

GRADES
6-8

Capstone

Injury Prevention in Volleyball

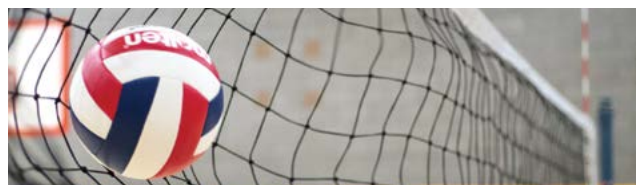
Engage: Present the following three facts and ask students to determine which two are true and which is fiction.

Injury rates:

- More than 3.5 million children ages 14 and younger get hurt annually playing sports or participating in recreational activities.
- Sports and recreational activities contribute to approximately 81 percent of all traumatic brain injuries among American children. (Fiction: It is actually 21% of all traumatic brain injuries).
- More than 775,000 children, ages 14 and younger, are treated in hospital emergency rooms for sports-related injuries each year. Most of the injuries occurred as a result of falls, being struck by an object, collisions, and overexertion during unorganized or informal sports activities.

**Information from Stanford Children's Health: Sports Injury Statistics.*

Explore: Students should brainstorm ways to prevent injury during sports and other recreational activities.



Explain: Physical injuries in volleyball are common due to the lack of protective equipment like in football and the nature of the sport. Volleyball players often dive, dig and move quickly on a small court. Communication and proper warm up are essential preventive measures in order to prevent injury.

Elaborate: Create an injury prevention plan for a volleyball team. The plan should include the following presented on a PowerPoint or poster:

- Explanation of two major injuries that are common in volleyball, include the body systems and labeled drawing of the muscles, bones and ligaments involved in the injury.
- A warm up plan for the team before play, including 15 minutes of warm up backed by online research.
- A design for a safety device (extension: create a prototype of the design).
- An on-court communication plan for players and the coach.

Common Injury List

- Rotator Cuff Tendinitis (shoulder)
- Finger Injuries
- Ankle Sprains
- Patellar Tendinitis (knee)
- Anterior Cruciate Ligament (ACL) Injury (knee)

Evaluate: Students should present their PowerPoint or poster to the class.