

SAFETY ABSTRACT

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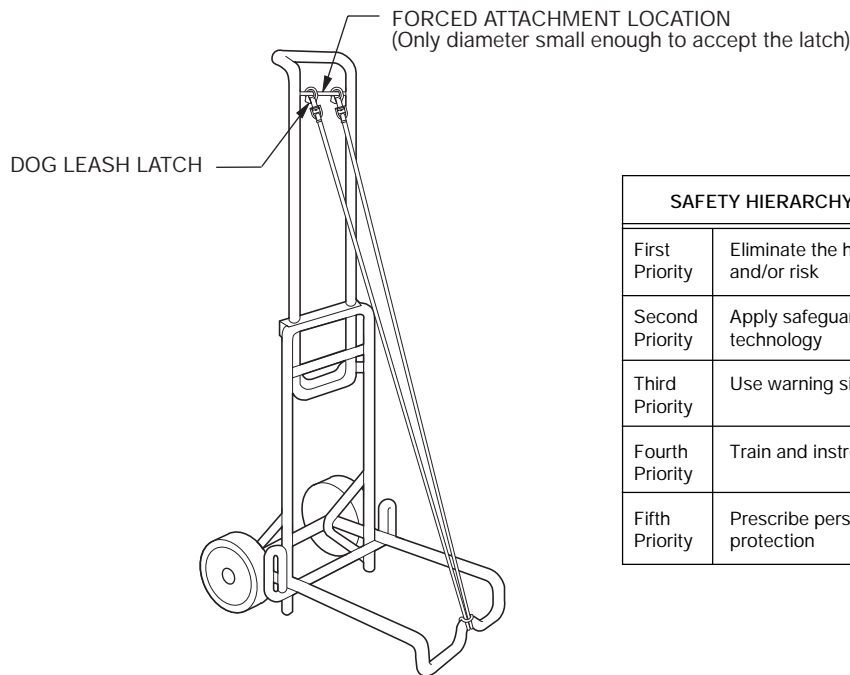
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Portable Luggage Cart Safety - An Application of the Safety Hierarchy

by Dennis B. Brickman, P.E.¹ and Ralph L. Barnett²

LUGGAGE CART WITH FORCED ATTACHMENT LOCATION AND DOG LEASH LATCH

ABSTRACT

Innovations currently available in portable luggage carts have produced compact utilitarian carriers that accommodate large payloads using lightweight structures. Most current designs adopt the bungee cord for rapidly securing and unfastening the load. This "rubberband like" restraining element has been identified by the Consumer Product Safety Commission (CPSC) as the primary source of luggage cart injuries because it produces impact hazards that strike the eye. Various countermeasures for controlling the impact hazard, such as the one pictured above, appear throughout the family of luggage carts. The Safety Hierarchy imposes a discipline for the systematic evaluation and application of safety strategies for mitigating the impact danger. Use of this hierarchy can marshal resources into effective accident prevention systems.

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The full text of this paper will be published at the ASME International Mechanical Engineering Congress and Exposition in November of 1995 and will be available from Triodyne Inc. at no cost. To request the paper, call (708) 677-4730 ext. 162.