Wheel Touching

Wheel touching is not something you want to do — ever. This sheet is designed to give you the technical background and practical tips. Bud Jorgensen

The Consequences

This sketch sets up a disaster waiting to happen. The following rider is not wearing a helmet. The lead rider is on aerobars and thus will have less control over the bike.

When the front wheel of rear rider touches the back wheel of the lead rider, the front of the following bike will be lifted briefly and the rear rider will crash.

The Physics

Key factors in this situation are:

- Weight distribution;
- Direction of travel of the tires;
- And, the front wheel is less stable on the ground because it is the steering wheel.

The rear wheel of the front rider carries more weight. It is more stable. Tire direction at the very back of the bike is up, towards the sky.

The front wheel of the rear rider carries much less weight. It is much less stable on the ground. Tire direction is down.

When tires of two bikes collide at high, and opposing, rotational speeds, the less stable wheel is the loser, every time.

Avoidance

Always leave enough room so that you can slow or swerve if a rider in front does the unexpected. When drafting, do not overlap wheels. If you are in an echelon formation because of a crosswind, keep your front wheel ahead of the dropouts on the rear wheel of the rider in front.

Fenders Can Help

If the bike you are following has fenders, you have a better chance of avoiding a crash because the rear wheel is not exposed.