

**U.S. DEPARTMENT OF TRANSPORTATION
HAZARDOUS MATERIALS SAFETY**

**HAZARDOUS MATERIALS INFORMATION SYSTEM
HAZMAT SUMMARY BY MODE / CAUSE FOR CALENDAR YEAR - 1998**

Mode / Cause	Incidents	SERIOUS INCIDENTS*		Deaths	Damages
		Major	Minor		
Air					
Human Error	18	1	3	0	19,129
Package Failure	4	0	0	0	3,300
Vehicular Accident/Derailment	0	0	0	0	0
Other	1	0	0	0	0

SUBTOTAL:	23	1	3	0	22,429
Highway					
Human Error	159	9	16	5	976,761
Package Failure	49	5	6	0	780,287
Vehicular Accident/Derailment	146	3	6	8	17,747,005
Other	3	0	0	0	48,000

SUBTOTAL:	357	17	28	13	19,552,053
Railway					
Human Error	22	2	0	0	101,650
Package Failure	18	1	2	0	77,042
Vehicular Accident/Derailment	30	1	3	0	12,819,731
Other	1	0	0	0	0

SUBTOTAL:	71	4	5	0	12,998,423
Water					
Human Error	2	0	0	0	835,599
Package Failure	2	0	2	0	0
Vehicular Accident/Derailment	0	0	0	0	0
Other	0	0	0	0	0

SUBTOTAL:	4	0	2	0	835,599
Other					
Human Error	0	0	0	0	0
Package Failure	0	0	0	0	0
Vehicular Accident/Derailment	0	0	0	0	0
Other	0	0	0	0	0

SUBTOTAL:	0	0	0	0	0

Total - 1998:	455	22	38	13	33,408,504

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

* PHMSA revised the definition of a serious incident in 2002. This report uses 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.