

Diamond Detectives: Finding 'Injury Clues' in Baseball and Softball Performance Data

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Presented by:

 **CHED**



CASE FILE



**Torn
UCL**



Case Overview

Act I: The Crime Scene

Act II: Review the Evidence

Act III: Identify the Suspects

Act IV: The Culprit, Revealed

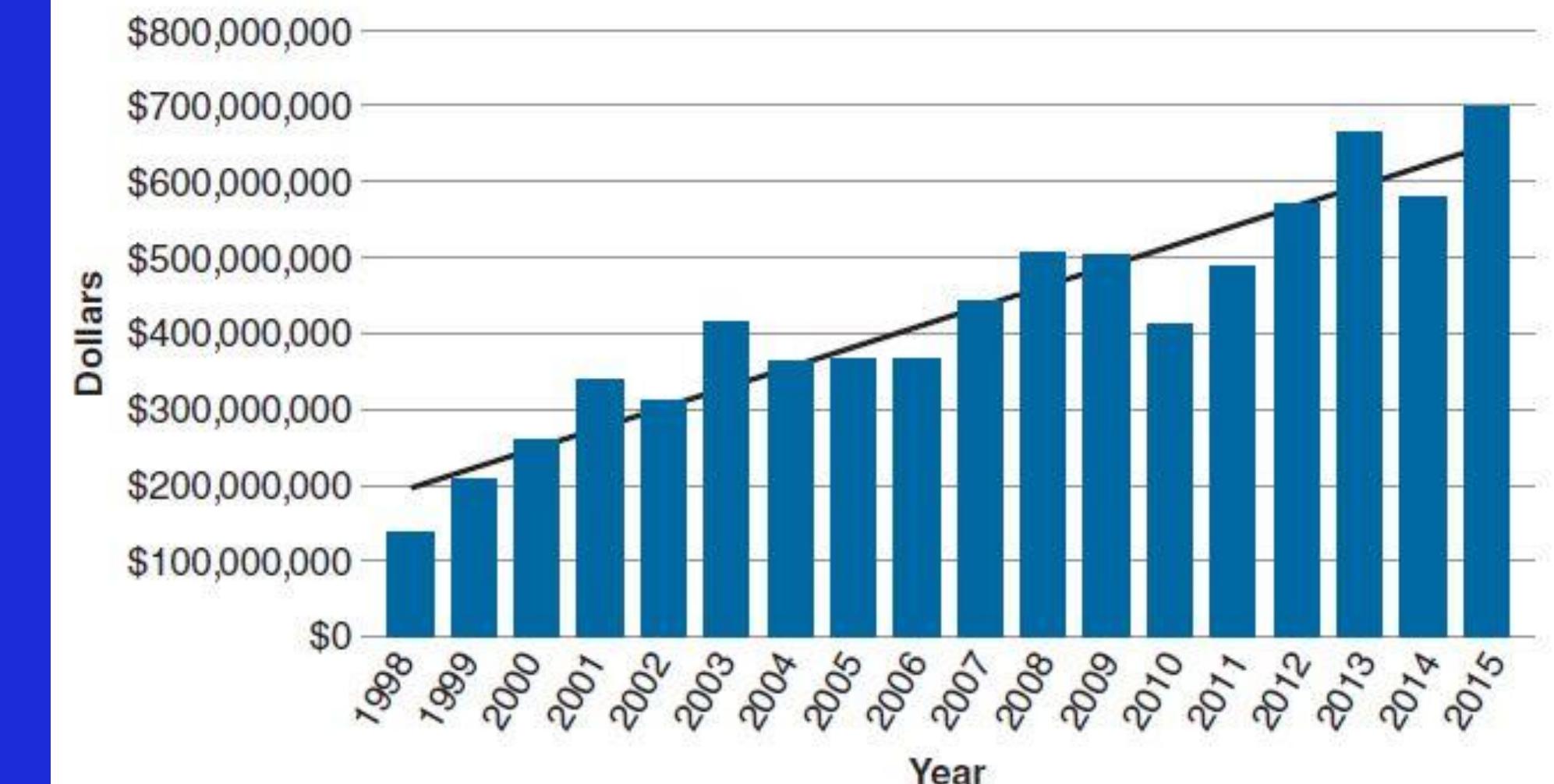
Act I

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The Crime Scene



This isn't a one-off.
It's a multi-billion-dollar problem that keeps getting worse.



MLB Injured List Tracker: Reason

A real-time look at the injured cash totals for each MLB team, position, or injury type.

SEASON

TEAM

2025

All Teams

RANK	REASON	PLAYERS	TOTAL DAYS MISSED	CASH TOTAL PER DAYS MISSED
1	Shoulder	77	4,034	\$89,121,681
2	Elbow	55	3,169	\$67,812,814
3	Elbow Tommy John	36	3,045	\$63,571,316

2025 Total:
>\$219 million USD
...
for the top three injury types
alone

Act II

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Review the Evidence

WHOOP

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Readiness and Recovery

What: Heart Rate Variability (HRV), **sleep**

When: Daily check-in

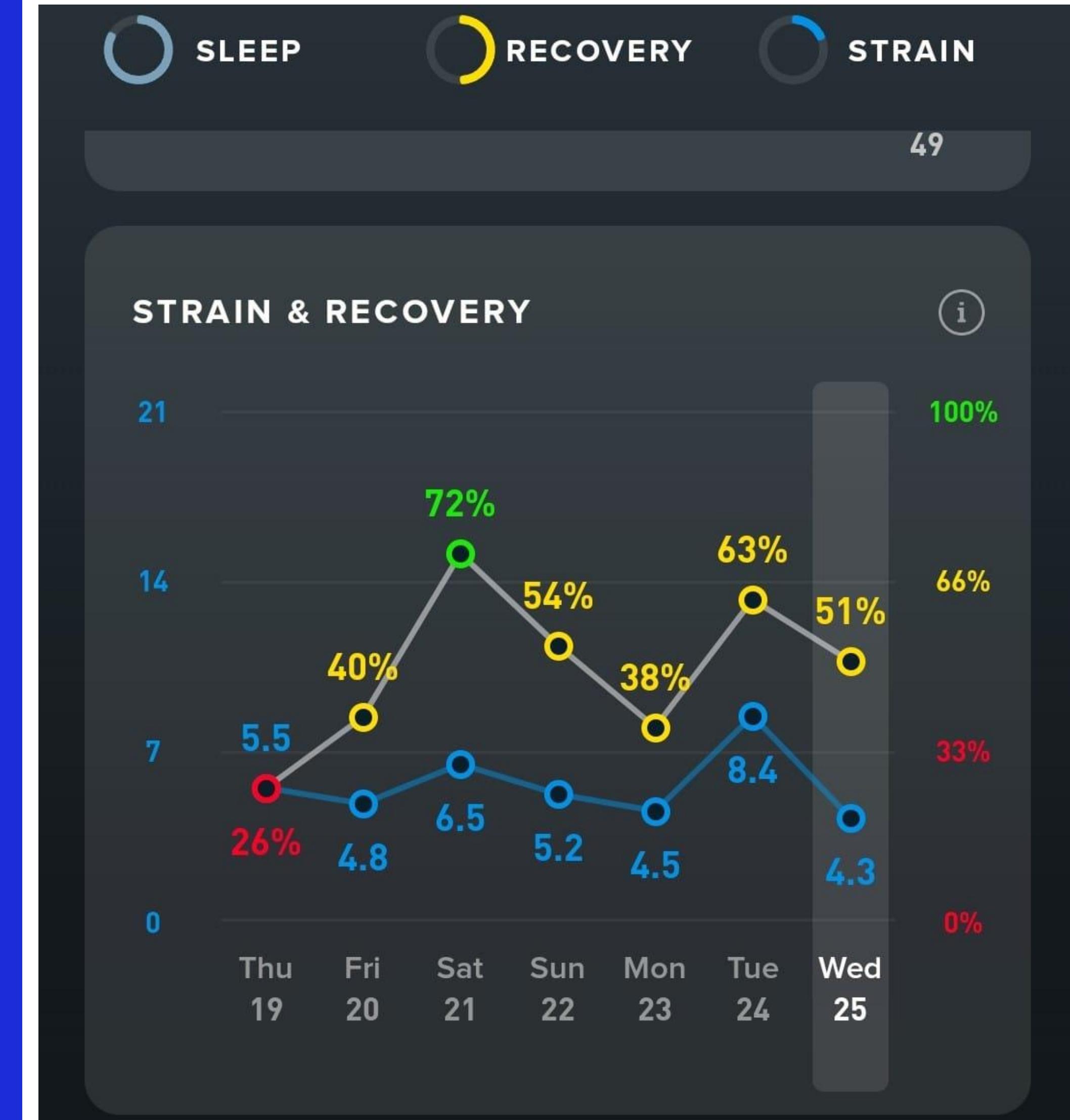
Insights: Objective “Red-Yellow-Green” system

Supports decisions like: Which **FITT** prescription or **training density** is best for me in today’s practice?

WHOOP

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Readiness and Recovery



GymAware x ANCORE

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Automated individualization

What: Rep-by-rep guidance on movement velocity

When: Pre-force profiling

Insights: Objective measure of effort

Supports decisions like: When should I stop this set? How many reps should I do?

GymAware x ANCORE

-
Automated individualization



Hawkin Dynamics TruStrength

Force Profiling

What: Force production capacity; **time to peak force**

When: Pre-event; inning-by-inning?

Insights: Fatigue status

Supports decisions like: Is our pitcher still able to output 90%+ of their baseline force in 150 ms, or should we use a different pitcher?

Enode

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Weight Room Form Assessment; Automated Individualization

What: Velocity-based training (VBT) and bar path/technique assessment

When: Every barbell lift

Insights: Auto-adjust reps and load based on velocity and form

Supports decisions like: How much load should I put on the bar for this set? How many reps should I do? Do I need to adjust my technique to keep me safer when lifting?

Trackman

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‘The Treasure Trove’

What: ball flight, spin, command, velocity

When: Every pitch and swing

Insights: **Subtle fatigue and performance indicators**

Supports decisions like: Is this our pitcher losing effectiveness due to accumulated fatigue?

Assemble your team.

Interview your witnesses.

Crack the case.

Datasets here:

Act III

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Identify the Suspects

Briefing Room

Menti link:

Act V

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Not Done Yet

We have more insight than
ever before.
Reliable witnesses.
Excellent code.

Where do we go from here?
Menti:

CHED can help.

chedbc.ca

Thank You

