

WORKERS' COMP & INTERNET OF THINGS

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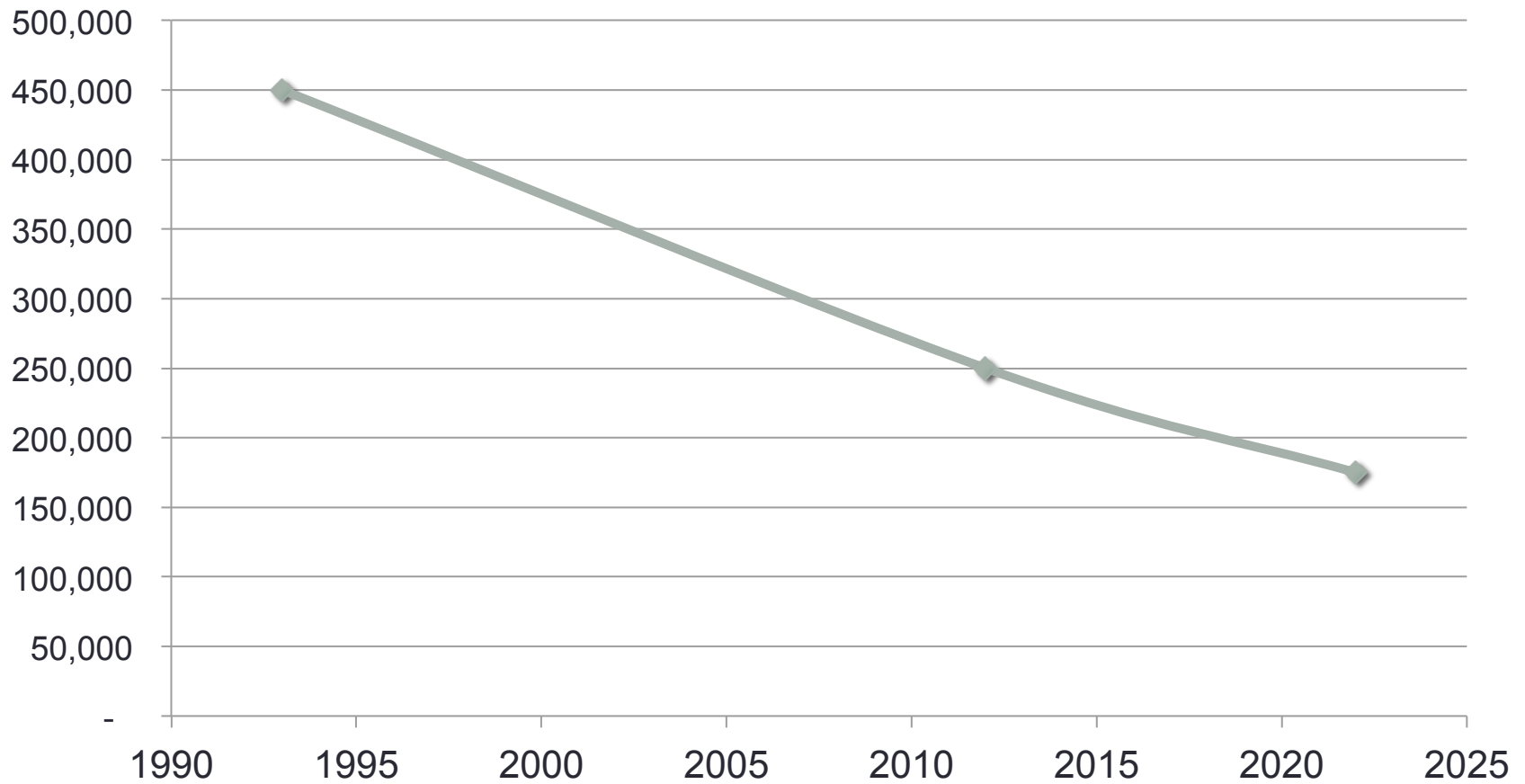
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Key take aways:

- 21st C technology is driving down injuries
- This technology is being applied in four ways
- We should train ourselves to interpret injury risks in terms of potential technology impact

Long Decline in Serious Injuries

Injuries over 30 days



Manufacturing 1993 - 2012

- Employment declined 33%
- Serious injuries declined 63%

Worksite improvements responsible for half the reduction in serious injuries!

Coming in Agriculture.....

- Robotic apple pickers
- Automatic deboners

*Will make up for shrinkage in low wage
immigrant workforce*

What 21st C Technology Does – Patient Lifting

- Predict
 - Will the task demand special handling?
- Real Time Monitoring
 - Is the body arrayed correctly?
- Assistive
 - Is only one worker needed?
- Robotics
 - Are no workers needed?

Vehicular – on and off road

- Predict
 - Weather conditions for work?
- Real Time Monitoring
 - Driving behavior, proximity alerts
- Assistive
 - Manuevering, parking, collision avoidance
- Robotics
 - Autonomous vehicles/carts

How to Anticipate Advances

- By Broad categories of work (such as vehicle use)
- By most severe injuries
- By less severe, more common injuries

Wide Distribution of Risks - Vehicles

Sector	% MV
Heavy Const	5%
Excavation	10%
Stores	2%
Towing	20%
All Trucking	18%
Trucking Other	24%
Trucking Long D	21%

10 Situations = Serious /Fatal Risks

Lockout/Tagout

- • **Confined Space Entry**
- • **Working at Elevations/Fall Arrest**
- • **Machine Guarding – Barricades**
- • **Operations of Mobile Equipment**
- • **Suspended Loads**
- • **Equipment and pipe opening**
- • **Hot work permits**
- • **Excavations, trenches**
- • **NFPA 70E – Arc Flash Protection**

Lesser risks - Strains /exertion

Wearable monitoring devices

- “DorsaVi assessors simultaneously collect video and sensor data which paints a detailed picture for the ViSafe analysts to review and pinpoint unsafe work practices that may lead to injury. “

Who is tracking these advances?

- Partnerships between loss control departments and technology centers
 - Missouri Employers Mutual
 - Texas Employers Mutual

Thanks!

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