ERA Accident Statistics 2022

Version 1, Status March 2024



Basic information about ERA accident statistic







ERA - European Rental Association Study

Joint development of the industry accident statistic for reporting, analytics and
benchmarking and definition of "accident hot spots" for best practice collection

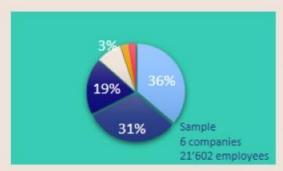
"from the industry for the industry"

531 Accidents



14.4 LTI

531 accidents leading to an overall 23'245 lost working hours with an average of 6 lost working days per accident



89% employees from 4 companies

- Overall, 6 companies participated and delivered data. The sample is impacted by 4 companies covering ~ 90 of the total population.
- · From two participants fragmented data only
- · No data from one group member

19 European countries covered

Support and data from 9 rental companies and associations

7 rental companies located in 19 EU countries are participating within the study











Denmark







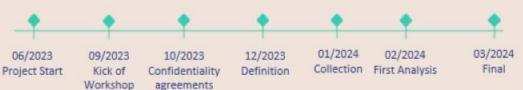


fragmented

Support

Support

Project timeline



Accident frequency and LTI with major deviations from highest to lowest value



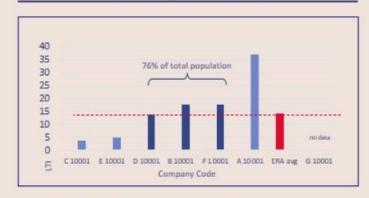
Consolidated LTI [#/1 Mio Workinghours - 2022]

14.4

- The overall average of the industry sample is on an LTI level of 14
- Sample is covering ~22'000 employees, 531 accidents and ~32'500 lost working hours

Solid safety performance

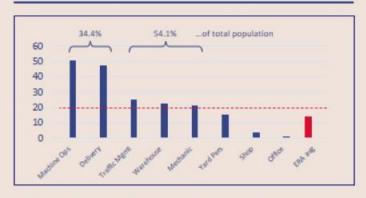
Company Comparison LTI [#/1 Mio Wh - 2022]



- 76% of total population at a LTI level between 14 - 17
- 10 times difference between the highest (37) to the lowest (3.8) overall LTI

Major differences

Function Comparison LTI [#/1 Mio Wh - 2022]

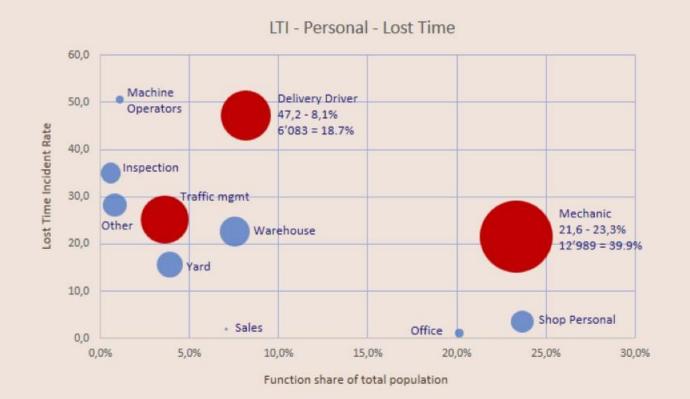


- Significant LTI differences between functions indicate different risk exposures I
- Highest "Machine Ops" and "Delivery";
 Medium "Traffic", "Warehouse", "Mechanics"
 and "Yard Personal

5 critical business functions out of 13

Safety portfolio indicate three main hot spots and focus areas for accident prevention



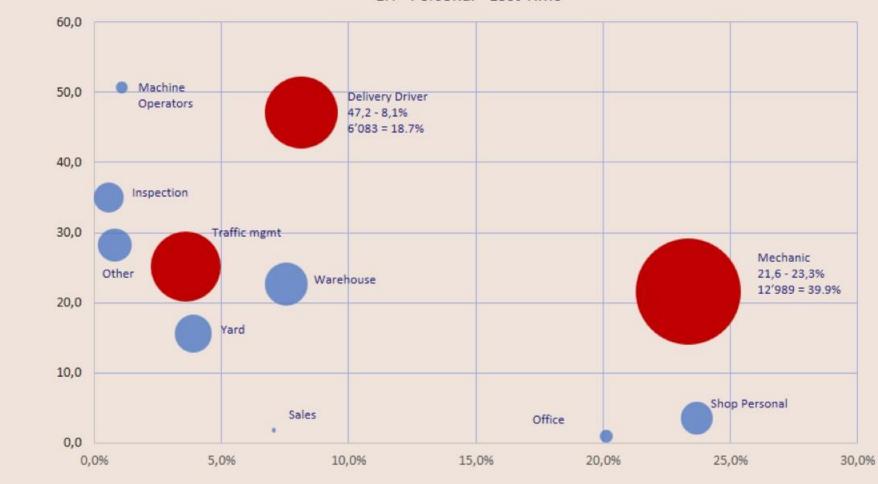


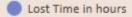
Conclusion

- The portfolio identifies three major buckets or safety hot spots responsible for 76% of total lost time:
 - Delivery Driver with an LTI of ~47, a populations share of ~8% and ~6'000 missing working hours
 - Mechanics with an LTI of ~22, a share of ~23% and ~13'000 missing hours
 - Traffic mgmt. with an LTI of ~23, population share of 3.6% and a total of ~5'700 missing hours
- An addition 16% of the total population are in a low to medium risk environment
 - Warehouse: LTI 22.7, 7.5% share, 2'155 wh
 - Shop: LTI 3.5, 23.7% share, 1'268 wh
 - Yard: LTI 15.6, 3.9% share, 1'614 working-hours

Safety portfolio indicate three main hot spots and focus areas for accident prevention







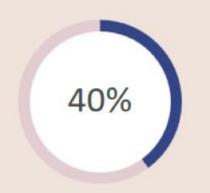
Lost Time Incident Rate

Function share of total population

Share of external accidents increase parallel to function related working share "outside" the company











TOTAL

From 532 accidents 15% are registered outside the company premises.

Which means, that most incidents are within the company perimeters.

DELIVERY

From a total of 140 cases representing 26% of all accidents ~20% happens outside the company.

SALES

Due to the nature of the function 40% of all accidents happens outside of the company and either in traffic, at the customer or construction site.

MACHINE OPS

Most exposed are machine operators working on customer sites with more than half of all cases. Within an 4% accident volume share

TRAFFIC MGMT

Due to the nature of this function the majority of accidents happens outside the company premisses

80% of the total "Lost Time" from three functions with an average of ~8 lost working days per accident



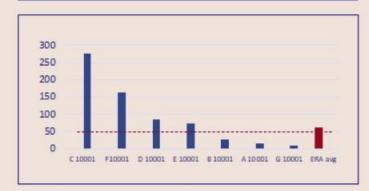
Lost Time Indicator [Working days / #]

~ 8 days / Accident

- The overall lost time in the sample is 32'541 hours for 532 accidents with gives an avg. of ~60 hours lost / accident
- Appling 80:20 rule → 26'000h:107# → 240h or 30 working days

Medium to high severity

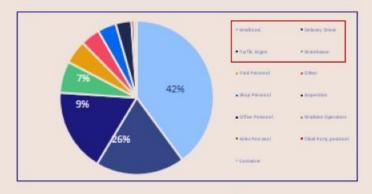
Company comparison
[Working hours / #]



 Major span between highest to lowest value impacted by most likely by reporting, local insurance systems and accident type

Major deviations

Lost time per function [#/1 Mio Wh]

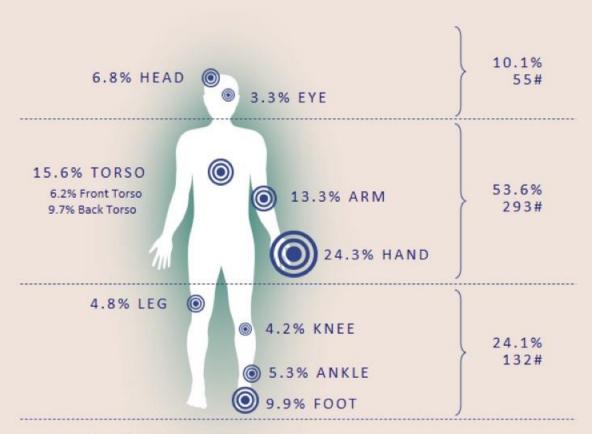


- 76% share of total lost time by the three functions of "Mechanic" and "Delivery Driver" and "Traffic Management"
- "Warehouse", "Yard" and "Shop" personal count for another ~15% share

Three functions most exposed

Broad variety of impacted body parts





- 3.8% MULTIPLE (21#)
- 8.4% OTHERS (#46)

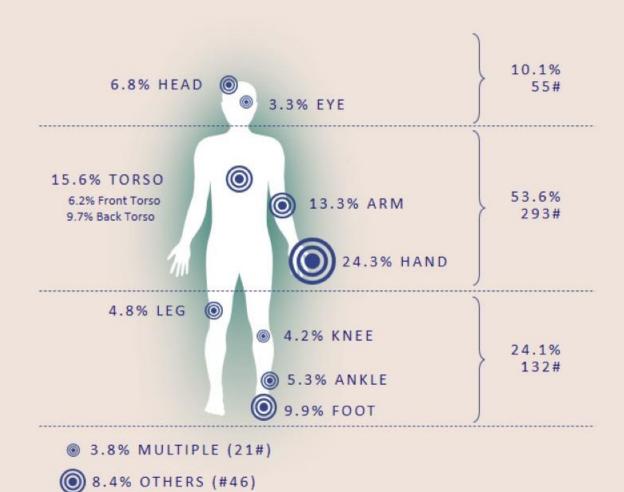
Summary and Conclusion

- The overall accident portfolio is showing a broad variety of impacted body parts
- In fact, every body part can be potentially impacted by an accident
- > 1/2 of all accidents are in the center body sections
- Single most affected areas with 2/3 of all accidents are hand, arm, foot and back torso
- "Hand-Arm System" is the area with most accidents and represent ~40% of the sample
- Broad variety and different function related focus areas and accident hot-spots

First indication only

Broad variety of impacted body parts





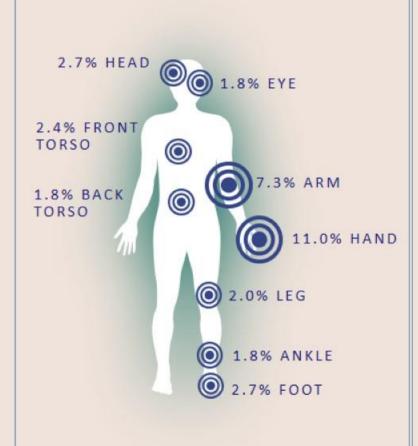
N = 547 Accidents

Four functions and related key accidents count for ~80%



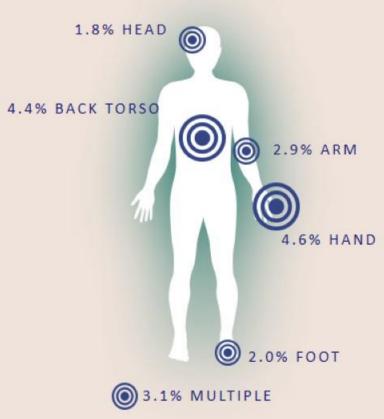


[N=189 from 532 accidents]



2# Delivery - 26.3% share

[N=140 from 532 accidents]



3# Warehouse - 11% share

[N=59 from 532 accidents]



4# Traffic Mgmt. - 7.5% share

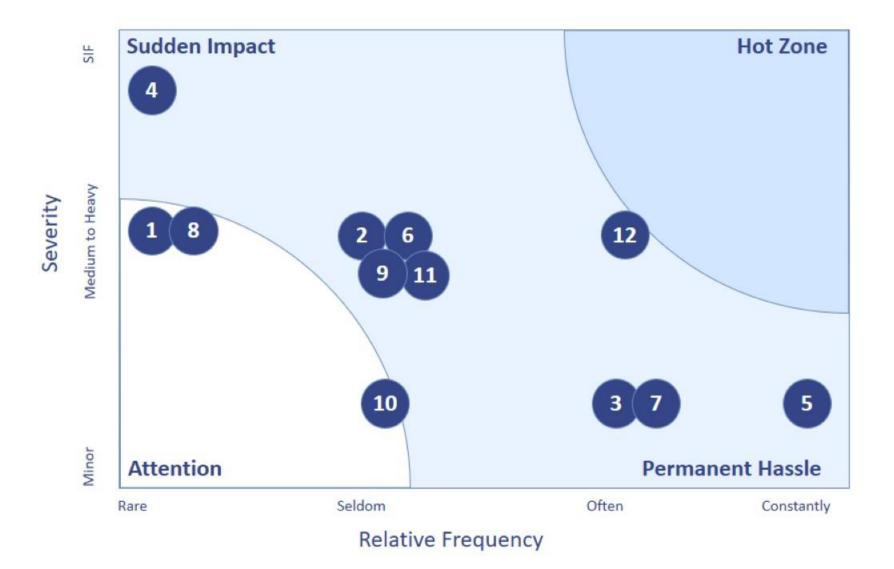
[N=40 from 532 accidents]



Remark 1: Selection method → Top 10% of "function vs body part" matrix = 18

Accident Root Cause Portfolio - from previous workshop





Top root causes

- Contact & Collision
- 2. Slips & Trips & Falls
- 3. Minor Trapping
- 4. Heavy Crushing
- 5. Cuts & Bruises
- 6. Shocks
- 7. Substance splashes
- 8. Tipping
- 9. Falling objects
- 10. Jump off
- 11. Traffic
- 12. Eye

MECHANIC: key accidents

Function - Body part - Root cause - Severity



		POTENTIAL ACCIDENT EFECTS	POTENTIAL ROOT CAUSE	SEVERITY
1	HAND	Bruises, cuts Fractures	 Minor trapping or contact & collision Tools and equipment, hand-held tools Shocks due to electrical, hydraulically, mechanical impact 	low-med
2	ARM	Bruises, cuts Sprains, fractures	 Minor trapping Tools and equipment, hand-held tools Slips-trips-falls 	low-med
3	HEAD, EYE	Impact, bruises Eye: scratches on cornea, splinters, burns	 Substance splashes Chemical substances, particles 	med-high
4	FRONT & BACK TORSO	Sprains, fractures	 Slips-trips-falls Low level, 1-2 steps, uneven ground, wet, stumble over objects 	med-high
5	LEG - ANKLE - FOOT	Sprains, fractures	 Slips-trips-falls Low level, 1-2 steps, uneven ground, wet, stumble over objects 	med-high
	•••	•	•	•••

DELIVERY: key accidents

Function - Body part - Root cause



		POTENTIAL ACCIDENT EFECTS	POTENTIAL ROOT CAUSE	SEVERITY
1	HAND	Bruises and cuts Fractures / sprains	 Minor trapping - tool or equipment Tipping while loading or unloading 	low-med
2	BACK TORSO	Musculoskeletal issues	 Manual handling Heavy weight and repetition 	med-high
3	ARM	Bruises and cuts Fractures / sprains	 Minor trapping - tool or equipment Tipping while loading or unloading 	low-med
4	FOOT	Fractures / sprains	 Slips-Trips-Falls, low level, 1-2 steps, uneven or slippery ground, stumbling over objects Tipping while loading or unloading Jump-off the vehicle 	med-high
5	HEAD	Impacts, bruises, eye-injuries	Substance splashes (chemicals, water, particles)	med-high
6	MULTIPLE	Bruises, fractures Depending on objects - bruises, cuts, fractures	 Contact & collision at any body part between equipment and person Falling parts, objects Traffic accidents 	any

OTHER: key accidents

Function - Body part - Root cause



POTENTIAL ACCID	ENT EFECTS	POTENTIAL ROOT CAUSE	SEVERITY
		, or entire to or or to to	

WAREHOUSE

1

HAND

· Bruises and cuts

Fractures / sprains

- · Minor trapping or contact & collision
- Tools and equipment, hand-held tools
- · Tipping, loading or unloading

med

TRAFFIC MGMT

2

FOOT

Fractures / sprains

- Slips-Trips-Falls, low level, 1-2 steps, uneven or slippery ground, stumbling over objects
- Tipping while loading or unloading
- Jump-off the vehicle

med