

## Resources

American Academy of Pediatrics  
2007 Safe Ride News Publications



### Program Awards

2004 National Safety Council Youth Activity Award of Merit Recipient

2007 NOVA National Hospital Association



"Trauma Nurses Talk Tough"  
2801 N. Gantenbein Ave.  
Rm. 2007

Portland, OR 97227  
503-413-4960 Email: [tntt@lhs.org](mailto:tntt@lhs.org)  
[www.legacyhealth.org/tntt](http://www.legacyhealth.org/tntt)

Program developed through a grant from the  
Transportation Safety Division of the Oregon  
Department of Transportation and the National Highway  
Traffic Safety Administration Section 163 Funds  
Rev. 10/07

## Bike Wheels to Steering Wheels



## A Parent's Guide for Youth 10-14

To Strengthen Traffic Safety in Families

## Newton's Three Laws of Motion

## Notes

**First Law—An object at rest remains at rest, and An object in motion remains in motion at constant speed and in a straight line unless acted on by an unbalanced force.**

**Second Law—The acceleration of an object depends on the mass of the object and the amount of force applied.**

**Third Law—Whenever one object exerts a force on a second object, the second object exerts an equal and opposite force on the first.**

**Simply stated—**

- ◆ The faster you go, the harder you hit
- ◆ Gravity forces in crashes increase the weight and propulsion of unsecured objects: i.e. people, backpacks, cell phones, coffee mugs, water bottles, purses, tools and sports equipment, suitcases, pens & pencils, toys, etc.
- ◆ People and things do not stop flying until stopped by forces equal or greater than a body or a thing.