



# SCIENCE IN MOTION

One of the latest innovations in energy management is MIPS, or Multi-Directional Impact Protection System. MIPS uses a slip plane, designed to manage energy from rotational and angular impacts.



### MIPS SLIP PLANE

This low-friction layer under the impact liner enables a relative motion between the head and the helmet during certain impacts.



### ELASTOMERIC RETENTION

Four elastomeric bands connect the MIPS layer to the outer liner, providing a few millimeters of movement in all directions.

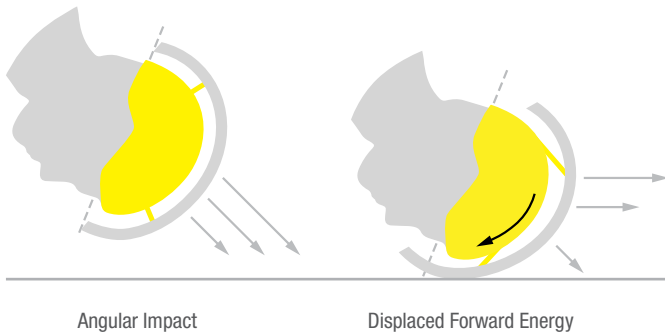
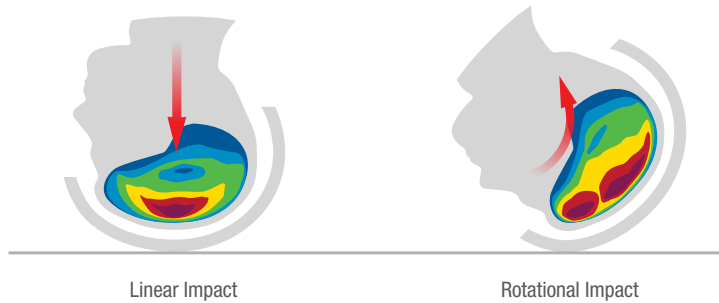


# TIME IS EVERYTHING

For the past 60 years and counting, Bell engineers have researched the forces involved in crashes across a wide range of scenarios. Recent findings have concluded that brain injury received during an angular impact is much more severe, due to higher strain on the brain's tissue. MIPS addresses this strain by allowing the head to slide independent of the helmet for a few milliseconds. This critical moment of time helps to reduce the violence of the brain inside the skull, and can significantly reduce the risk of traumatic brain injury.

## WHY IT'S IMPORTANT ►

When a head rotates quickly and comes to a sudden stop, the rotational acceleration can cause the brain tissue to experience high levels of strain. The stretching of the tissue that can be caused by these motions can result in various types of brain injury. MIPS is designed with the intent to address rotational forces from certain impacts.



## ◀ HOW IT WORKS

MIPS uses a slip plane system that moves inside the helmet, mimicking the brain's own protection system. This layer is designed to rotate inside the helmet with the intent to potentially slow or reduce the amount of energy transferred to or from the head. Science tells us that if we can reduce the strains associated with rotational acceleration, we might reduce the risk and severity of brain injury.

## THE COLLECTION ►

In 2014, Bell introduced MIPS technology into its bike helmet product line. For 2017, Bell is proud to announce the availability of MIPS in 3 tried-and-true powersports helmets. Representing unique riding styles, the MX-9, MX-9 Adventure and the Qualifier DLX are ready for the journey ahead. Everyone's invited.



MX-9

MX-9 Adventure

Qualifier DLX