

The preferred size of individual packages is between 15 to 30 kg. Anything lighter can be thrown, anything heavier and not on pallets risks being dropped.

Each mode of shipping has its own unique hazards which are summarized below.

Postal Service

A parcel sent by post must be able to stand repeated random drops or repeated impacts during the sorting, handling and transportation process.

Rail

In rail shipment, three main hazards exist for packages. When rail cars are assembled in yards, the shunting operations may produce impacts with other goods. Snatching also occurs which results from starting and stopping loosely coupled wagons. Vibration depends on the speed, type of car, and condition of the track. In the case of mechanical products, such vibration can cause loosening of screws and fastenings and settlement of loose packing materials, with resultant damage.

Road

The main hazards in road transport are vibration and bouncing of the load. This is affected by both the road conditions and the speed and suspension conditions of the truck. Exports to developing countries are particularly exposed to these hazards because road conditions are often poor. Load crushing by ropes, shifting of the load, and impacts from other goods are also important hazards.

In developed countries some trucking companies specialize in providing better quality truck suspension. Such improved suspension is generally available in North America, and truckers offering Air Ride or Super Air Ride suspension should be preferred over those not offering such a service. However, it may not be possible to reduce packaging to take advantage of the service, as other carriage conditions may increase the likelihood of damage to your product.

Marine

The principal hazard in transport by ship is excessive top loading within the container. Provided the cargo is correctly stowed, there should be no risk of impacts arising from cargo shifting. However keep in mind that containers will, both on sea and on land, be subject to vibration, tipping, rolling and shock loads. See **Safe Stowage** for an explanation of Marine Hazards.