

**HAZARDOUS MATERIALS SAFETY
HAZARDOUS MATERIALS INFORMATION SYSTEM
HAZMAT SUMMARY BY Mode of Transportation / Cause FOR 2008**

Serious Incidents*

Mode of Transportation / Cause	Incidents	INJURIES		Fatalities	Damages
		Hospitalized	Non-Hospitalized		
Air					
Dropped	2	0	0	0	0
Freezing	1	0	0	0	0
Human Error	1	0	0	0	0
Impact with Sharp or Protruding Object (e.g., nail)	1	0	0	0	0
Improper Preparation for Transportation	4	0	0	0	0
Cause Not Reported	1	0	4	0	0
Highway					
Abrasion	5	0	0	0	78,058
Broken Component or Device	10	0	1	0	68,678
Commodity Self-Ignition	2	0	0	0	157,000
Conveyer or Material Handling Equipment Mishap	1	0	0	0	0
Corrosion - Exterior	3	0	0	0	6,299
Corrosion - Interior	8	0	0	0	142,500
Defective Component or Device	5	1	0	0	91,478
Deterioration or Aging	13	2	2	0	246,515
Dropped	3	0	4	0	17,035
Fire, Temperature, or Heat	8	0	1	0	1,236,531
Forklift Accident	8	2	15	0	77,243
Freezing	2	0	0	0	8,000
Human Error	38	0	2	0	2,933,085
Impact with Sharp or Protruding Object (e.g., nail)	5	0	0	0	317,595
Improper Preparation for Transportation	8	0	0	0	94,855
Inadequate Accident Damage Protection	1	0	0	0	5,000
Inadequate Blocking and Bracing	10	1	1	0	140,575
Inadequate Maintenance	3	0	0	0	20,693
Inadequate Preparation for Transportation	4	1	0	0	24,217
Incompatible Product	1	0	0	0	2,000
Loose Closure, Component, or Device	6	0	0	0	53,966
Misaligned Material, Component, or Device	1	0	0	0	0
Missing Component or Device	1	0	0	0	500,350
Overfilled	18	0	0	0	258,501
Over-pressurized	3	0	0	0	113,410
Rollover Accident	75	0	0	3	14,809,618
Too Much Weight on Package	1	0	0	0	800
Valve Open	3	1	0	0	21,910
Vehicular Crash or Accident Damage	79	0	3	4	9,747,724
Cause Not Reported	78	3	33	1	4,884,941

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		Hospitalized	Non-Hospitalized		
Rail					
Broken Component or Device	1	0	0	0	67,600
Corrosion - Exterior	4	1	0	0	116,156
Defective Component or Device	6	0	0	0	193,648
Derailment	12	0	0	0	7,122,233
Deterioration or Aging	7	1	1	0	231,212
Fire, Temperature, or Heat	1	0	0	0	319,900
Human Error	10	3	14	1	378,665
Improper Preparation for Transportation	1	0	0	0	0
Loose Closure, Component, or Device	8	1	0	0	29,860
Misaligned Material, Component, or Device	2	1	0	0	5,260
Missing Component or Device	4	1	0	0	43,376
Overfilled	2	0	0	0	111,600
Over-pressurized	1	1	0	0	11,056
Valve Open	2	0	0	0	28,800
Cause Not Reported	15	2	0	0	367,880
Water					
Defective Component or Device	1	0	0	0	4,500
Human Error	1	0	0	0	85,000
Impact with Sharp or Protruding Object (e.g., nail)	1	0	0	0	10,500
Totals By Mode					
Air Incidents	10	0	4	0	0
Highway Incidents	403	11	62	8	36,058,577
Rail Incidents	76	11	15	1	9,027,246
Water Incidents	4	0	0	0	110,500
Total - 2008	492	22	81	9	45,185,823

Note: Due to multiple causes being involved in a single incident, the totals above may not correspond to the totals in the other reports.

* PHMSA revised the definition of a serious incident in 2002. This is the current definition:

- a fatality or major injury caused by the release of a hazardous material,
- the evacuation of 25 or more persons as a result of release of a hazardous material or exposure to fire,
- a release or exposure to fire which results in the closure of a major transportation artery,
- the alteration of an aircraft flight plan or operation,
- the release of radioactive materials from Type B packaging,
- the release of over 11.9 gallons or 88.2 pounds of a severe marine pollutant, or
- the release of a bulk quantity (over 119 gallons or 882 pounds) of a hazardous material.