Most Paralympians inspire, but others cheat

aralympians are often described as inspirational, even heroic. But as the Paralympics has grown and become more competitive, some advantage-seeking athletes are following the lead of their less scrupulous able-bodied peers: that is, they cheat.

Canada sent 143 competitors to the the Beijing 2008 Paralympic Games (Sept. 7–18) and like the Olympians who recently ran and jumped and swam and dunked in the same facilities, each is a driven athlete with a goal: victory.

"These are more than feel-good stories," says Dr. Richard Goudie, chief medical officer for Team Canada. "These are full-on, super athletes."

Though rare, doping does occur in parasports. Eleven athletes were busted at the 2000 Paralympics in Sydney, Australia. Prior to the 2004 games in Athens, Greece, Canada's best-known disabled athlete, single-amputee sprinter Earle Connor, received a 2-year suspension after testing positive for testosterone and nandrolone.

"The methods of doping are similar between the Olympics and the Paralympics," says Dr. Gaetan Tardif, assistant chef de mission for Canada's Paralympic team. "It is still a question of increasing your endurance and increasing your strength."

Because of their complex medical conditions, Paralympians file more therapeutic use exemptions than Olympians. Athletes disabled due to trauma, for example, may have suffered nerve damage. One of the best treatments for neuropathic pain is marijuana, a banned substance.

"A number of these athletes have been smoking pot for their pain for quite a while," says Tardif.

Paralympians seeking exemptions have to file the same applications as Olympians, but unlike the International Olympic Committee, the International Paralympic Committee doesn't demand pulmonary function tests.

Once in China, Paralympians can be tested without notice at any time. If

caught doping, they receive the same penalties — including disqualification and withdrawal of medals — as busted Olympians. The testing itself, however, is more complicated at the Paralympics, especially for athletes who urinate through catheters.

"At the Olympics, everyone pees the same," says Tardif. "At the Paralympics that is not entirely the case. Doping control officers have to be better trained."

One form of cheating, called boosting, is unique to the Paralympics and has nothing to do with steroids or stimulants. Athletes with spinal injuries sometimes follow this practice, which could involve sitting on thumb tacks or clamping a catheter to bloat the bladder. "That painful stimulus will drive blood pressure up and drive heart rate up and that will improve performance," says Nancy Quinn, chief therapist for the Canadian Paralympic team.

To discourage boosting, officials monitor athletes' blood pressure at events. Athletes who test high are given time to lower their blood pressure and are disqualified if they can't.

Elite athletes, disabled or not, are always looking for an edge. With more nations sending teams to the Paralympics, there are bound to be more athletes willing to cheat to get ahead.



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"For a number of sports, getting to the Paralympic podium is a very difficult thing," says Tardif. "Once you could be a big fish in a small pond, but now the pond is much bigger." — Roger Collier, *CMAJ*

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Disabled athletes suffer unique injuries

Paralympians train just as hard as able-bodied athletes and get injured just as often. But the types of injuries and the rehab that these entail are different. Injuries also have a greater impact on everyday life for a Paralympian.

Athletes with spinal cord injuries or missing limbs often have a dramatic muscular imbalance. This asymmetry results in predictable injury patterns.

"We see more overuse injuries of the upper body for wheelchair athletes," says Dr. Richard Goudie, chief medical officer for Canada's Paralympic team.

Other physical problems unique to disabled athletes are frictional injuries (where skin contacts a prosthesis) and equipment-related trauma — fingers broken in wheelchair spokes, legs punctured by spikes on sledge hockey sticks.

Disabled athletes also have unique rehab struggles. "It's hard to rest a shoulder injury if your means of locomotion is your arms," says Nancy Quinn, chief therapist for the Canadian Paralympic team.

Injuries are becoming less of a problem as interest in the Paralympics increases. More funding means athletes can now afford to take a long-term approach to training and have access to better equipment.