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### Identifying Accidental Passenger Vehicle Non-transport Incidents in the NVSS

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### Purpose

... establish a method to collect and maintain data on the number and types of injuries and deaths involving [passenger] motor vehicles ... in nontraffic, noncrash events

"SAFETEA-LU", Public Law 109-59, Title II, Sec. 10305 "K.T. Safety Act of 2007", Public Law 110-189



### ICD-10 E-Codes (External cause of injury)

#### Mechanism of the event

- what caused the injury (ex. motor vehicle crash, a firearm, a drug or a fall)
- Manner of death
  - intent behind the death (unintentional, suicide, homicide, legal intervention or act of war, and unknown intent)



# **First Cut**

- Exclude transport deaths
- Exclude intentional deaths
- Exclude firearm deaths
- Include unintentional deaths and deaths of unknown intent from external causes
- 61,116 potential cases in 2003
- 63,978 potential cases in 2004.



### **Identify Passenger Vehicle Deaths**

- Passenger vehicles (passenger cars, utility vehicles, pickup trucks, vans)
- Perform character string searches of narratives
  - medical information
  - place of injury
  - description of how the injury occurred



### **Character String Search Keywords**

Body type identifiers

 CAR, AUTO, AUTOMOBILE, TRUCK, PICK-UP, PICKUP, SUV, VEHICLE, VAN, TAXI, JEEP, CONVERTIBLE and SEDAN

- 15 most common vehicle makes
  - to identify other cases where these names (e.g., FORD or HONDA) were used instead of the generic body type
- Approximately 3,000 cases identified



# **Review Remaining Narratives**

- Was a motor vehicle involved? (reduce false positives)
- Was motor vehicle a passenger vehicle?



# Does narrative indicate the vehicle was a factor in the injury?

- Injury occurred inside the vehicle
- Injury occurred while a person was entering, exiting, or falling from a vehicle
- Injury involved a person outside the vehicle who came in contact with the vehicle
- Injury involved a person outside the vehicle who came in contact with a vehicle emission (such as fire, smoke, exhaust, gasoline, battery acid, or radiator fluid)



# **Data Analysis Limitations**

- ~ 17 percent records-no injury description-used codes/medical narrative
- Keywords omitted or misspelled
- Narratives only report 'truck' or 'vehicle'
- Some non-passenger vehicles
- Some non-transport fatalities may meet NHTSA crash definition

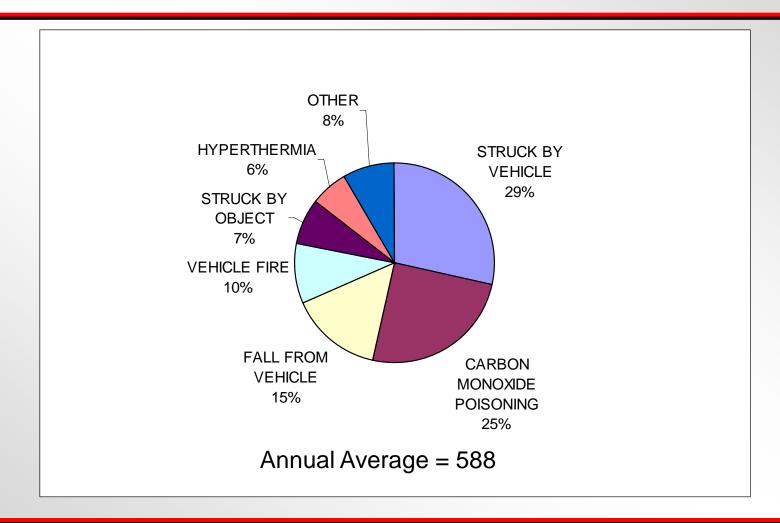




- Many different search strategies and classifications were attempted
- NHTSA believes that 'limitations' did not have major effect on results

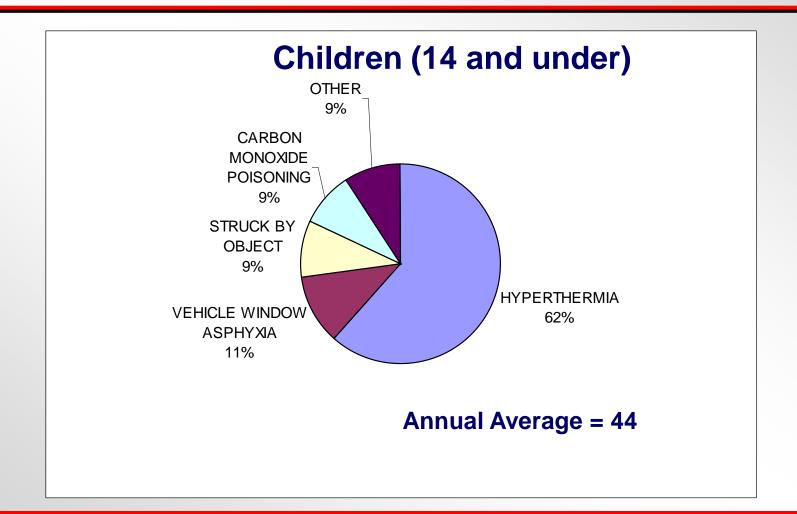


#### NiTS 2007: Noncrash Fatalities Source: NVSS 2003 & 2004





#### Noncrash Child Fatalities Source: NVSS 2003 & 2004





#### Not in Traffic Surveillance on Web

#### http://www-nrd.nhtsa.dot.gov/Cats/

#### listpublications.aspx?Id=233&ShowBy=Category

NOT IN TRAFFIC SURVEILLANCE

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Publication			
Number	Year	Title	
811065	2009	NiTS 2007: Noncrash Fatality Database User's Manual	
811066	2009	NiTS 2007: Noncrash Injury Database User's Manual	
811064	2009	NiTS 2007: Nontraffic Crash Database User's Manual	
N0409	2009	Not in Traffic Surveillance Cases (April 2009)	
N0809	2009	Not in Traffic Surveillance Cases (August 2009)	
N1209	2009	Not in Traffic Surveillance Cases (December 2009)	
N0209	2009	Not in Traffic Surveillance Cases (February 2009)	
N0109	2009	Not in Traffic Surveillance Cases (January 2009)	
N0709	2009	Not in Traffic Surveillance Cases (July 2009)	
N0609	2009	Not in Traffic Surveillance Cases (June 2009)	
N0309	2009	Not in Traffic Surveillance Cases (March 2009)	
N0909	2009	Not in Traffic Surveillance Cases (September 2009)	
811085	2009	Not-in-Traffic Surveillance 2007 - Highlights	
811116	2009	Not-in-Traffic Surveillance 2007 Children	

