

**U.S. DEPARTMENT OF TRANSPORTATION  
HAZARDOUS MATERIALS SAFETY  
HAZARDOUS MATERIALS INFORMATION SYSTEM  
HAZMAT SUMMARY BY MODE / CAUSE**

**CALENDAR YEAR 1993**

| Mode / Cause                  | Incidents     | Injuries  |            | Deaths    | Damages           |
|-------------------------------|---------------|-----------|------------|-----------|-------------------|
|                               |               | Major     | Minor      |           |                   |
| <b>Air</b>                    |               |           |            |           |                   |
| Human Error                   | 493           | 2         | 35         | 0         | 46,064            |
| Package Failure               | 118           | 0         | 8          | 0         | 32,219            |
| Vehicular Accident/Derailment | 0             | 0         | 0          | 0         | 0                 |
| Other                         | 11            | 2         | 3          | 0         | 10,197            |
| -----                         |               |           |            |           |                   |
| <b>SUBTOTAL:</b>              | <b>622</b>    | <b>4</b>  | <b>46</b>  | <b>0</b>  | <b>88,480</b>     |
| <b>Highway</b>                |               |           |            |           |                   |
| Human Error                   | 9,023         | 14        | 316        | 0         | 3,739,624         |
| Package Failure               | 1,779         | 1         | 111        | 0         | 4,560,287         |
| Vehicular Accident/Derailment | 217           | 13        | 48         | 14        | 11,262,952        |
| Other                         | 76            | 0         | 8          | 1         | 302,990           |
| -----                         |               |           |            |           |                   |
| <b>SUBTOTAL:</b>              | <b>11,095</b> | <b>28</b> | <b>483</b> | <b>15</b> | <b>19,865,853</b> |
| <b>Railway</b>                |               |           |            |           |                   |
| Human Error                   | 435           | 0         | 25         | 0         | 327,156           |
| Package Failure               | 608           | 2         | 31         | 0         | 406,084           |
| Vehicular Accident/Derailment | 49            | 0         | 1          | 0         | 1,915,653         |
| Other                         | 24            | 0         | 7          | 0         | 538               |
| -----                         |               |           |            |           |                   |
| <b>SUBTOTAL:</b>              | <b>1,116</b>  | <b>2</b>  | <b>64</b>  | <b>0</b>  | <b>2,649,431</b>  |
| <b>Water</b>                  |               |           |            |           |                   |
| Human Error                   | 5             | 0         | 0          | 0         | 30,166            |
| Package Failure               | 3             | 0         | 0          | 0         | 182,925           |
| Vehicular Accident/Derailment | 0             | 0         | 0          | 0         | 0                 |
| Other                         | 0             | 0         | 0          | 0         | 0                 |
| -----                         |               |           |            |           |                   |
| <b>SUBTOTAL:</b>              | <b>8</b>      | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>213,091</b>    |
| <b>Others</b>                 |               |           |            |           |                   |
| 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                 |
| -----                         |               |           |            |           |                   |
| <b>SUBTOTAL:</b>              | <b>0</b>      | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>          |
| -----                         |               |           |            |           |                   |
| <b>Total - 1993</b>           | <b>12,841</b> | <b>34</b> | <b>593</b> | <b>15</b> | <b>22,816,855</b> |

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