



Protecting your Smile

A guide to dealing with sport related dental injury & emergencies

Written by Alysia Henderson LAT/ATC

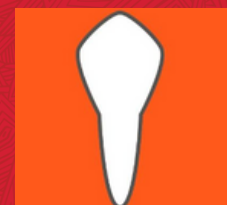
The old and classic holiday song, "All I want for Christmas is my two front teeth" could be a fitting wish for our high contact club sport participants. While wrestling, tackling, skating, or dribbling their way through the Fall Season, the physical demands of their sport create a high chance of losing a tooth and returning home to family and friends with a gap-toothed smile.

So what should one do if they find themselves or a teammate dealing with sport related trauma to the mouth? This article will walk you through the initial tooth injury care steps for a chipped, avulsed, or luxated tooth. A trip to the dentist will also be in order!

Tooth Fracture or chipping

A tooth fracture or chip occurs when a portion or combination of a participant's crown, enamel, dentin, or root cracks and breaks off.

The root is typically still preserved and intact in the gum line, but depending on the severity of the fracture/chip the dentin and pulp layers could be exposed making the tooth sensitive to touch and air. If a participant finds themselves suffering from this, they should do their best to find the tooth piece or pieces, store them in milk, and schedule an appointment to see a dentist within 24 hours. Why the milk? Milk is a readily available PH balanced liquid that prevents the tooth from drying out. Other storage options are available, such as "Save-a-Tooth" kits, which are little containers that hold biocompatible liquids and the tooth for up to 24 hours. These kits are often expensive depending on where they are purchased, so milk is the most cost effective option. A participant can continue to play in their practice or game as tolerated.



Tooth Avulsion

An avulsion is defined as a tooth being completely knocked out from the gum line, meaning the periodontal ligament is severed. We've all lost teeth as children, so imagine holding your adult sized tooth in your hand, just maybe more bloody, especially if the reason it is out is due to a collision with an opponent or playing surface.

If a participant finds themselves in this situation, they should re-implant their tooth within 5-10 minutes, making sure to not touch the root! Hold the tooth by the crown (the end/white part) when re-inserting into the socket of the gum line. If conscious and able, it is best to keep the tooth implanted and held within the mouth, as long as there isn't concern it will accidentally be swallowed. If unable to trust oneself from swallowing, the tooth can be stored in milk or a kit as noted above. The key is to keep the avulsed tooth from drying out and dying. With this injury, time is of the essence so a dentist should be seen **immediately** so that proper splinting can be performed.



Tooth Luxation

A tooth luxation occurs when a tooth remains implanted in the socket, but is repositioned in the wrong position or direction. The tooth could look pushed back among the row of teeth or to the front or side of the normal aligned position. To treat this condition, it is ok for the participant to reposition and move the tooth back into the proper place. Getting an appointment with your dentist is imperative so that they can assess the situation and make sure that everything is ok and well aligned within the mouth.



Prevention

As in all sports, there is no way to prevent every incident imaginable from occurring. However, there are ways to prevent injury through proper training and use of protective equipment. In the case of the mouth and teeth, a mouth guard is a helpful piece of equipment. Though the context of this article is through a RecWell club sports lens, it is important to note that the NCAA mandates that mouth guards be worn by participants of football, field hockey, ice hockey, and lacrosse. Most of our club field hockey, ice hockey, lacrosse, and rugby participants wear mouth guards, but not everyone always does, placing their pearly whites at risk for the injuries mentioned above.

Mouth guards come in many forms, either stock, "boil and bite," or custom ones fashioned by a dentist or other medical manufacturer. The Academy for Sports Dentistry recommends that participants and athletes wear a properly-fitted mouth guard, meaning custom, but studies have not shown much difference in injury rates between participants with stock and custom mouth guards. In general, a mouth guard protects the teeth by dispersing the energy from an impact across the gum line.

If you are a club sport participant involved on a high-impact team, please consider investing in a mouth guard for not only the protection of your teeth, but also an unexpected trip to the dentist! I can guarantee your teams' safety officers will thank you, as it will save them from leading a search for your fallen teeth out in the middle of the playing field.



References:

Colgate (2022, September 15). *What to do with a knocked out tooth*. <https://www.colgate.com/en-us/oral-health/dental-emergencies-and-sports-safety/what-to-do-with-a-knocked-out-tooth#>

Gould, T.E., Poland, S.D., Caswell, S.V., Ranalli, D., Mills, S., Ferrara, M.S., & Courson, R. (2016) National Athletic Trainers' Association position statement: Preventing and managing sport-related dental and oral injuries. *Journal of Athletic Training*, 51(10), 821-839, DOI: 10.4085/1062-6050-51.8.01