

# **Violence in England and Wales 2006 An Accident and Emergency Perspective**

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## **Executive Summary**

- A structured sample of thirty-three Type 1 Accident and Emergency (A&E) Departments in England and Wales were included in this national study of trends in serious violence.
- Anonymous prospective data relating to age, gender and attendance date of those treated for violence-related injuries were retrieved from participating A&E departments.
- An estimated 364,000 people in England and Wales attended A&E departments seeking treatment following violence in 2006.
- Overall, there was a decrease of 2% in serious violence in England and Wales in 2006 compared to 2005: it is estimated that approximately 6,000 fewer people sought treatment at A&E departments following violence-related injury. This decrease continues the downward trend observed over the period 2000 to 2005 according to A&E data.
- Violence affecting females decreased by 8% in 2006 compared to the previous year. Rates of violence affecting males, those aged 11 to 30 and those aged 50 years and over did not change.
- Violence rates for those aged 0 to 10 decreased by 21% and for those aged 31 to 50 decreased by 7%.
- In 2006, violence-related A&E attendance was most frequent on Saturdays and Sundays and between the months of April and October with a peak in July.
- These findings are not consistent with the hypothesis that implementation of the 2003 Licensing Act in November 2005 would increase violence in England and Wales.

## **Introduction**

The menace of violence permeates the lives of many people, affects every aspect of society and has long been established as an important public health problem in the UK.<sup>1</sup> From the public health standpoint the main cornerstones in violence prevention are injury surveillance, risk factor identification and exploration, implementation of violence prevention programmes and their evaluation. Injury surveillance based in Accident and Emergency (A&E) departments has been developed in many countries including Australia, Canada and the United States and more recently in England and Wales as a measure of morbidity.<sup>2-5</sup> Violence trends derived from police and British Crime Survey (BCS) data have often been contradictory. A great deal of community violence is not reported to or recorded by the police.<sup>6</sup> Evidence of objectivity of injury data has come from investigations of sensitivity and specificity of data recording, and from close correlations with panel data relating to known risk factors for injury from violence.<sup>7</sup>

The National Violence Surveillance Network (NVSN) based in A&E departments in England and Wales was formed in 2002 for the purposes of measuring violence using injury data and to clarify national and regional trends. This has demonstrated no significant national trends in the period 1995 to 2000 and decreases in overall violence from 2000 to 2005. In 2005, compared to 2004, there were national decreases in violence affecting males, females and all age groups except those aged 31 to 50. Since the inception of NVSN those at highest risk of violence-related injury have consistently been males and those aged 18 to 30 years.<sup>8</sup>

The aim of the study reported here is to identify overall, gender and age-specific violence-related injury rates and violence trends in England and Wales for the year ending 31<sup>st</sup> December 2006.

## Methods

The structured (by Government Office Region) sample of 33 A&E departments included in this study are certified members of the NVSN (Table 1). Inclusion criteria were the availability of prospective electronic data on violence-related attendances and agreement from the A&E clinical director to take part in the study. Prospective electronic A&E data relating to age, gender, and attendance date of patients reporting violence-related injury during the year ending 31<sup>st</sup> December 2006 were retrieved. A&E attendances were categorised by gender and five age groups: 0-10, 11-17, 18-30, 31-50 and 50+ years. The potential bias in selecting this sample of A&E departments – due to the non-randomised study design – was limited by assigning appropriate weights to the sample A&E population so that comparisons could be made with national violence-related injury rates from previous years. The method for calculating appropriate weights is detailed in a previous publication.<sup>8</sup>

Annual assault injury rates (number of injured per 1000 resident population) were computed separately for both genders and for the five age groups. Annual injury rates for 2006 were compared to injury rates from previous years. In computing national injury rates assumptions were made including:

- Coverage ratio (total annual attendance at A&E departments in the sample compared to total annual attendance at all A&E departments in England and Wales) was the same for both gender and all age groups
- Resident populations of England and Wales in 2006 and 2005 were similar

## **Results**

### **Violence-related A&E attendance**

Altogether, 44,315 people injured in violence were treated in the 33 A&E departments in 2006 (Table 2). Male to female ratio was three to one (32,928 assaults for males; 11,387 assaults for females). Almost half were aged 18 to 30 years (21,165). Age and gender distribution of those seeking treatment following assault during 2006 was similar to the previous year.<sup>8</sup>

### **Assault injury rates**

Overall, 10.5 per 1000 males and 3.4 per 1000 females were treated at A&E departments in England and Wales during 2006 for injuries sustained in violence (Table 2). Overall estimated annual injury rate was 6.9 per 1000 resident population. Those at highest risk from assault were those aged 18 to 30 years followed by those aged 11 to 17, those aged 31 to 50, those aged 50+ and those aged 0 to 10 years.

### **Trends in violence**

There was a decrease of 2% in overall violence-related A&E attendances in England and Wales in 2006 compared to 2005 (Figure 1), an 8% reduction in violence affecting females and no change in violence affecting males. There were falls in violence affecting those aged 0 to 10 (21%) and those aged 31 to 50 (7%), but no other age-specific reductions. Overall violence-related A&E attendance was greatest between April and October with a peak in July 2006. Violence-related A&E attendances were highest on Saturdays and Sundays (Figures 2a and 2b).

## Discussion

An estimated 364,000 people in England and Wales attended A&E departments for medical treatment following assaults in 2006 – a decrease of approximately 6,000 assault-related attendances compared to 2005. Overall, serious violence in England and Wales decreased in 2006 compared with the previous six years according to A&E-derived data but at a slower rate than in the years since 2000 (Table 3).<sup>8</sup> There were substantial reductions in violence affecting females, those aged 0 to 10 and those aged 31 to 50 years in 2006 compared to the previous year. Violence affecting males and those aged 11 to 30 and those aged 50+ years remained unchanged in 2006 compared with 2005. According to the BCS, overall rates of violent crime resulting in injury in England and Wales did not change between 2004/2005 and 2005/2006 whilst according to police records there was an increase of 2% in violent crime over the same period (Figure 1).<sup>9</sup> Thus, all three national violence data sources suggest that violence rates have changed little since 2005. Furthermore, public perceptions and worry about violent crime in England and Wales have remained unchanged since 2004/2005.<sup>10</sup> These sustained decreases may reflect better targeted policing and the work of Crime and Disorder (Community Safety) Reduction Partnerships.

Variation in violence-related A&E attendance by day was similar to previous years – there was more serious violence during weekends compared to weekdays. Highest assault-related attendance occurred between April and October with a peak in attendance in July. These trends are similar to those identified in previous years and may be explained by more people spending more time in city and town centres, and greater alcohol consumption during weekends and the summer months.

The 2003 Licensing Act came into force on 24<sup>th</sup> November 2005.<sup>11</sup> This Act has modernised licensing legislation and has provided greater freedom for the leisure and

hospitality industry and their users. At the same time new regulatory powers were given to the police, courts and local authorities allowing, for example, the police to close licensed premises immediately. These changes prompted concern that varying and increasing opening hours would greatly increase violence. According to the A&E-derived injury data presented here, there is little evidence to suggest that the 2003 Licensing Act has had any significant effect on violence-related injuries in England and Wales.

Overall, this study continues to demonstrate that levels of violence-related harm are inversely related to overall levels of violence recorded by the police. In turn, this continues to suggest that greater police ascertainment of violence, far from indicating increases in violence, can, given prompt intervention, reduce the risk of injury requiring treatment.<sup>6</sup>

## References

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**Table 1: Hospitals included in the study (n=33)**

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Bassetlaw District General Hospital
Blackburn Royal Infirmary
Burnley General Hospital
Cheltenham General Hospital
Chesterfield and North Derbyshire Royal Hospital
Glan Clwyd Hospital (Rhyl)
Conquest Hospital (St Leonards-On-Sea)
Countess of Chester Hospital
Darlington Memorial Hospital
District General Hospital (Eastbourne)
Doncaster Royal Infirmary
Frimley Park Hospital
Good Hope Hospital (Sutton Coldfield)
Hexham General
Hinchingbrooke Hospital
Huddersfield Royal Infirmary
Ipswich Hospital
Kingston Hospital
Lister Hospital (Stevenage)
Norfolk and Norwich University Hospital
North Devon District Hospital (Barnstaple)
North Manchester General Hospital
Queen Mary's Hospital (Sidcup)
Royal Bournemouth Hospital
Royal Calderdale Hospital (Halifax)
Royal Devon and Exeter Hospital
Royal Sussex County Hospital (Brighton)
Russells Hall Hospital (Dudley)
Salisbury District Hospital
St Mary's Hospital (Isle of Wight)
Stepping Hill Hospital (Stockport)
University Hospital of Wales (Cardiff)
Wansbeck General Hospital (Ashington)

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**Table 2: Violence injury rates by age and gender 2006: patients who attended 33 A&E departments in England and Wales for treatment following violence-related injury.**

<b>Gender</b>	<b>n</b>	<b>%</b>
<b>Male</b>	32,928	74.3
<b>Female</b>	11,387	25.7
<b>Total</b>	44,315	100

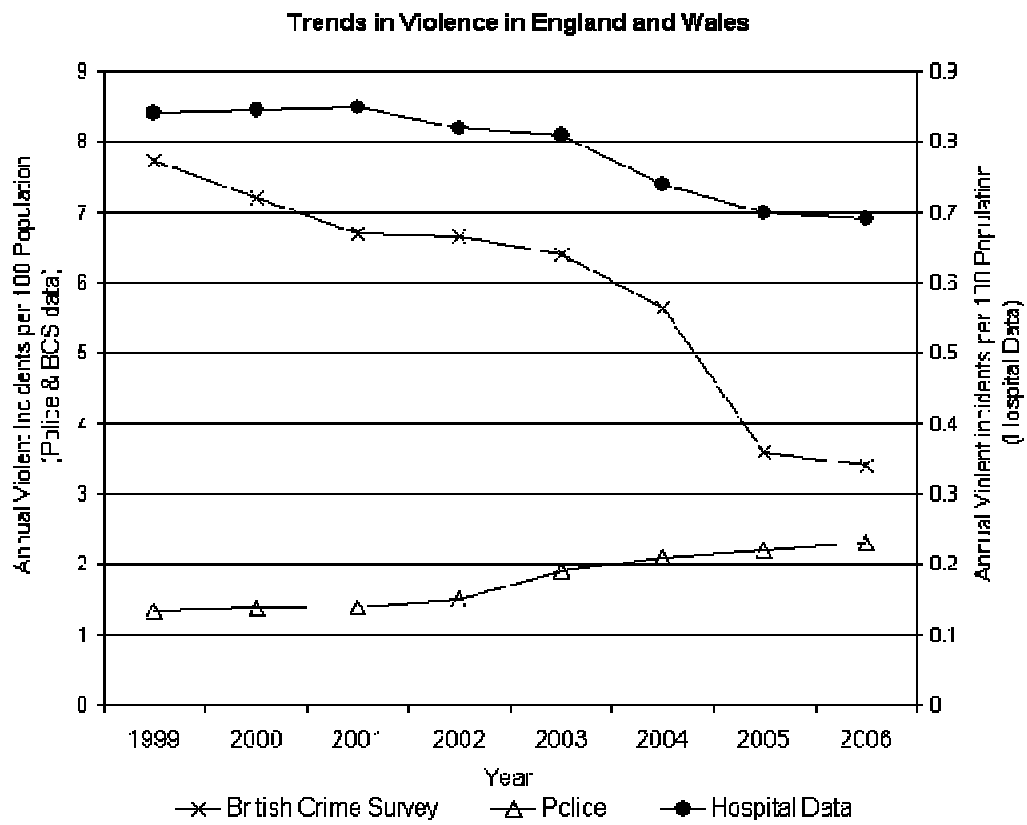
  

<b>Age groups (years)</b>	<b>n</b>	<b>%</b>
<b>0 to 10</b>	475	1
<b>11 to 17</b>	7,468	16.9
<b>18 to 30</b>	21,165	47.8
<b>31 to 50</b>	12,738	28.7
<b>50+</b>	2,479	5.6
<b>Total</b>	44,315	100

<b>Annual assault injury rate (per 1,000 residents)</b>	
<b>Male</b>	10.5
<b>Female</b>	3.5
<b>Total</b>	6.9
<b>0 to 10</b>	0.7
<b>11 to 17</b>	12.7
<b>18 to 30</b>	20.1
<b>31 to 50</b>	6.5
<b>50+</b>	1.2

Figure 1



**Table 3: Percentage change in serious violence as measured by A&E injury records in England and Wales**

	<b>Males</b>	<b>Females</b>	<b>Total</b>
<b>2000 – 2001</b>	0	3.5	1
<b>2001 – 2002</b>	0	-7.7	-4.5
<b>2002 – 2003</b>	0.5	-2.3	-0.8
<b>2003 – 2004</b>	-9.6	-4.6	-8.8
<b>2004 – 2005</b>	-6.8	-11	-6.9
<b>2005 - 2006</b>	2	-8	-2

**Figures 2a and 2b: Trends in violence-related injury in England and Wales 2006**

