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Increasing Safety for Commotio cordis in Sport

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Preventing Commotio Cordis in Young Children Playing Sports

My research investigates how we can prevent incidences of commotio cordis in children playing sports. Commotio cordis is a rare occurrence in which an individual is hit over the chest with an object such as a baseball, causing the heart to stop, often being fatal. Commotio cordis is most common in children and has resulted in over 224 recorded fatalities. Due to lack of awareness and misdiagnosis, this number is likely higher. Current baseball chest protectors fail to prevent commotio cordis, with fatalities often occurring in children wearing chest protectors. Currently, we have identified vulnerable positions over the chest that may result in commotio cordis in children playing baseball, while also developing new injury testing metrics that can determine the effectiveness of baseball chest protectors. Our future research aims to explore other sports and avenues in which we can prevent commotio cordis and save the lives of children in sport.