V. CONCLUSIONS

Passenger cars in India experience a significant level of passenger compartment intrusion as a result of frontal impacts, and this trend must be checked. Based on the above analysis, a preliminary assessment of Euro NCAP frontal impact tests with real world passenger car crashes in India indicates that the Offset Deformable Barrier (ODB) test has a higher significance to regulate passenger compartment intrusions in car-to-car collisions, compared to the Full Width Rigid Barrier test.

As a significant number of crashes in the sample occur due to car-to-truck/bus collisions that result in underride crashes with severe passenger compartment intrusions and occupant injuries, a test must be formulated to reduce the severity of underride crashes.

Finally, it is important to remember that occupant restraints, such as seat belts and airbags, will be effective only if the occupants use them. Since the rate of usage of seat belts is very low in India, it is important to educate and enforce the usage of seat belts, particularly in the rear seats, otherwise the effectiveness of these crash tests in reducing passenger car occupant injuries will not be realised in the real world.

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