

# EDITORIALS

## Injury surveillance in Europe and the UK

The slow steady progress made in collecting injury data in Europe is in danger of being undone

Graham Kirkwood *Research Fellow*<sup>1</sup>, Thomas C Hughes *Consultant in Emergency Medicine*<sup>2</sup>,  
Alyson M Pollock *Professor of Public Health Research and Policy*<sup>1</sup>

<sup>1</sup>Blizard Institute, Queen Mary University of London, Centre for Primary Care and Public Health, London E1 2AB, UK; <sup>2</sup>Oxford Radcliffe Hospitals NHS Trust, Oxford, UK

Injuries are an important international public health problem, contributing an estimated 11.2% of the world total of disability adjusted life years in 2010.<sup>1</sup> In the United Kingdom, falls are the second largest cause of years lived with disability.<sup>2</sup> In addition, although deaths from road traffic collisions have fallen substantially in the UK over the past 20 years, deaths from injuries in the home have risen sharply, and without high quality data we have little understanding of the causes.<sup>3</sup>

In May 2007 the Council of the European Union recommended that EU member states develop national injury surveillance and reporting systems to monitor injury trends and evaluate the effectiveness of injury prevention initiatives.<sup>4</sup> Consequently, the three year Joint Action on Monitoring Injuries in Europe project (JAMIE), funded by the European Commission (EC), was launched in 2011 with the aim of “having by 2015 a common hospital-based surveillance system for injury prevention in operation” across all EU member states.<sup>5</sup> The number of countries contributing data to the European Injury Data Base (IDB-JAMIE) increased from 12 in 2011 to 20 in 2013.<sup>6</sup> However, coordinated collection of injury data in Europe is now under threat because neither the EC nor most EU countries, including the UK, are committed to continuing the project when the JAMIE initiative ends in 2014.<sup>6 7</sup>

JAMIE incorporates two datasets, both of which are collected at the emergency departments of participating hospitals. All hospitals in a country are supposed to collect the minimum dataset, and this is supplemented by a full dataset collected by a sample of hospitals. The datasets were intended to provide detailed information on aetiology and mechanisms of injury, including the involvement of any consumer products.<sup>5</sup> This information is vital to support prevention initiatives.

Currently, no hospital in the UK collects the full dataset, and none of the four UK health departments has provided funds for the implementation of standardised collection of data.<sup>8</sup> As a result, the most recent data returns for the minimum dataset had to rely on English Hospital Episode Statistics data, which are designed for administrative purposes and are generally incomplete, of poor quality, and lack sufficient detail on key

fields such as location (no road category) and mechanism of injury (no falls category).

Generally, current information on emergency care in the UK is unacceptably poor—in the words of the House of Commons Health Committee we are “flying blind.”<sup>9</sup> The College of Emergency Medicine’s minimum dataset provides better quality data on emergency care and this will be the template for a dataset upgrade that has been agreed for England by the secretary of state for health. It incorporates both the Unified Diagnostic Dataset, to improve the quality of recorded diagnosis, and the JAMIE minimum dataset.

A report commissioned by the Royal Society for the Prevention of Accidents on the feasibility of establishing a UK-wide injury database was published in 2008.<sup>10</sup> The results of this study led to the initiation of parallel projects to collect injury data on all children (under age 16) attending the emergency department at St Mary’s Hospital in London (from June 2011) and on all those attending emergency departments at the John Radcliffe Hospital, Oxford, and the Horton General Hospital, Banbury (from December 2011). Initial results of the pilot projects showed that collecting routine enhanced injury data is feasible with minimal burden on clinicians.<sup>11</sup>

Of all the UK countries, Wales has the best record for injury surveillance, collating emergency department data under the All Wales Injury Surveillance System since 1996. Work is underway to incorporate the JAMIE minimum dataset into a replacement Welsh emergency department dataset, which will improve data quality. A separate programme has been underway in Scotland since 2010 to collect better quality data at emergency departments. Following a review, work is ongoing within the Information Services Division (ISD) of NHS National Services Scotland to determine the next steps in this process.

An infrastructure already exists, which collates data collected by 36 emergency departments in England and Northern Ireland—the Emergency Department Syndromic Surveillance System, a part of Public Health England’s Syndromic Surveillance System.<sup>12</sup> Data centralisation systems also exist in Wales through the Secure Anonymised Information Linkage

Databank and in Scotland through the ISD. In addition, the Farr Institute of Health Informatics Research has introduced initiatives with the potential to link data and expertise across the prevention, research, and health informatics communities and undertake studies at a scale not previously feasible.<sup>13</sup>

The public health and financial benefits of collecting quality data on injuries are long established in the design, implementation, and evaluation of injury prevention initiatives.<sup>4 5 7</sup> Injury surveillance has the potential to substantially reduce injuries in the home and thereby reduce the load on the emergency services. The reduction in the number of people injured in road traffic collisions that came about through changes in the law and sustained pressure from politicians, safety campaigners, and technological improvements in vehicles and road design was informed by well established routine data collection on every collision reported to the police. The same attention needs to be applied to injury surveillance, and UK health ministers must now act to ensure that the momentum built up through the JAMIE project is not lost. Ministers and parliament must ensure that the UK fulfils its EU commitments on collecting and monitoring injury data.

We thank Ronan Lyons for helpful comments, references, and information, Steven Macey for detail on the UK data returns to IDB-JAMIE, and Celina Davis for the detail on injury data collection in Scotland.

Competing interests: We have read and understood BMJ policy on declaration of interests and declare: GK is employed under a grant awarded to the Centre for Trauma Sciences project by the Barts Charity; TH is chair of the Informatics Committee of the College of Emergency Medicine, which develops case mix measures and high quality data collection and information technology systems for the specialty of emergency medicine, and had a scholarship from the Royal Society for the Prevention of Accidents to conduct another related study of

emergency department data in 2011; AMP has no competing interests to declare.

Provenance and peer review: Not commissioned; externally peer reviewed.

- Murray CJ, Vos T, Lozano R, Naghavi M, Flaxman AD, Michaud C, et al. Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 2012;380:2197-223.
- Murray CJ, Richards MA, Newton JN, Fenton KA, Anderson HR, Atkinson C, et al. UK health performance: findings of the Global Burden of Disease Study 2010. *Lancet* 2013;381:997-1020.
- Royal Society for the Prevention of Accidents. The big book of accident prevention. 2013. [www.rosipa.com/bigbook/index.html](http://www.rosipa.com/bigbook/index.html).
- Council recommendation on the prevention of injury and the promotion of safety. 31 May 2007. [www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwVwContent/I4councilrecommendation.htm](http://www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwVwContent/I4councilrecommendation.htm).
- EuroSafe. IDB-JAMIE manual. October 2013. [www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwAssets/D5FC1077E7DC33FCC1257C120038002B/\\$file/IDB-JAMIE%20Manual%20OCT%202013.pdf](http://www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwAssets/D5FC1077E7DC33FCC1257C120038002B/$file/IDB-JAMIE%20Manual%20OCT%202013.pdf).
- Rogmans W. Report on 4th meeting of JAMIE-associated partners Vienna, January 30-31 2014. [www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwAssets/107B9CD02741101DC1257C7F005635E1/\\$file/Report%204th%20meeting%20JAMIE%20partners%20Vienna%2030-31%20January%202014\\_110214.pdf](http://www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwAssets/107B9CD02741101DC1257C7F005635E1/$file/Report%204th%20meeting%20JAMIE%20partners%20Vienna%2030-31%20January%202014_110214.pdf).
- ANEC, BUEC, BUSINESSEUROPE, CEN, CENELEC, EuroCommerce, et al. The need for a pan-European accident & injury data system. 14 March 2013. [www.anec.org/attachments/Joint%20call%20for%20a%20pan-European%20accident%20&%20injury%20data%20system.pdf](http://www.anec.org/attachments/Joint%20call%20for%20a%20pan-European%20accident%20&%20injury%20data%20system.pdf).
- Lyons R. Challenges in implementing FDS in a single UK hospital. Fourth meeting of JAMIE associated and collaborating partners, Vienna, 30-31 January 2014. [www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwAssets/107B9CD02741101DC1257C7F005635E1/\\$file/TOP52%20LYONS%20UK\\_FDS\\_challenges.pdf](http://www.eurosafe.eu.com/csi/eurosafe2006.nsf/wwwAssets/107B9CD02741101DC1257C7F005635E1/$file/TOP52%20LYONS%20UK_FDS_challenges.pdf).
- House of Commons Health Committee. Urgent and emergency services. Second report of session 2013-14. Vol 1, Section 2 A crisis in A&E? 2013. [www.publications.parliament.uk/pa/cm201314/cmselect/cmhealth/171/17102.htm](http://www.publications.parliament.uk/pa/cm201314/cmselect/cmhealth/171/17102.htm).
- Ward H, Healy G. Feasibility of establishing a UK wide injury database. 2008. [www.rosipa.com/homesafety/info/feasibility-study-final-report.pdf](http://www.rosipa.com/homesafety/info/feasibility-study-final-report.pdf).
- Slater W, Weld S, Harris S, Pfeiffer C, Maconochie I, Hughes T. Findings from a pilot to assess the feasibility of enhanced injury data collection in emergency departments. South West Public Health Scientific Conference, 5 February 2014.
- Elliot AJ, Hughes HE, Hughes TC, Locker TE, Shannon T, Heyworth J, et al. Establishing an emergency department syndromic surveillance system to support the London 2012 Olympic and Paralympic Games. *Emerg Med J* 2012;29:954-60.
- Lyons RA, Ford DV, Moore L, Rodgers SE. Use of data linkage to measure the population health effect of non-health-care interventions. *Lancet* 2014;383:1517-9.

Cite this as: *BMJ* 2014;349:g5337

© BMJ Publishing Group Ltd 2014