# From Zero to Ninety Percent: Evaluation of the Helmets for Kids School-based Initiative in Cambodia

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#### Background

In Cambodia, helmet wearing rates among children are low as motorcycle passengers and bicyclists are not legally required to wear helmets. Previous work from the Cambodia Helmet Vaccine Initiative (CHVI) revealed that barriers to helmet use include lack of helmet access, belief that crash risk depends on trip length, and helmet comfort. Helmets for Kids (HFK) is a CHVI intervention aimed at increasing correct and consistent child helmet use by addressing these barriers.

## Purpose

To assess the effectiveness of the HFK intervention.

## **Study/Intervention Design**

HFK is a school-based program that combines teacher and student safety education along with helmet provision and fitting to all students in selected Cambodian elementary schools. Helmets are donated through public and private partnerships and distributed in a media-attended handover ceremony.

## Method

Schools were the unit of analysis. Nine schools covering 6,853 students were selected using convenience sampling based on traffic density, motorcycle/bicycle use, and student crash history. Program effectiveness was measured through pre- and post-intervention roadside helmet observations of students as they arrived at school. Observations occurred 1-2 weeks pre-intervention, 1-2 weeks post-intervention and 10-12 weeks post-intervention, to determine short and longer term effectiveness of HFK on helmet use.

#### Results

Overall student helmet use increased from an average of 0% (range: 0-3.3%) pre-intervention to an average of 89% (range: 53-100%) at 1-2 weeks and 87% (range: 53-98%) at 10-12 weeks post-intervention.

#### Conclusion

In rapidly motorizing countries such as Cambodia, school-based helmet use programs combining helmet donation and education can increase helmet use among children.

Key Words: helmet, motorcycle, bicycle, school-based intervention, injury