Results Using research examples (domestic ladders, motorised mobility scooters and fire risk reduced cigarettes), the problem will be summarised by investigation of the adequacy of existing data systems to identify injuries associated with these existing and emerging products; the effects of jurisdictional boundaries on product safety; the reactive nature of the system and related limitations; and the lack of an adequate scientific evidence base to proactively guide much of the related regulatory process (e.g. Product Safety Standards).

Conclusions Potential new multi-sector approaches to developing a more proactive product safety system that aligns evidence with public policy and the regulatory system will be proposed.

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RE:FINE NEISS: A REAL-TIME INTERACTION SEARCH SYSTEM FOR CONSUMER PRODUCT-RELATED INJURY ED VISITS IN UNITED STATES

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Background The United States Consumer Product Safety Commission's (CPSC) National Electronic Injury Surveillance System (NEISS) records information about consumer product-related injuries from a probability sample of emergency departments, and makes these records publicly available. NEISS is used for injury research and to guide decisions about product recall, set product safety standards, and develop public awareness campaigns. The NEISS data contain both structured and unstructured fields. However, the current NEISS query builder system only allows structured data query.

Methods We redesigned the online data query system and created RE:fine NEISS to enable both structured and unstructured data query while enhancing the user experience. Our design goals were to provide real-time feedback, reduce the cognitive load for users and offer advanced functionalities.

Results The RE:fine NEISS significantly improves the usability of the NEISS. As the user builds a query, a sample of the matching subset of data is populated in real-time and is updated each time the user modifies the query. The auto-complete lookup feature for product names makes finding products easier. In addition, the unstructured text search capability allows users to add as many conditions as they want for any field search for keywords, phrases and wildcards, apply nested Boolean queries, and exclude conditions. Furthermore users can save, share, and reuse their queries.

Conclusions A group of injury researchers, familiar with NEISS, assisted with the development and evaluation of RE:fine NEISS. These users found that they could easily generate queries, readily view the data in a friendly format, quickly assess project feasibility, and produce the desired dataset for more detailed study. RE: fine NEISS is available online at http://injurysearch.nationwidechildrens.org/

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PRODUCT RELATED HEAD INJURIES AMONG INFANTS AND TODDLERS IN EUROPE – A PUBLIC HEALTH TOPIC?

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Background Studies show that young children (< 5 yrs) are most at risk among the under 18-year-olds for being hospitalised because of a head injury (Dunning et al. 2004). Despite the high incidence rates in this age group and some publications on a national level (Ellsaesser 2014), little knowledge exists on a European level of the importance of products triggering head injuries in young children. For such questions the European Injury Data Base (IDB) provides a valuable source of information, in particular its full data set (FDS) which is used in 18 EU countries for collecting information on the product involvement. The following study aims to use this data for an in depth analysis on product related head injuries.

Method Case analysis of a total of 54,001 injuries collected during a 2-year period (2013–2014) in the under five-year-olds treated in 115 hospitals (either ward or emergency) of 18 European countries. An injury was counted as "head injury" if the body part was documented as head and one of the following injury types were registered: contusion, open wound, abrasion, fracture, concussion or other specified brain injury. An injury has been counted as a product related injury if a product was registered as triggering the injury.

Results Head injuries in infants (<1 year) made up 63% (3,486) of all injuries (5,538) in the age group. 65% (2,255) of head injuries were triggered by products. The three most frequent product related head injuries were falling from or out of: #1 bed 20% (459), #2 changing table 10% (226), #3 buggy or carrier 7% (150). Head injuries in 1-to 4-year-olds made up 41% (19,876) of all injuries in the age group (48,463). 59% (6,977) were triggered by a product. The three most frequent products involved were: #1 furniture 8% (1048), e.g. couch, #2 stairs 7% (963), #3 bed 5% (653).

Conclusions Product related head injuries in young children are a crucial public health issue and new parents should be given targeted injury prevention measures.

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DEVELOPING RISK-INFORMED DECISION-MAKING PROCESSES

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Background Finnish Safety and Chemicals Agency (Tukes) is a national agency which supervises and promotes technical safety and conformity, together with consumer and chemicals safety. One of the key tasks of Tukes is to promote safety awareness and behaviour as well as to ensure that all participants abide by the legislation.

Current changes in society and technology are extremely rapid and the variety of products on the market is ever increasing. At the same time the authorities' resources are continuing to