

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

**HAZARDOUS MATERIALS INFORMATION SYSTEM
HAZMAT SUMMARY BY MODE / CAUSE FOR CALENDAR YEAR - 1993**

Mode / Cause	Incidents	Injuries		Deaths	Damages
		Major	Minor		
SERIOUS INCIDENTS*					
Air					
Human Error	4	2	0	0	2,547
Package Failure	2	0	0	0	19,425
Vehicular Accident/Derailment	0	0	0	0	0
Other	2	2	3	0	10,010

SUBTOTAL:	8	4	3	0	31,982
Highway					
Human Error	161	14	84	0	856,399
Package Failure	68	1	15	0	3,774,284
Vehicular Accident/Derailment	128	13	47	14	9,477,970
Other	5	0	3	1	183,905

SUBTOTAL:	362	28	149	15	14,292,558
Railway					
Human Error	9	0	1	0	7,098
Package Failure	26	2	1	0	270,122
Vehicular Accident/Derailment	21	0	1	0	1,491,127
Other	1	0	4	0	0

SUBTOTAL:	57	2	7	0	1,768,347
Water					
Human Error	0	0	0	0	0
Package Failure	1	0	0	0	0
Vehicular Accident/Derailment	0	0	0	0	0
Other	0	0	0	0	0

SUBTOTAL:	1	0	0	0	0
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 - 1993:	428	34	159	15	16,092,887

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.