Ineffective Tire Recalls Impact Passenger Vehicle Safety

Most drivers have a problem with at least one tire

Four vehicle accidents due to tire tread separation between February and May of 2014 took 12 lives and injured 42 more. Later that year the National Transportation Safety Board (NTSB) hosted a Passenger Vehicle Tire Safety Symposium to address areas of concern regarding passenger vehicle safety due to tire issues. A special investigation report, which was adopted October 27, 2015, provides a summary of the issues and industry-wide recommendations to improve passenger vehicle safety.

"Today’s recommendations, if acted upon, hold the promise of saving some of the more than 500 lives lost to tire-related crashes every year. Better tire registration processes, more accessible tire-recall information, and ultimately better recall completion rates will be crucial to reducing tire-related crashes and deaths."
- Christopher A. Hart, NTSB Chairman

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

Problem Solving • Incident Investigation • Root Cause Analysis

1. Problem
   What
   Date
   Special investigation report adopted 10/27/15
   Time
   N/A
   Different, unusual, unique
   Facility, site
   US
   Task being performed
   Passenger vehicle tires
   Impact being performed
   Registration, recall, upkeep

2. Analysis
   Frequency
   ~33,000 tire-related crashes per year
   Safety Goal Impacted
   >500 deaths/19,000 injuries in US every year
   Environmental
   Cause
   Problem
   Ineffective Tire Recalls impact passenger vehicle safety
   Date
   Special investigation report adopted 10/27/15
   When
   N/A
   Different, unusual, unique
   Facility, site
   US
   Task being performed
   Passenger vehicle tires

3. Solutions
   Action Item
   Owner(s) (Names)
   Cause

   1. Develop better guidance for consumers related to tire aging & service life
      NTSB, NHTSA, automotive & tire industry, safety groups
      Inadequate understanding of tire aging & service life

   2. Develop tire-aging test, best practices
      Poor tire maintenance/aged tires

   3. Promote technology to reduce tire-related crashes
      Tire-related accidents

   4. Include complete identification number on inboard and outboard sidewalls
      NHTSA, tire manufacturers
      Difficult to find tire identification number

   5. Improve recall process
      NHTSA with Congress/industry
      Requirement standards

   6. Improve tire recall site
      Congress if necessary
      Low recall completion rate

   7. Improve tire registration process
      NHTSA
      Lack of tire registration

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For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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