pakistani (6%), other White ethnicity (35) and Indian (3%).

Table 4. Lancashire injury and violence attendances by ethnicity (January 2019 to December 2022)

Ethnicity	N	%
White British	256399	85%
Pakistani	16234	5%
Other White	9722	3%
Indian	5104	2%
Other Asian	3512	1%
Other	2657	1%
Other Mixed	1217	0%
White Irish	1090	0%
White and Asian	970	0%
Bangladeshi	868	0%
White and Black Caribbean	687	0%
African	522	0%
Other Black	465	0%
Caribbean	360	0%
White and Black African	307	0%
Chinese	279	0%
Total	300393	100%

Temporal

Attendances were highest in 2019 (161,932), decreased by 28% to 116,883 in 2020 (Figure 3), and then increased by 10% in 2021 (128,076) and by 8% in 2022 (138,066). Attendances were lowest in April 2020 (5,364) during the first Covid-19 lockdown, and were highest in May 2019 (15,842).

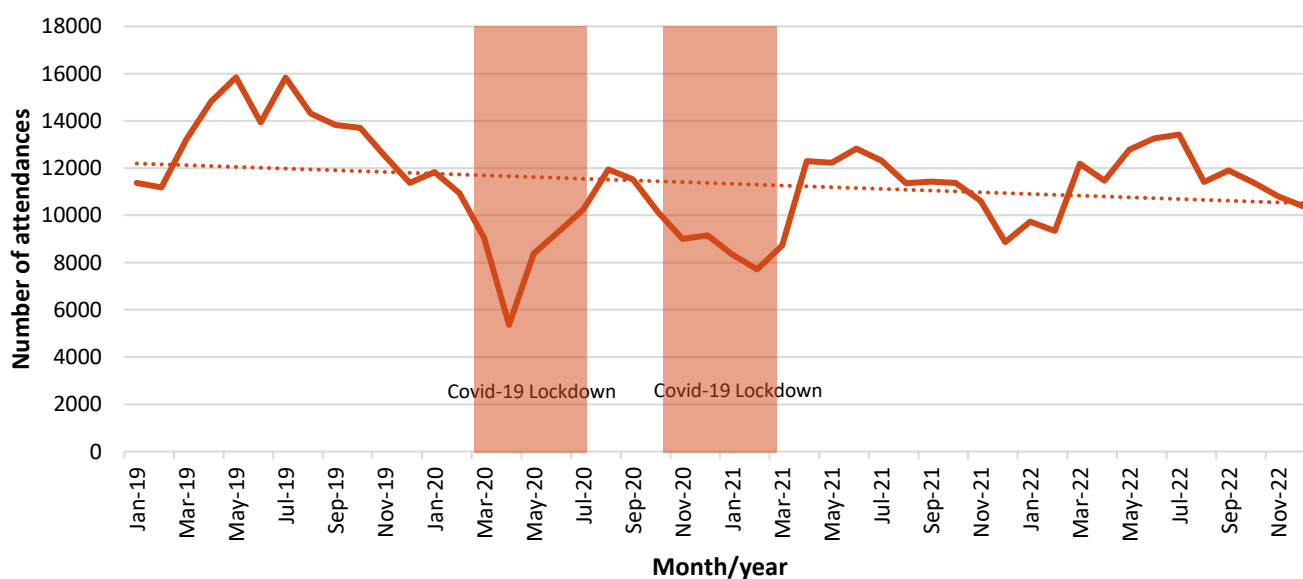


Figure 3. Lancashire injury and violence attendances by year and month of attendance (January 2019 to December 2022)

Figure 4 shows that attendances were highest on Mondays (86,123; 16%) and Tuesdays (79,672; 15%), with peak times between 10am and 11:59am (79,711; 15%) and between 12pm and 13:59pm (77,307; 14%). The peak overall time was on Monday between 10am and 11:59am (13,508; 2%).

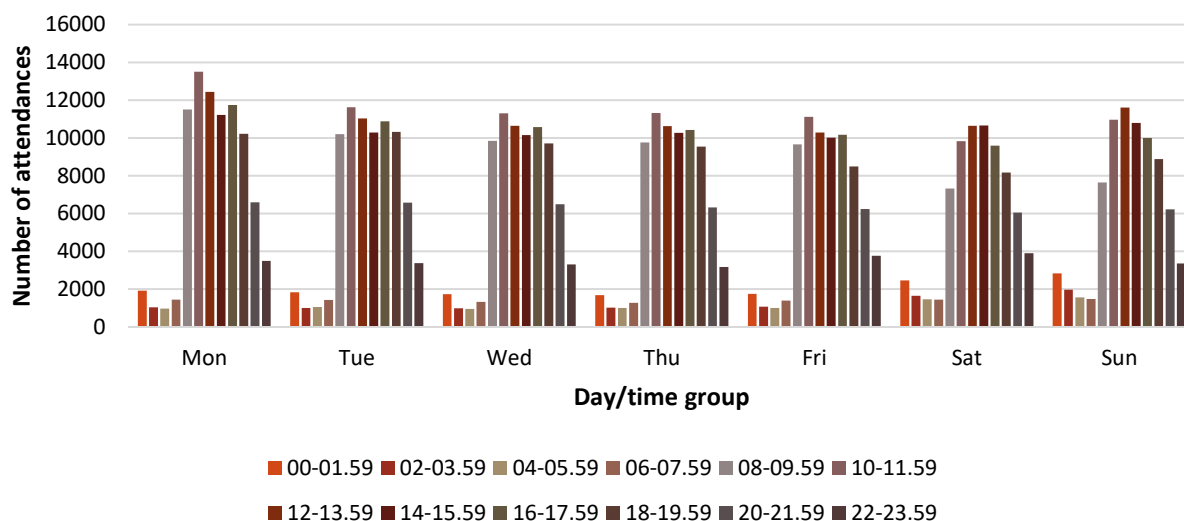


Figure 4. Lancashire injury and violence attendances by day and time of attendance (January 2019 to December 2022)

Where collected (478,484), the highest proportion of incidents took place on a Saturday (72,273; 15%), followed by Sunday (69,783; 15%). Where incident time¹ was recorded (204,022), the highest proportion of incidents were reported as occurring between 2pm and 3:59pm (31,796; 16%). Where both incident date and time were recorded (Figure 5), (204,021), the peak overall time was on Saturday between 2pm and 3:59pm (5,179; 3%).

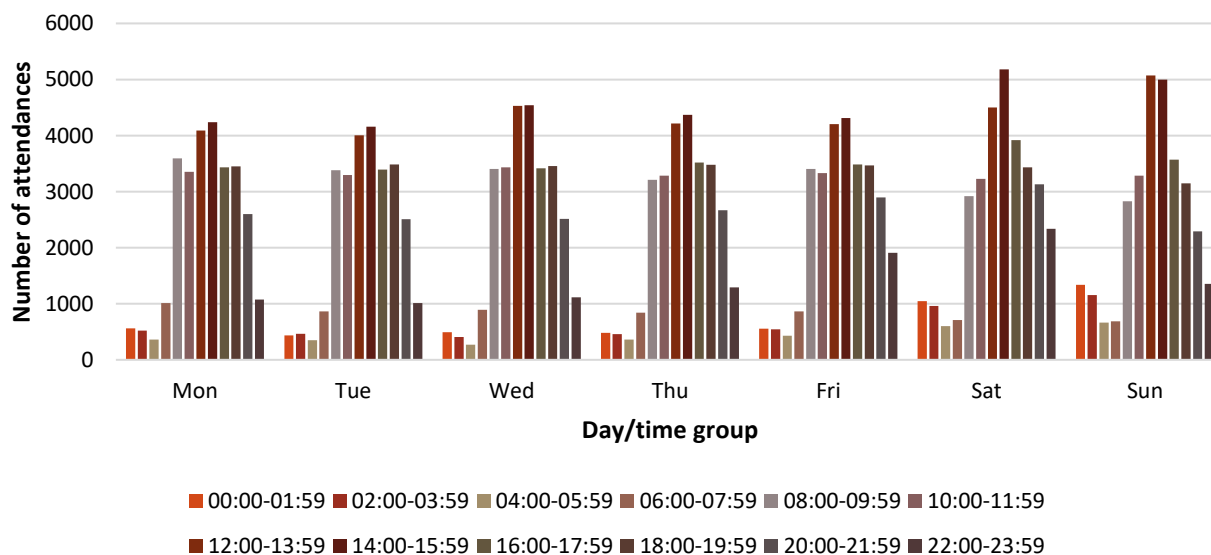


Figure 5. Lancashire injury and violence attendances by day and time of incident (January 2019 to December 2022)

¹ Excluding times recorded as 00:00:00 as this looks to be an automatic default option for some EDs

Over a third of injuries took place in the home (200,990; 37%) with 18% (96,680) occurring in a public place and 7% (39,648) in work (Figure 6).

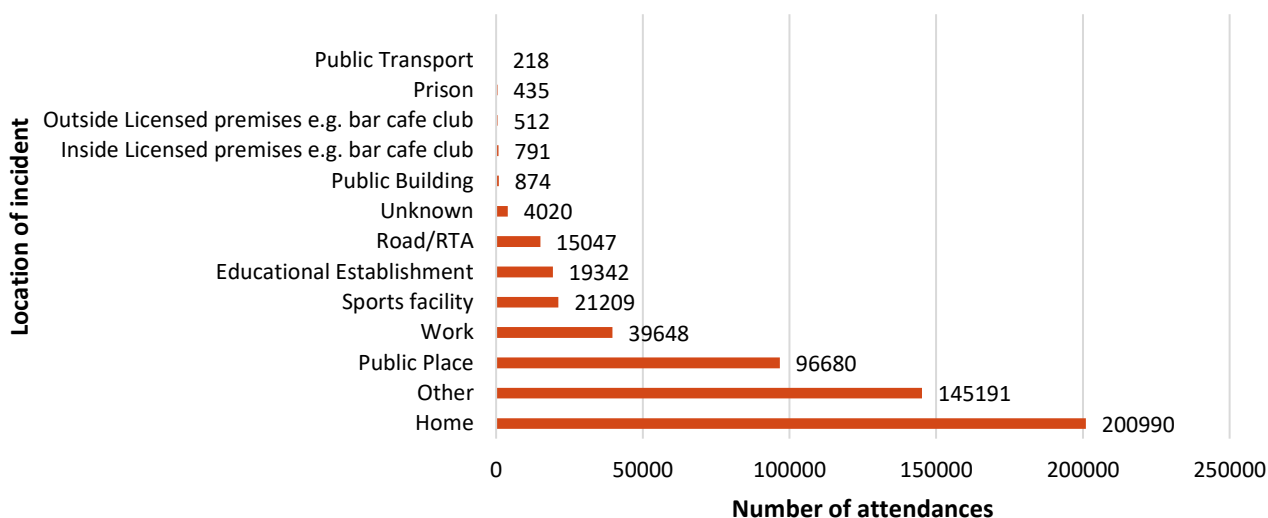


Figure 6. Lancashire injury and violence attendances by location of incident (January 2019 to December 2022)

Patient group

The highest proportion of injuries were recorded as being an ‘other accident’ (254,418; 47%), followed by falls (100,225; 18%). Road traffic accidents comprised 6% of injuries (30,356) with assaults making up 3% of injuries (16,893) and deliberate self-harm 1% (6,138; Table 5).

Table 5. Lancashire injury and violence attendances by injury group (January 2019 to December 2022)

Injury group	N	%
Other accident	254418	47%
Fall	100225	18%
Body/Limb Injury	37400	7%
Head Injury	36725	7%
Sports injury	33518	6%
Road traffic accident	30356	6%
Assault	16893	3%
Wound/Cut	10967	2%
Bite/Sting	7962	1%
Deliberate self-harm	6138	1%
Burn/Scald	6137	1%
Overdose/Poisoning	3760	1%
Firework injury	329	0%
Drowning/Immersion	97	0%
Electrical	32	0%
Total	544957	100%

Figure 7 shows that where sex was collected (544,824), men were more likely than women to attend for sports injuries (men; 75%, women; 25%), assaults (men; 70%, women; 30%). Conversely women were more likely than men to attend for deliberate self-harm (women; 61%, men; 39%), falls and overdose/poisoning (both women; 57%; men; 43%).

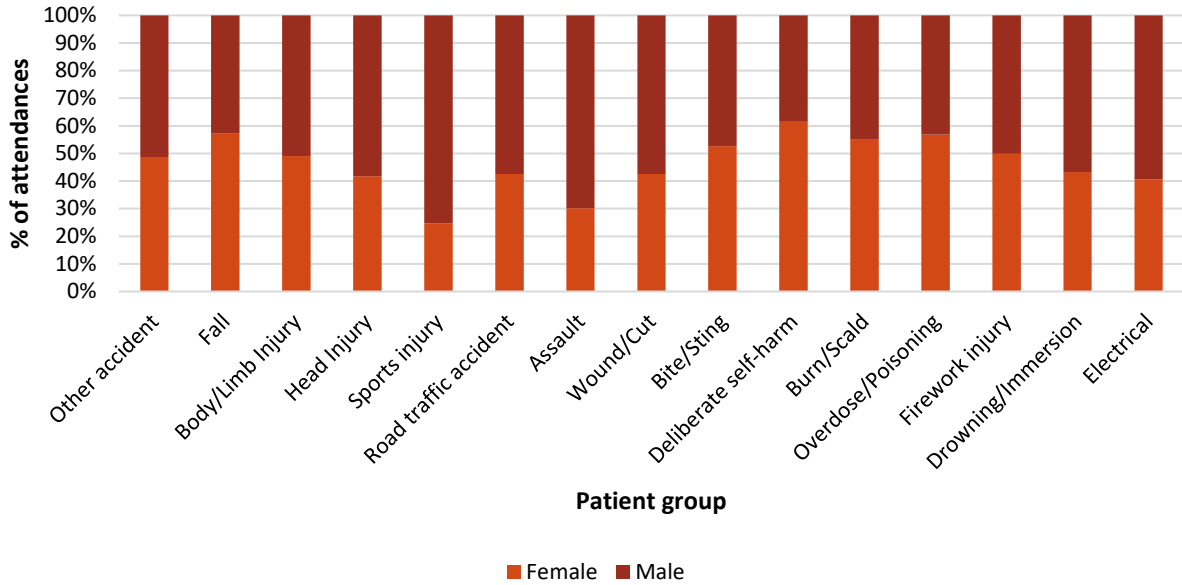


Figure 7. Lancashire injury and violence attendances by sex and patient group (January 2019 to December 2022)

Those aged 60 years and over were more likely than any other age group to attend following a fall (52%). Close to half (49%) of self-harm presentations were made by those aged between 15 and 29 years, and 46% of assault presentations were by those aged between 30 and 59 years, followed by 42% for those aged 15 to 29 years (Figure 8).

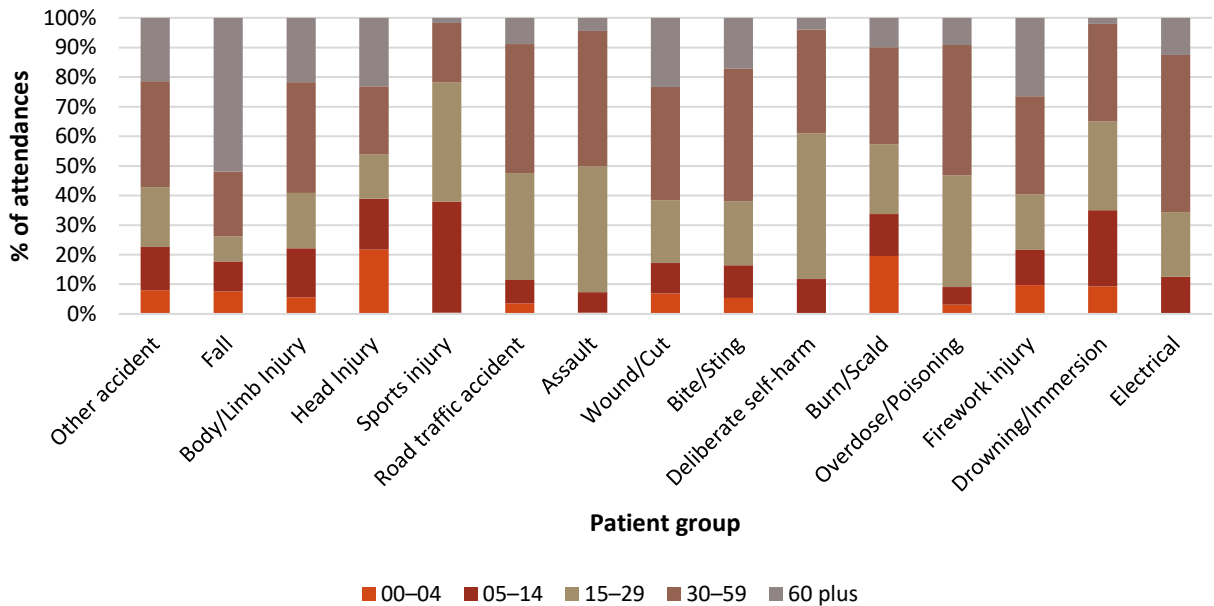


Figure 8. Lancashire injury and violence attendances by age group and patient group (January 2019 to December 2022)

Figure 9 focuses on the main patient injury groups of falls, road traffic accidents, assaults and deliberate self-harm. There were pronounced decreases in falls, road traffic accidents and assaults during the Covid-19 lockdown periods, with deliberate self-harm remaining more consistent. Overall, between 2019 and 2022, road traffic accidents decreased by 28%, and assaults by 25%. Falls increased by 12%. However, between 2021 and 2022, assaults increased by 7%, falls by 4% and road traffic accidents by .3%. Deliberate self-harm decreased by 6%.

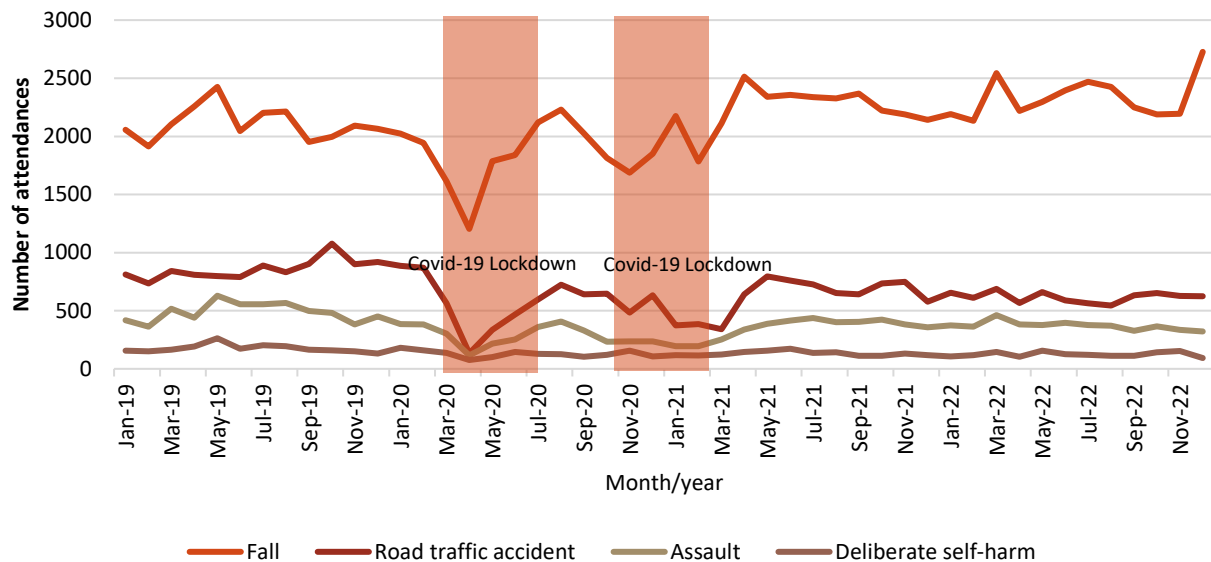


Figure 9. Lancashire injury and violence attendances by month and year (January 2019 to December 2022)

Hospital visit

Two thirds of patients arrived at hospital via their own transport (363,972; 67%) with 15% (82,173) arriving by ambulance (Figure 10). Where collected (136,121), 69% of patients self-referred into hospital.

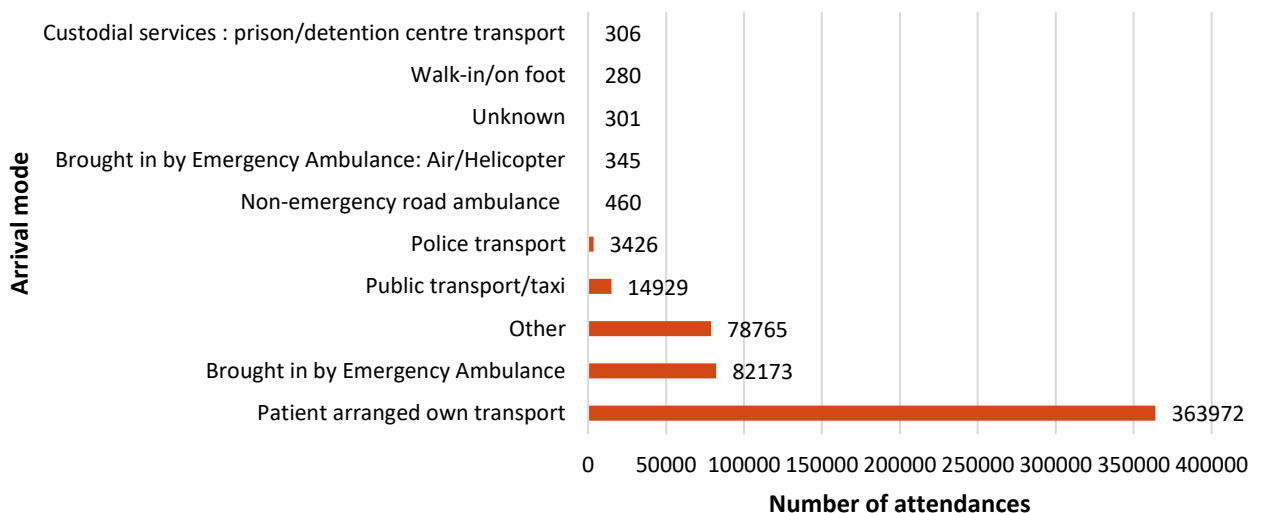


Figure 10. Lancashire injury and violence attendances by arrival mode (January 2019 to December 2022)

Where collected (512,904), 65% (331,633) of attendances were discharged from hospital (Figure 11), 19% (96,365) were referred to another health care provider and 8% (42,915) were admitted. Just under one in ten were coded as 'other' which included those who died in department (156) and those who left without being treated (13,404).

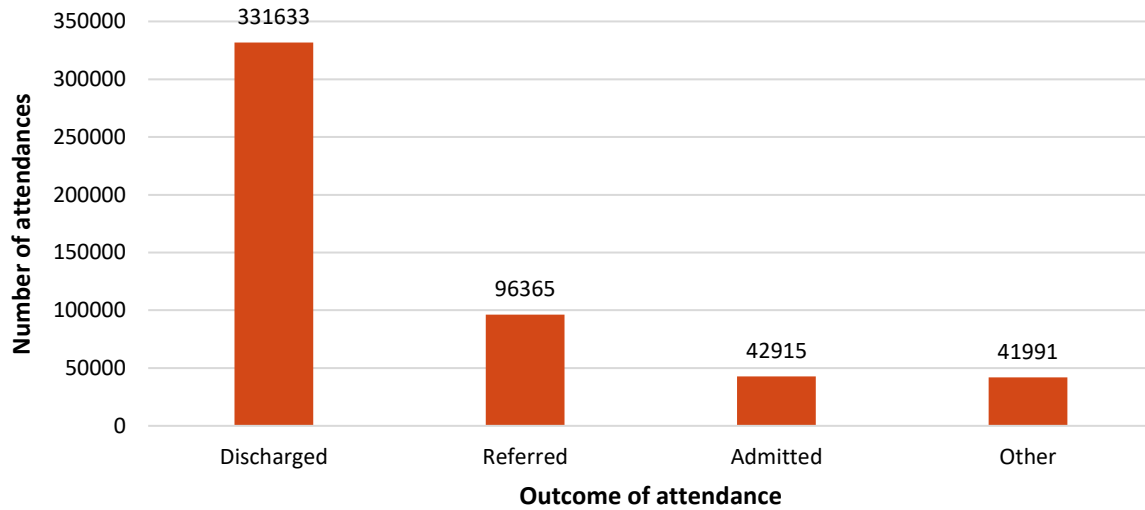


Figure 11. Lancashire injury and violence attendances by outcome of attendance (January 2019 to December 2022)

Overview of Lancashire ED Data Quality

Whilst TIIG report on all injury and violence data collection, most of the data quality work they carry out focus on additional data collected which relate to assault presentation. This data collection is underpinned by [Information Sharing to Tackle Violence](#) (ISTV) Figure 12 shows the averages for each ISTV data collection question for each ED site²³ during 2022. Most EDs are around or above the recommended target of 70%, set by the [Royal College of Emergency Medicine](#). TIIG already carry out data quality work with each data provider, including through the provision of monthly completion rates, regular meetings and feedback on how the data is being used. The next phase of data quality work will focus on improving the detail of the data collected particularly for assault location detail data (i.e., name of street, pub etc), as the more detailed location information that can be collected, the more useful it is to partners who are accessing this data. There is also focused data quality work taking place with specific hospital trusts whose data quality has been impacted due to IT system changes and staffing issues.

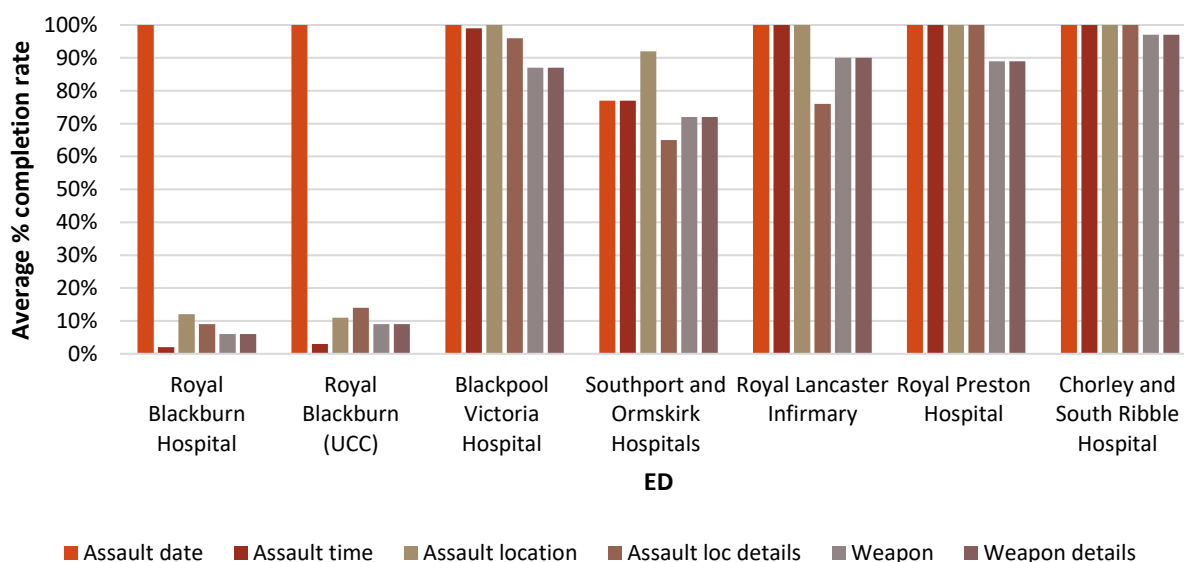


Figure 12. Lancashire ISTV data collection by ED (January 2022 to December 2022)

² Split by ED and Urgent Care Centre (UCC) for Blackburn

³ Southport and Ormskirk combined due to low numbers at Ormskirk ED