

PLAYING • IN • THE

DANGER



ZONE

MEL UNRUH with lawyer John Laxton: injury brought review of body-contact policy

Before 1975, spinal cord injuries in hockey were rare. Then helmets became mandatory

ROBERT MASON LEE
Vancouver Sun

Halfway through the second period of play, Mel Unruh of the Aldergrove midget hockey team chased the puck towards the boards just to the left of his team net. His head was down. He was trying to play the puck at his feet.

Unruh was 17 years old and a Grade 12 student. He was not a terribly good student, but, as the judge later said, he was more a person of action than of academics. He planned to go on to community college. He played a normal life.

But he was, in that instant of play, in the most precarious position known to hockey today. His eyes were on the puck, which meant his neck was craned downwards. He was approaching the boards almost head-on. And he was in the "danger zone" — a region to the sides and back of the net, slightly more than a body length from the boards. It was a textbook case.

Unruh was the victim of physics and a reckless check. The check was neither particularly hard nor vicious — but it was from behind. Unruh pitched forward and struck his head sharply on the boards. Then he twisted over, and collapsed with his back to the ice. He was a quadriplegic.

Here is the gruesome truth of ice hockey: A cadaver, when dropped on its head, requires 150 foot-pounds of force to break its neck. A 170-pound player, striking the rink boards at skating speed — 10 m.p.h. — suffers an impact of 600 foot-pounds to the head. Four times the force necessary to end all plans for a normal life.

Almost always, the spine fractures in the cervical vertebrae, or neck. Almost always, it bursts under compression, and fragments of bone can be driven into the spinal column. All too often, the player is left paralysed from the neck down. And all of this almost never happened until the helmet rule was introduced in regulation play.

Between 1948 and 1975, cases of spinal injury in hockey were extremely rare — not a single case of sport-related spinal injuries recorded in Toronto hospitals was caused by hockey. In 1975, the year the Canadian Amateur Hockey Association made helmet use mandatory, there was one. The next year there were two. By the early 1980s, the pattern had settled down to about a steady 15 a year.

Since the helmet rule was introduced until 1987, the year of the most recent complete survey, 117 Canadian hockey players were struck down by spinal injuries. (The number is now closer to 180.) Of those, about half suffered damage to the spinal cord, and 38 were left unable to move from the neck down. Five died, of respiratory failure. The most tragic figure in the statistics is the age of the players. Three-quarters of those injured were between the ages of 11 and 20.

On Wednesday, the latest casualty was confirmed. Bill Zapf, 18, a defenceman with the Nanaimo Clippers of the B.C. Junior Hockey League, was transferred to a rehabilitation hospital in his native Edmonton after recovering from a five-hour operation in Kamloops. He was left quadriplegic.

His father, returning from the hospital where he saw his son with holes drilled in his skull and his head held upright in a halo brace, felt only "numb." The youth had been checked into the boards from behind. The offence, the father said, "is actually like attempted murder."

"He hasn't been given much hope there will be any regeneration, and we'll have to cope with that," he said. Although his son was an experience hockey player, and aware of the dangers of being checked from behind near the boards, "it never happens to you. It's always someone else's problem."

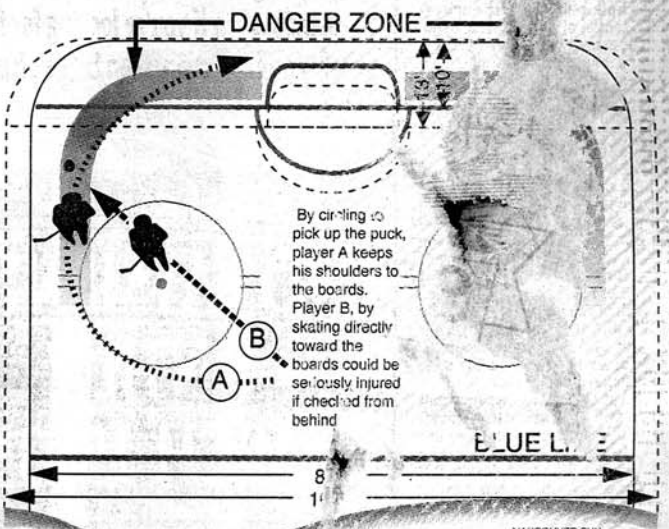
"If this had happened in a car accident, I might be able to accept it. It would be easier take. But not like this. Not on the ice." His voice strangled: "This is supposed to be a game."

"The only piece of equipment that is going to protect the neck from being broken is the brain"

Dr. Charles Tator

Hockey has always been a dangerous game, but this latest trend is confounding. While diving is still the most common cause of paralysis caused by sports, hockey paralysis has followed the introduction of a rule meant to prevent injury. A clue to the reason is offered by American football, where head injuries dropped after the introduction of helmets, but spinal injuries increased.

Studies into the problem concluded that players were using their helmeted heads as an offensive weapon, to butt or spear opposing players. The helmets gave them a feeling of invulnerability without a corresponding amount of protection. Once the practice



Dotted lines show dimensions of standard European rinks. Safety advocates urge a wider surface and placement of the net farther from the boards to help prevent injury.

was forbidden, spinal injuries dropped. This has not yet happened in Canadian hockey. According to a February, 1991 medical journal report, the number of cases of quadriplegia in American football has fallen from about 30 to 10 a year. In Canada, there are about four cases of quadriplegia a year from hockey. Player for player, Canadian hockey offers three times the risk of quadriplegia than American football. But changes to equipment and regulations have dramatically reduced other types of hockey injuries. The introduction of face guards has eliminated blinding injuries, while face, scalp and brain injuries were cut in half by the mandatory use of helmets.

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