NFL Injury Impact Simulation

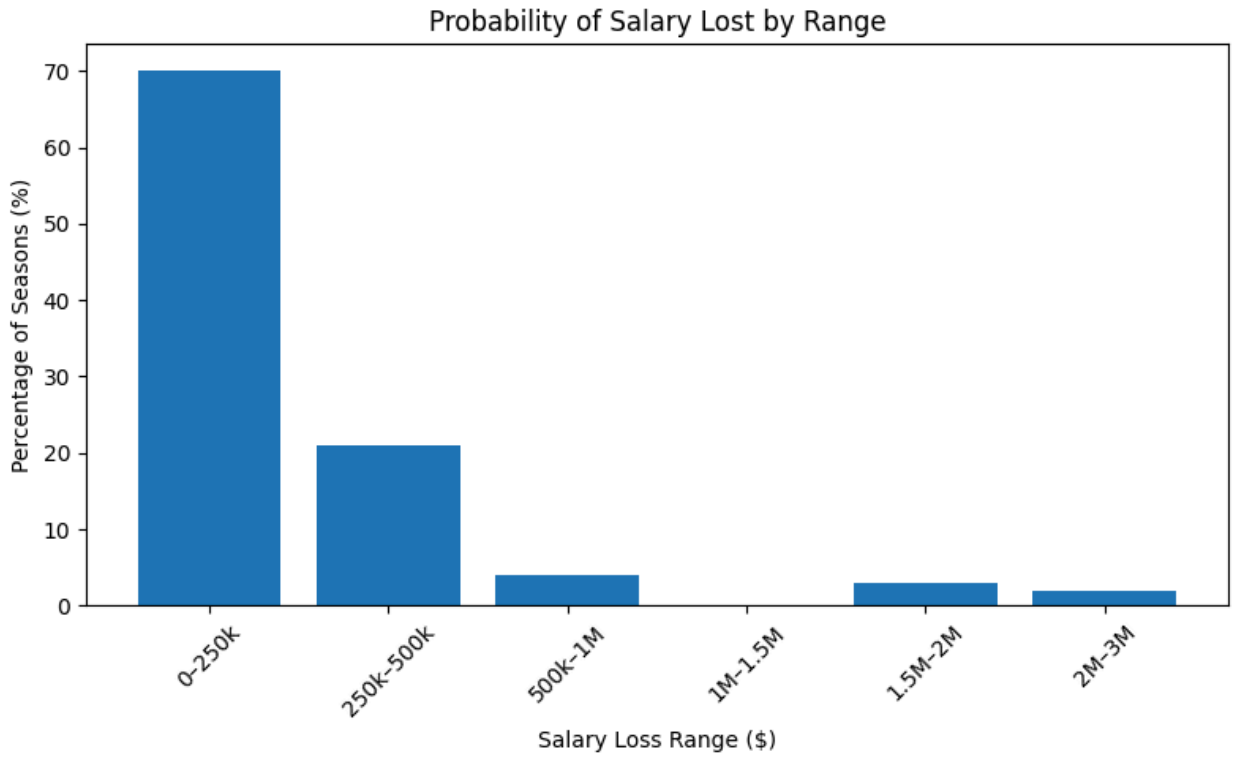
We analyzed three years of NFL injury data and ran 100 simulated seasons to understand how player injuries affect our money, our roster, and our chances of winning. Here's the bottom line: injuries don't ruin us most years, but when things go bad, they can get *very* expensive — especially at certain positions.

What We Found:

Financial Impact

- Average cost per season: about $208,000.
- Most seasons are manageable:
    - 70% cost under $250K.
- But some seasons get expensive:
    - 21% cost $250K–$500K
    - 4% cost $500K–$1M
    - 5% cost over $1.5M (rare but serious)

The big takeaway: most years are fine, but the few bad years can hit very hard.



This graph breaks down the spread of financial losses across simulated seasons.

Injury Frequency

- Average injuries per team per season: 0.438
- Most injury-prone groups:
    - Wide Receivers (33%)
    - Tight Ends (31%)

Position Breakdowns

Quarterbacks – Most Expensive Loss

- Cost per injury: ~$1.8M
- Missed games: ~3.4
- Impact: scoring drops by ~3.7 points/game
- Win rate drops to ~24%

Takeaway: We absolutely need a strong backup QB and possibly injury insurance for highly paid QBs.

Running Backs – Biggest Performance Drop

- Cost: ~$397K
- Missed games: ~2.5
- Impact: scoring drops 8+ points/game (the biggest drop)
- Win rate drops to ~29%

Takeaway: We need strong RB depth — losing a starting RB hurts performance the most.

Wide Receivers – Most Common Injury

- Cost: ~$341K
- Missed games: ~2.4
- Impact: ~2.3-point scoring drop
- Main issue: constant rotating due to many injuries

Takeaway: We should carry one extra WR.

Tight Ends – Longest Recoveries

- Cost: ~$463K
- Missed games: 3.8 (longest)
- Impact on scoring: very small

Takeaway: We need a reliable TE2 who can fill in for several weeks.

What Injuries Mean for Winning

With a key player injured, we score only **41–58%** of the points usually needed to win.
Estimated scoring when a position is injured:

- RB: 27.3 points
- QB: 22.8
- WR: 21.5
- TE: 19.3

Meaning: Any major injury dramatically drops our chances of winning games.

Recommended Actions

1. Create a $500K Injury Reserve Fund
    a. Keeps us financially safe in bad injury years.
2. Improve Roster Depth
    a. Develop a solid backup QB
    b. Keep 3 reliable running backs
    c. Carry extra WRs
    d. Make sure TE2 can start long-term
3. Do Quarterly Injury Risk Checkups
    a. Re-evaluate risk as the roster changes.
4. Consider Injury Insurance for Expensive Players
    a. Especially QBs with big contracts.
5. Invest in Injury Prevention
    a. Sports science, recovery protocols, and analytics to lower injury rate (could reduce costs by ~10%).

Final Thoughts

Injuries are unavoidable, but their impact doesn't have to be. With smarter depth planning, an emergency fund, and prevention efforts, we can reduce both financial losses and the hit to our performance.

We know where we're vulnerable, and we know how to fix it. The numbers give us a clear, practical path forward.