represents a child who will be using the restraint. Ford's and UM–CPP's comments, discussed further below, were based on their belief that the standard should not require the labeling of height information.

Notwithstanding general concurrence, commenters disagreed on whether to use sitting height or standing height. Advocates believed that using sitting height rather than standing height ''appears to be appropriate since it provides a more accurate measure of the height of the torso from the hips to the head.'' The commenter believed using sitting height ''should provide a closer match of the child to the child restraint system in order to protect against head excursion and head injury.'' On the other hand, Ford, AAMA, Century, Safeline and Cosco opposed the use of sitting height. Century and Cosco believed sitting height, while perhaps a relevant criterion for determining the suitability of a restraint for a child, would nonetheless be useless information because most parents do not know their child's sitting height. Cosco stated ''there is little correlation between sitting and standing height for manufacturers to give parents any guidance.'' Ford said that wording about how to measure sitting height may reduce the readability of the child seat label.

In lieu of a requirement that manufacturers provide sitting height, many commenters suggested that NHTSA specify a sitting height limit referencing what Century calls ''a readily identifiable body landmark, such as the top of the ears or top of the head.'' Century stated:

> For rear-facing seats the top of the head should not exceed the top of the seat back, and for boosters with or without a seat back, the child should no longer use the seat if the top of the ears are above either the booster seat back or the vehicle seat back.

Ford, a manufacturer of built-in child seats, said it compares anatomical landmarks on the child to physical features on the child restraint. ''It is very easy for a parent to compare shoulder height to the location of a shoulder belt slot or the top of the child's head to the top of the head restraint, and the need for such physical limits is more likely to be understood.'' Ford and UM–CPP recommended that NHTSA not require manufacturers to label child seats with the recommended height of children intended for the seats. These commenters further suggested the test dummy used for Standard 213 compliance testing should be selected solely on the recommended weight range for a particular child restraint.

Based on the comments on the proposal and other information, NHTSA reaches the following conclusions. Standard 213 currently requires manufacturers to label each child restraint with recommendations for the maximum height of children who can safely occupy the system. S5.5.2(f), S5.5.4(f). The purpose of the requirement is to help ensure the proper fit of restraint to child. The information helps consumers purchase an appropriate child restraint. Information about the suitability of a restraint for children of certain heights serves a useful purpose.

On the other hand, NHTSA is mindful that consumers may not know the sitting height of their child as well as they know standing height. The latter is routinely measured and provided to parents during the child's medical examinations. Because standing height is more familiar to parents, this rule specifies recommended standing height, rather than sitting height, to be on the label. Since requiring standing height recommendations to be labeled is a current requirement of Standard 213, this rule maintains the status quo. The agency is unconvinced of a need to change it.

This rule provides for using the manufacturer's height recommendations, in addition to the manufacturer's weight recommendation, to select the test dummies used in Standard 213's compliance test. The NPRM explained the basis for this provision. If height were not a factor,

> It might be possible for a restraint to be tested with a dummy or dummies insufficiently representative of the range of children recommended for the restraint. This could occur if a manufacturer were to recommend inconsistent mass and height ranges. A manufacturer could create an inconsistency by recommending a height range that corresponds to children who are of greater mass (weight) than the masses expressly recommended by the manufacturer for the restraint.
>
> For instance, suppose an infant restraint were recommended for children with masses not more than 4 kilograms (approximately 9 pounds) and a sitting height of up to 475 mm. Although the use of both the newborn and 9-month-old dummies would be more representative of the users of the restraint, only the newborn dummy would be used if dummy selection were based solely on the mass recommendation. However, according to a report by the University of Michigan on ''Physical Characteristics of Children as Related to Death and Injury for Consumer Product Safety Design,'' Report No. PB–242–221, of children with masses of 4 kilograms, those in the 95th percentile have a sitting height of approximately 450 mm. Since the restraint is recommended for children with heights greater than the 95th percentile child, NHTSA has tentatively determined that it would be appropriate to test the infant restraint not only with the infant dummy, but also with a test dummy representative of a taller child (i.e., with the 9-month-old dummy).

NHTSA has decided that the following dummies will be used to test a child restraint if any portion of their corresponding standing height ranges falls under the maximum height recommendation of the manufacturer of that restraint:

ADOPTED PROVISIONS

Recommended height of child suitable for the restraint	Dumm(ies) used for compliance test
Not more than 650 mm (650 mm is approximately the height of a 95th percentile newborn male child).	Newborn
More than 650 mm to 850 mm.	Newborn 9-month-old
More than 850 mm to 1100.	9-month-old[1] 3-yr-old
More than 1100 mm .	6-yr-old

[1] This dummy is not to be used to test booster seats.

Century stated:

> While we agree that it makes sense to establish height limits that correspond to weight limits to prevent a manufacturer from inaccurately representing the usage range for a particular restraint, we do not agree with combining mean values for weight with 95th percentile values for height. This conflict of information on a label could lead a consumer to the incorrect assumption that even though their child weighs more than the weight listed but is less than the height, that it is still all right to use the seat.

In response to Century, NHTSA is not requiring manufacturers to label their restraints as suitable for children in the 95th percentile for height. Rather, the rule would simply permit NHTSA to use a manufacturer's height recommendation as a basis for choosing a test dummy. Manufacturers have wide latitude in recommending the reasonable height ranges they think are appropriate for their restraints.

A number of commenters suggested it would be worthwhile to label a restraint with information using ''anatomical landmarks'' on the child (e.g., top of the ears) so parents can determine when their children have outgrown a particular child restraint. Manufacturers who want to provide such information are free to do so. However, the agency will not require such information to be labeled, for lack of need for such a requirement. See, denial of *Legath*