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## eSports Injury Prevention



Video and computer gaming make up the foundation of a thriving community evolving since the 1970s. Competitive and professional opportunities are growing and comprise the exciting world of eSports.

eSports has grown into an international network of individual and team-based events with hundreds of millions of fans. Official events sell out large arenas and generate billions of dollars in revenue annually.

The International Olympic Committee (IOC) has recognized eSports as a sporting activity. Students in the USA participate in competitive varsity high school leagues, college club teams, and even receive official university athletic scholarships.

As an emerging sport, eSport teams are not as regulated as more well-established National Collegiate Athletic Association (NCAA) sports. There is no official regulating body setting GPA standards, medical supervision requirements or return-to-play protocols after injury. It is up to the gaming community, and those who support them, to recognize injury risk and learn to prevent it before it occurs!

*If you are a gamer, even recreationally, awareness of these tips will foster a long and fulfilling career at any level of competition.*

### “What’s the big deal? It’s just gaming.”

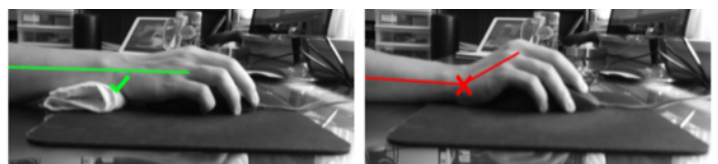
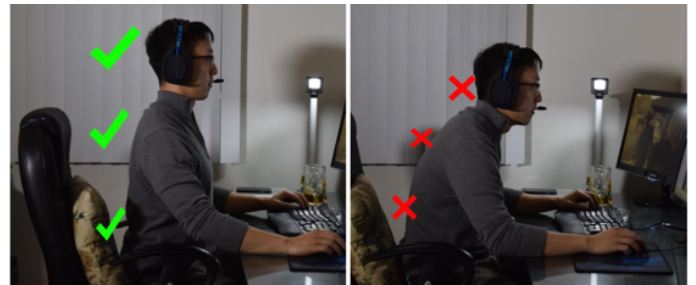
The majority of young people participate in gaming to some degree.

How we move (or do not move) our bodies in our youth affects us for our entire lives!

eSports offer exciting career options, but injury can significantly limit and shorten that career.

### General injury prevention (eSport fitness “cheat codes”):

- Like any athlete, hydrate and fuel your body well!
  - Your brain is working hard even if you are “just sitting”.
- Stretch! Target neck, wrists/hands/fingers, & lower back.
  - Develop a chair yoga routine for start and end of gameplay.
  - Take a break every hour and move – walk, dance it out, etc.
- Build a routine and stick to it.
  - Respect your bathroom breaks and sleep deadlines.
  - Set timers if needed. Develop good habits.

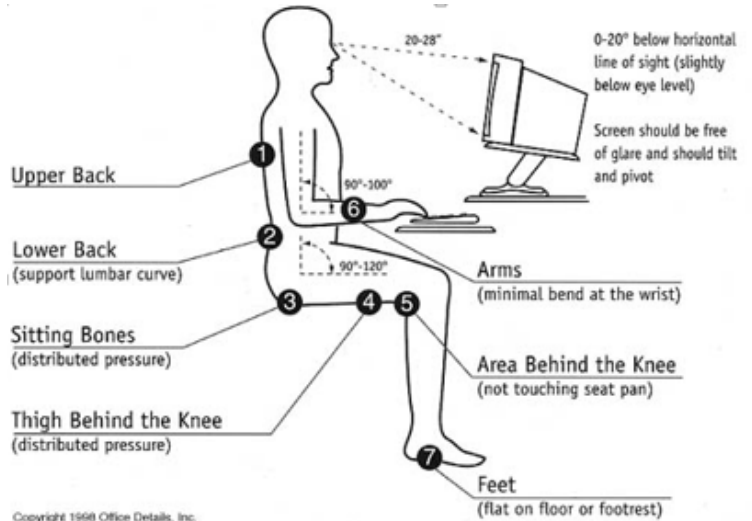




## What are some common health concerns for eSport athletes?

### Wrist, Neck and Back Pain:

- Carpal tunnel syndrome, slouching, lumbar spine disc disease
- Cause: poor ergonomics + posture weakness + repetitive motions
- Prevention “cheat code”: gaming station organization
- Posture check every hour (set timer) + breaks & stretches
- Work to strengthen your “core” abdominal muscles



### Computer Vision Syndrome

- Blurry vision + low back pain + tension headache
- Cause: eye fatigue after >3hrs/day of screen time
- Prevention “cheat code”: gaming station organization
- Check the set-up of your screen, chair, and keyboard
- Build a break & stretch routine

### Sleep Disorders

- Can't fall or stay asleep, sleep not restful, daytime drowsiness
- Cause: excess doses of electronic screen light; Complicated by energy drinks
- Prevention “cheat code”: practice sleep hygiene & monitor total gameplay
- [Sleep mode = cool, dark, & quiet on a regular schedule]

### Metabolic Dysregulation

- Challenges with weight gain or loss, gastrointestinal issues
- Cause: Lack of regular physical activity, hours without breaks
- Prevention “cheat code”: proper nutrition plan + daily exercise





### Mental Health Concerns

- Anxiety/depression, Internet Gaming Disorder (IGDT-10)
- Cause: combination of the factors listed above;
- Exacerbated by stress of gaming environments
- Prevention “cheat code”: Nutrition + Sleep hygiene + regular exercise
- Build your in-real-life (aka “irl”) support network of friends and family
- Spend time away from electronics! Try guided mindfulness/meditation videos or podcasts

# GAMING POSTURE CHEAT SHEET

A  INFOGRAPHIC

## 5 KEYS TO PERFECT GAMING POSTURE



### 1 NERF YOUR NECK



Draw your chin back to keep your neck in a neutral position. Remember: Think like you are making a double chin, NOT tilting your head down

### 4 HAPPY HIPS

Keeps your thigh parallel to the ground - Try to avoid having the knees be higher than your hips and keep your legs straight instead of crossed.

### 2 SHOULDER SECRETS

Bring your Chest forward before setting your shoulders back and slightly up. The most common faulty position of the shoulder blade is that it is too low, meaning the common advice of setting your shoulders “down and back” can increase your risk of neck pain

### 5 SUPPORT YOUR HANDS

Keep your forearms parallel to the floor and make sure there is not an excessive amount of pressure/weight at any part of your forearm, wrist or hands. Also be sure to keep your wrists in the neutral position.



### 3 NEUTRAL GAME: LOW BACK

Slightly Arch your lower back to keep your spine in neutral. Remember your pelvis is like a bowl of water, keep the water from spilling!



### GAMING BREAK RULES:

1. After every 50 minutes or 1-2 competitive games (whichever comes first), take a 5-minute break to check posture, walk around and stretch your wrists
2. During any loading times in between games, matches, quickly think “Chest up, Chin tucked, Shoulders back”

### SECRET BOSS: TIME



Even if we follow these Five Principles of Posture, any position we hold for an extended period of time can be harmful to our health. To beat the secret boss of **TIME**, we can set **gaming break rules** to prevent spending too much time in any position

For more in-depth tips specifically geared towards gaming, check out a blog led by professional Physical Therapist, Matt Hwu, who is the official team therapist for a competitive gaming club based in Los Angeles, California. His mission is succinctly summed up by the motto: “Live well so you can game well.” <https://www.1-hp.org/about/#movement>

Content credits also include the CDC and Hallie Zwibel, DO.

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