

Making the industry safer - Reducing accidents in FVL

2025 incidents & analysis

July 2026



ECG

The Association
of European
Vehicle Logistics

About ECG

ECG, the Association of European Vehicle Logistics, has been the voice of the Finished Vehicle Logistics industry in Europe since 1997. ECG represents the interests of more than 200 member companies and partners, from family-owned SMEs to multi-nationals, and is the major champion of the European vehicle logistics sector.

ECG represents all transport models at EU level- road, rail, maritime and fluvial. ECG members provide transport, distribution, storage, preparation, and post-production services to manufacturers, importers, car rental companies, and vehicle leasing operators in the 27 Member States of the European Union as well as Norway, Switzerland, Turkey, the United Kingdom, and beyond. They own or operate more than 470 car-carrying ships, 14,000 purpose-built railway wagons, 23 river barges, and 26,000 road transporters. As a major employer, the finished vehicle logistics sector plays an important role in contributing to the economic success of the European Union. Today, ECG members have an aggregate turnover of €21.3bn and their economic impact on companies associated with the sector is estimated at €56bn. **More than 210,000 Europeans are employed directly by our members.**

About the Health & Safety Working Group

The ECG Health & Safety Working Group (H&S WG) was established in 2018 with the aim of improving driver safety in Finished Vehicle Logistics (FVL) and road transport. Initially, the group focused on addressing the risk of falls from height and issued key recommendations for their prevention. The Working Group is structured into five sub-groups, with Sub-Group 1 (SG1) and 4 (SG4) currently active.

SG1 is dedicated to collecting and analysing data on **severe accidents** and **near misses** that occur during the loading and unloading operations on trucks. Its main objective is to identify emerging trends and guide the efforts of other sub-groups.

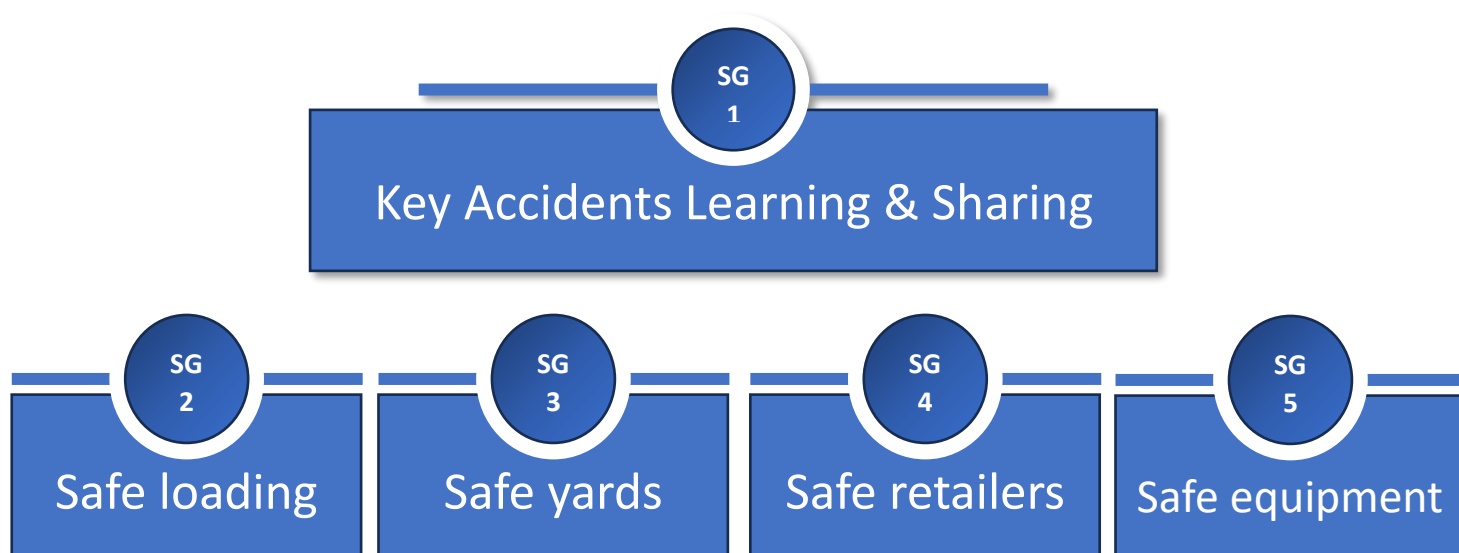
SG2 is tasked with developing and enhancing loading and unloading standards for car transporters. This sub-group produced the [ECG Guidelines – Safe Loading Process](#), which are available in 14 European languages and use visuals and brief instructions to ensure that drivers follow safe loading and unloading practices.

SG3 focused on creating standards for safe environments within hubs and compounds, resulting in the publication of the [ECG Guidelines – Safe Yard Design](#).

SG5 conducts risk assessments and evaluates the safety features of car transporters, with the goal of improving the equipment used in FVL.

The latest initiative, led by SG4, focuses on addressing safety challenges faced by drivers during deliveries or collections at dealerships and other remote locations. This work of the sub group was prompted by a growing number of incidents, particularly where drivers are required to unload vehicles on public roads amidst active traffic. In response, SG4 established a structured [retailer escalation process](#) to support operators in managing safety issues at retailer sites.

Health & Safety Working Group organisational chart





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List of Abbreviations

3PC	3 Points of Contact
EPB	Electronic Parking Brake
FVL	Finished Vehicle Logistics
H&S WG	Health & Safety Working Group
LSP	Logistic Service Provider
OEM	Original Equipment Manufacturer
SG	Sub-Group

Table 1. List of abbreviations

Terminology (how the report translates members' inputs)

Car drive off	Driver loses control of the vehicle while driving due to negligence or mechanical fault.
Car roll off	A car without a driver rolls off an inclined plane, e.g. from an angled truck deck, or from parking on a slope, due to improper parking or securing (chocking/lashing).
Collision	Incidents involving a vehicle during a manoeuvring or stationary phase, regardless of the location.
Entrapment between mobile parts of the truck	While working on or by the truck, the driver gets caught between two elements of the truck (pinch, compression of limbs...).
Equipment failure/wrong usage	The origin of the incident comes from a piece of equipment, not necessarily limited to the truck, not working as expected or not used in a proper manner.
Fall from height	The driver falls from the truck deck, or from any raised platform or support.
Impact/Contact	Driver hits a body part against a fixed structure of the truck/trailer
Loading/Unloading	An event happening on the truck, by the truck or on the ramp while loading or unloading a vehicle.
On road accident	A road accident happening in any moment to a driver during their working hours.
On road to dealer accident	A road accident happening to a driver heading to a dealer.
Others	Incidents not falling in the Loading/Unloading category.
Slip, Trip and Fall	A driver slipping or tripping over a part of the truck.
Strains and Sprains	Ergonomic injuries that occurred from material (e.g. chocks/lashes) /machine (e.g. pulling out the ramp) handling.

Table 2. Terminology

1 Overview

This report presents a consolidated analysis of 91 safety incidents reported by ECG members covering the 2025 reporting cycle. Incidents were submitted through the shared reporting portal by Logistics Service Providers (LSPs) and Original Equipment Manufacturers (OEMs) operating across 15 European countries.

The dataset captures incidents across the full spectrum of finished vehicle logistics operations, from loading/unloading to yard manoeuvring and on superstructures and trailers, to road transport and delivery to dealer. Severity is recorded across four levels: *Near Miss*, *Less than Serious*, *Recoverable but Serious*, and *Fatal*.

Out of 91 records, 51 were related to loading/unloading operations. Within the *Loading/Unloading* group, *Slip, Trip and Fall* are the most frequent circumstance (17 incidents), followed by *Car Roll-off* (7) and *Collisions* (7). *Collision* is the leading overall incident circumstance across all categories combined (26 incidents, of which 19 occurred outside loading/unloading contexts), underscoring the significant road safety exposure of the industry. *Slip, Trip and Fall* are disproportionately concentrated in the loading/unloading context (17 out of 21), pointing to the hazardous nature of trailer and superstructure surfaces as a working environment. The high proportion of *Near-Miss* events, 60%, is a positive indicator of reporting culture, but also highlights the volume of precursor events that could escalate under different circumstances.

In table 1, a summary of the main incidents report evidence, detailed in the next chapters.

Feature	Loading/Unloading	Others (Transit/Yard)
Primary Risk	Personal Injury (Slips/Falls)	Asset Damage and Road Safety
Highest Severity	Serious Recoverable	Fatal
Primary Location	Trailer Decks/Structure	On the Ground (Roads/Yards)
Critical Factor	Equipment Handling (Straps/Winch)	Environmental (Ice) and Transit (Fire)

Table 3. Incidents summary

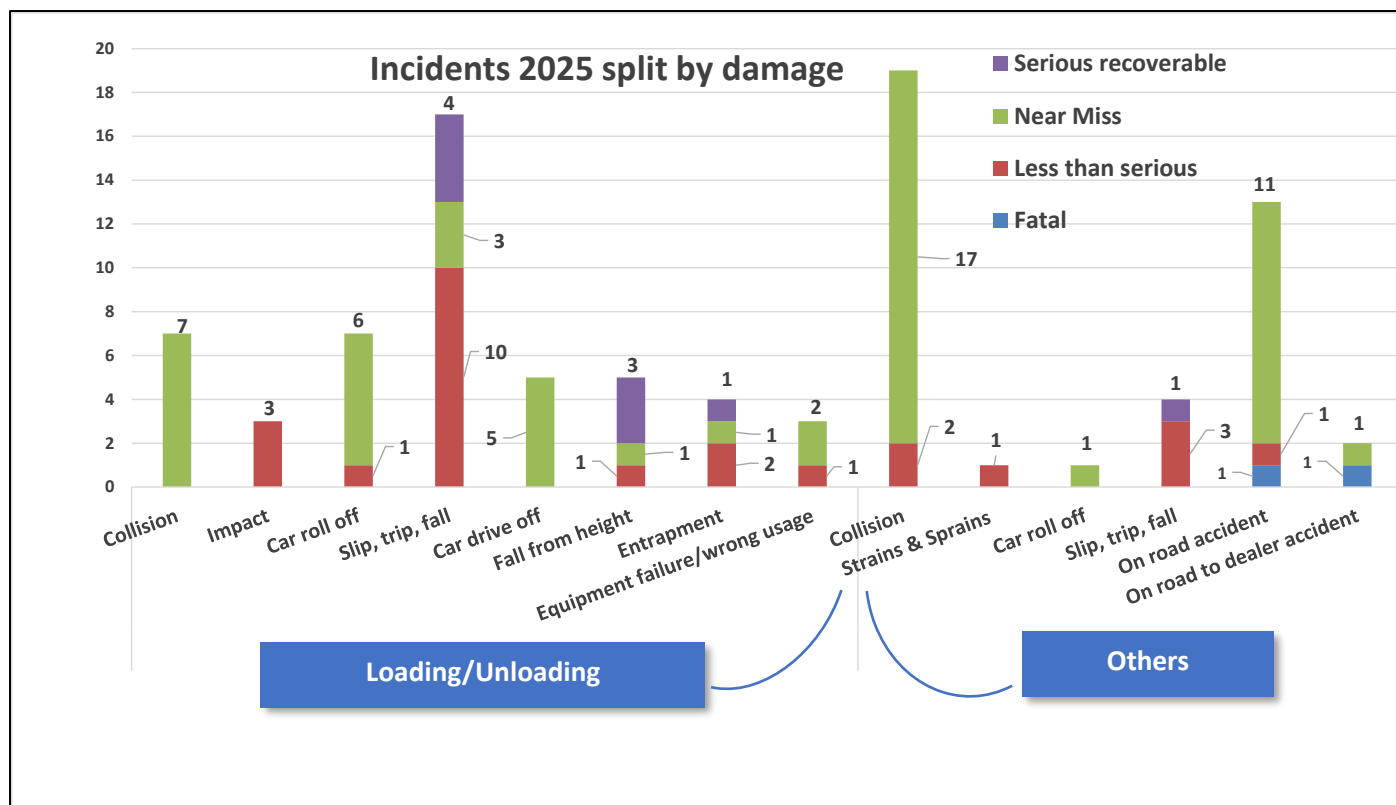


Fig. 1. Incident 2025 split by damage

2 A focus on *Loading/Unloading* category

This category accounts for **51 incidents** and is primarily characterized by physical risks to the operator during the manual stages of vehicle handling.

2.1 Where incidents happened

Confirmation of a multi-level risk environment (ground + height) considering the distribution of the events, which see deck-related operations as primary risk cluster but still strong exposure on ground-level activities ($\approx 27\%$).

Top locations:

- Trailer upper deck: **17**
- Trailer lower deck: **17**
- Ground: **14**
- Loading ramp: **3**

2.2 When incidents happened

Risk is evenly distributed across all operational steps, not limited to loading/unloading itself but the preparation phases are equally critical.

Activities:

- Loading car: **13**
- Unloading car: **13**
- Deck set up: **13**
- Fastening car: **4**
- Others: **8**

(Truck check, walking on the decks...)

2.3 What happened

The dominant risk is represented by ***Slip, Trip and Fall*** (33% of incidents), when drivers slipping or tripping while navigating the truck structure.

Even "low" falls (from 0.5m to 1m) from trailer decks frequently result in "Serious recoverable" injuries, often requiring ambulance transport and hospital tests.

A significant number of incidents occur while operators are adjusting the height of the upper platforms (both on the truck and trailer).

Inadvertent operation of lift/lower controls and failure to secure hydraulic jacks correctly have led to asset damage and operator injury.

Roll-off" incidents (cars rolling off the ramps) are a recurring trend, often triggered by **winch failures or late braking**. These are currently categorized mostly as "Near Misses," but represent high-potential severity.

There is a notable trend of **"pinched fingers"** and hand impacts during the "securing/strapping" phase, often linked to non-use of gloves or slips of the ratchet strap.

3 A focus on *Others* category

This category accounts for **40 incidents** and covers the highest-severity outcomes, primarily focused on yard maneuvering and road transit.

3.1 Where the incidents happened

While the "Others" category has a higher percentage of "Near Misses," it contains **all of the fatal incidents**, and transit remains the highest-risk phase for driver life safety.

Accidents in the yard are the most frequent:

- On the ground: **31**
- Truck decks: **6**
- By the truck: **3**

3.2 What happened

Collision is the leading circumstance (nearly 50% of this category), mostly occurring while maneuvering cars in the yard and categorized as "Near Misses: this suggests frequent but low-severity impacts that primarily affect operational efficiency and vehicle quality (KPIs) rather than safety.

A specific trend of **vehicle fires during transport** was identified (5 cases). Incidents involve cars catching fire on the trailer while driving on highways. Drivers often attempt to extinguish these using on-board extinguishers, but the data suggests these fires are difficult to control once started, leading to the loss of multiple vehicles.

"Ice" is a recurring keyword for this category. It contributes both to drivers slipping while exiting the cabin and to collisions due to increased following distances and reduced traction in yards and on highways.

4 Incident trends

Comparing the 4 main incident categories over the years (Fig. 2), including *Loading/Unloading and Others*, a clear trend is not visible although *Slip, Trip and Fall* with an oscillating progress, have seen a consistent decline from a peak of 50% in 2019 to 25% in 2025. Furthermore, a downward trend in cars rolling off equipment is taking shape, dropping from a high of 20% in 2021 to 8% in 2025.

In Table 4, the complete incident share across the categories.

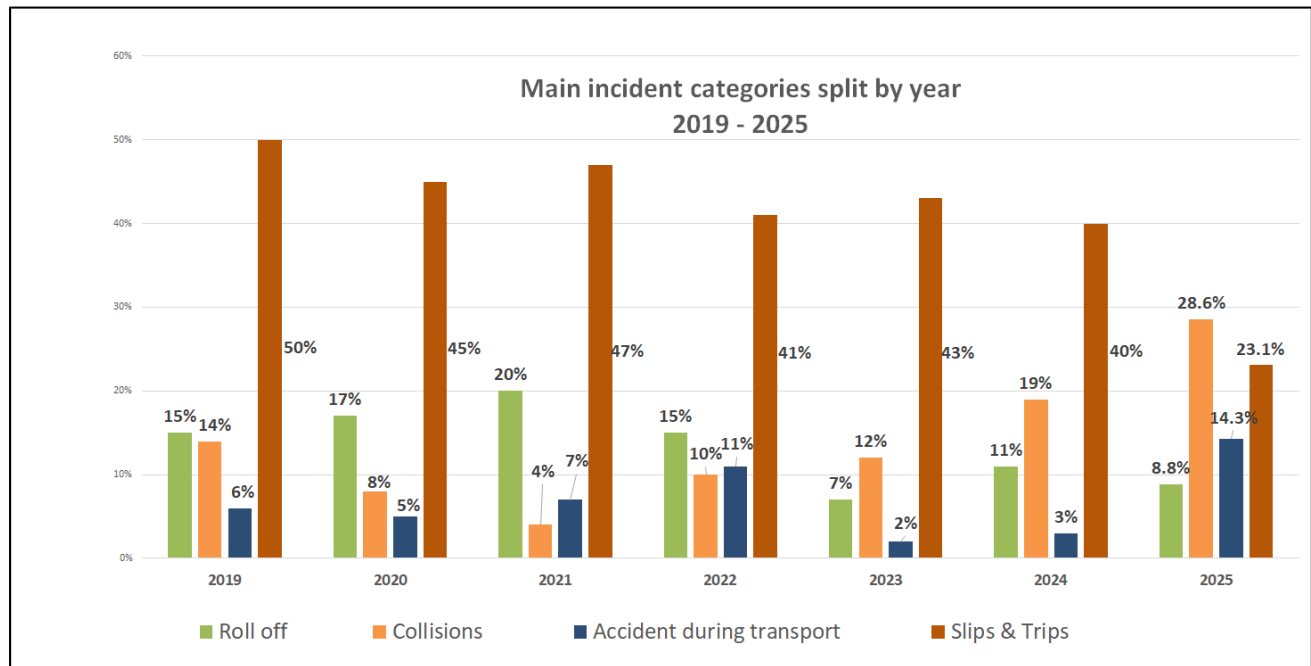


Fig. 2. Main incident categories split by year.

	Slips & Trips	Impact injury	Material/Machine handling/failure	Roll off	Fall from height	Drive off	Collisions	Accident during transport	Accident during delivery at retailers	Entrapment between mobile parts of truck	Fire	Strains & Sprains
2019	50%		2%	15%	13%		14%	6%				2%
2020	45%	8%	6%	17%	9%	2%	8%	5%				
2021	47%	4%	2%	20%	4%	2%	4%	7%	4%	6%		
2022	41%	2%	10%	15%	2%	2%	10%	11%		8%		
2023	43%	4%	4%	7%	10%	3%	12%	2%	7%	4%	1%	3%
2024	40%	4%	4%	11%	5%	4%	19%	3%	1%	5%		5%
2025	23%	3%	3%	9%	6%	6%	29%	14%	2%	4%		1%

Table 4. Incident share across the categories Loading/Unloading and Others

5 Severity breakdown

Across the two categories Loading/Unloading and Others.

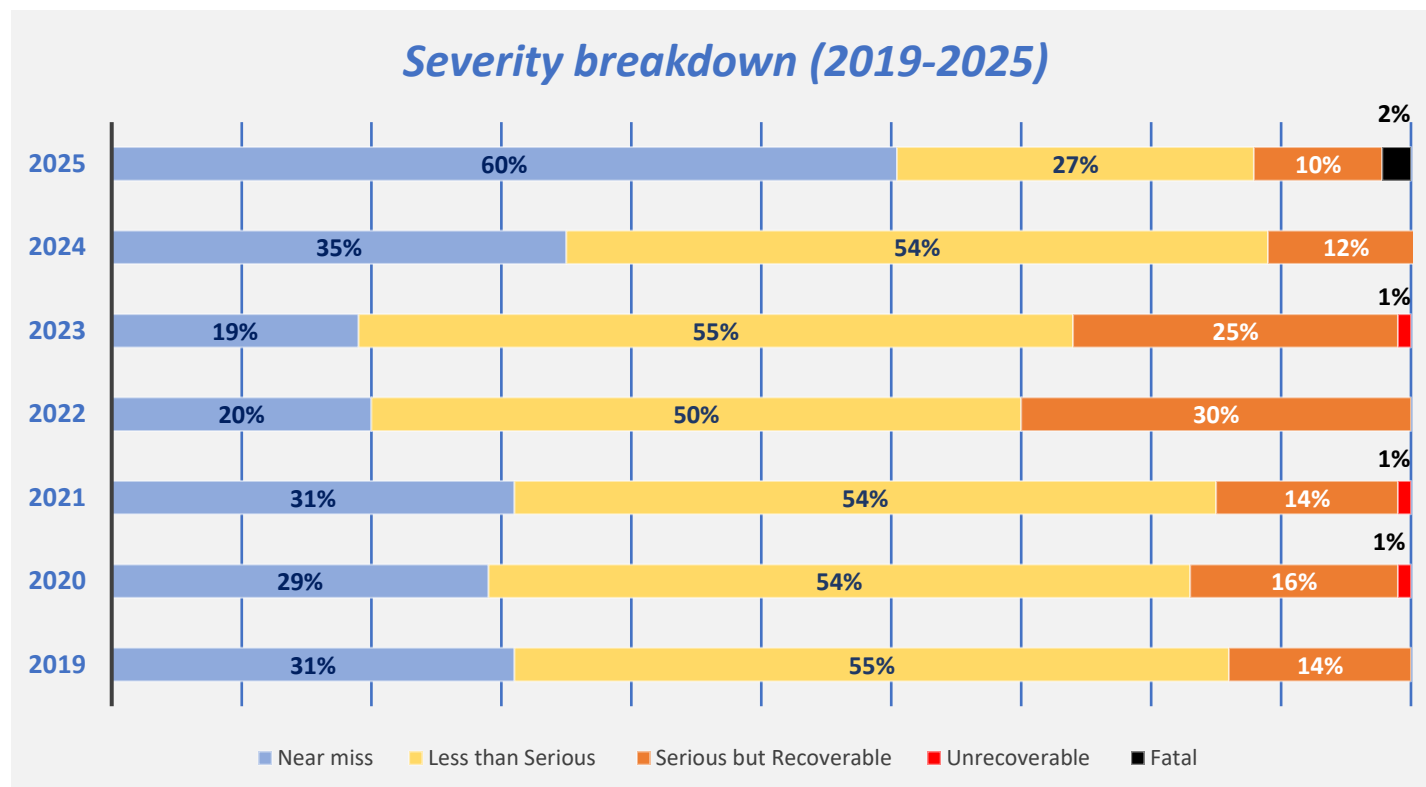


Fig. 3. Severity breakdown (2019-2025)

Near miss: From 2019 to 2024, the share fluctuates between ~0.19 and 0.35, without a clear upward or downward trend. In 2025, there is a significant shift in 2025, but since it is only one data point, it cannot yet be considered a stable trend.

Less than serious:

Very stable from 2019 to 2024, consistently around 0.50–0.55; in 2025, it drops sharply to ~0.27. This decrease mirrors the increase in *Near miss* in 2025, indicating a redistribution across categories rather than a gradual trend.

Serious but recoverable: Oscillating values not indicating a consistent trend.

Unrecoverable: Present only in some years and not reported in 2025.

Fatal: 2 on road incidents recorded in 2025.

6 Breakdown of high-risk incidents

The following section provides an in-depth breakdown of the different types of high-risk incidents reported in 2025, across the two categories Loading/Unloading and Others. For the purposes of the report, high-risk incidents are defined as **those which occur very frequently and/or can cause potentially serious injuries when they do occur.**

6.1 Slip, Trip and Fall

Most of the incidents that occurred can be linked to the lack of compliance with [ECG Guidelines - Safe Loading Process](#). The Guideline provides key indications on how to minimize the risk of such incidents especially during deck preparation, walking, standing and accessing decks. Although evenly distributed over the loading/unloading activities, still this year upper deck preparation reports the highest number of incidents, represented by slip and limb stuck in a deck hole, as indicated in Fig. 4 and 5.

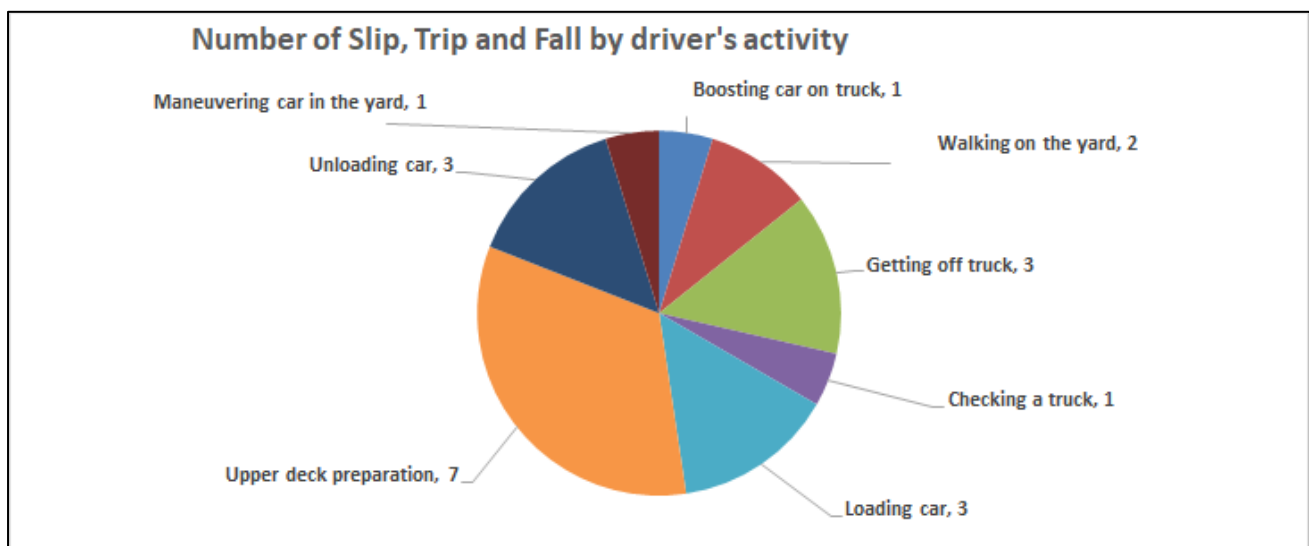


Fig. 4. Number of Slip, Trip and Fall by driver's activity

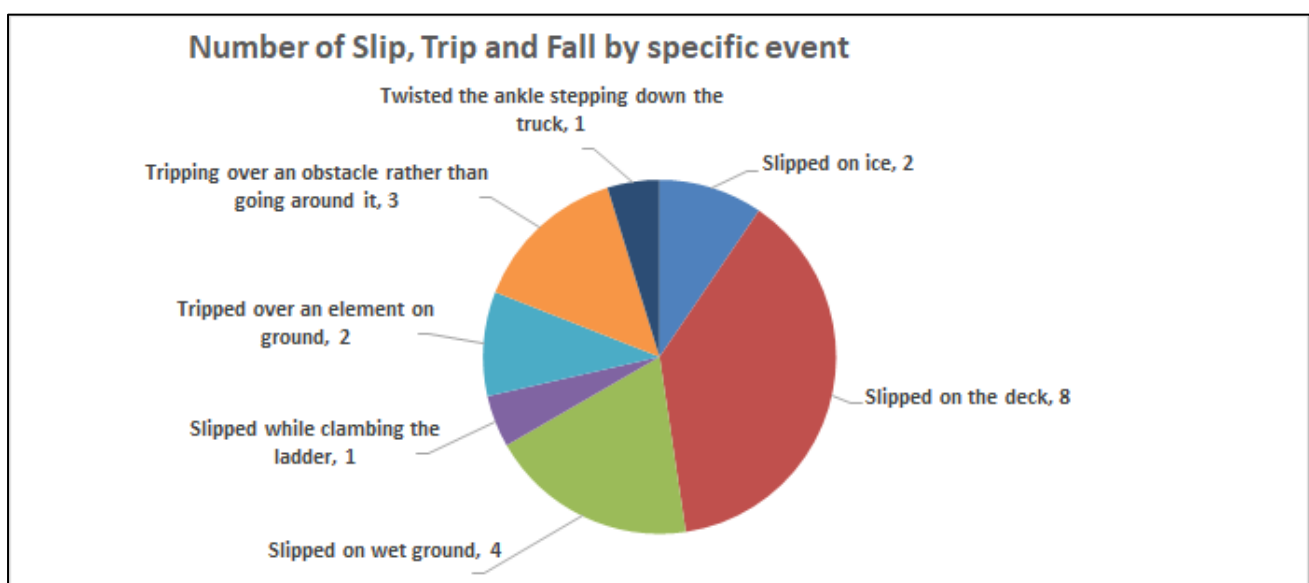


Fig. 5. Number of Slip, Trip and Fall by specific event

6.2 Roll-offs

Roll-off events — where a vehicle being loaded or unloaded rolls or moves uncontrolled off a deck — were reported 8 times. 7 were classified as *Near misses* while one resulted in a *less-than-serious* injury (door/pole contact). This suggests that existing reflexes and barriers generally containing the consequences, but the frequency indicates a persistent procedural risk.

Common root causes identified across roll-off incidents include:

- Failure to apply handbrake or engage neutral gear correctly before adjusting decks.
- Winch or equipment failure during loading, requiring the driver to intervene by entering the moving vehicle.
- Failure to follow established securing sequences.

6.3 Falls from height

Five incidents involved a fall from an elevated surface (trailer or superstructure platforms, ladders, ramps). Two resulted in fractures classified as Recoverable but Serious. All incidents describe drivers working on vehicle transport platforms who, during loading or unloading operations, lost balance or control—due to factors such as broken or missing safety equipment, slippery or unstable surfaces, or momentary inattention—resulting in falls from low heights and injuries that required medical attention.

6.4 Drive-offs

All five drive-off incidents in the loading/unloading category share a notable commonality: 3 of the 5 explicitly describe Ford F-150 pick-up trucks with a sticky or jammed accelerator pedal causing the vehicle to accelerate uncontrollably during unloading. The fourth and fifth incidents involved cardboard floor protection becoming lodged between the accelerator and brake pedal causing vehicle to move uncontrollably.

6.5 Collision

Twenty-six collisions occurred (24 Near miss and 2 Less than serious), of which sixteen during car movements on the yard.

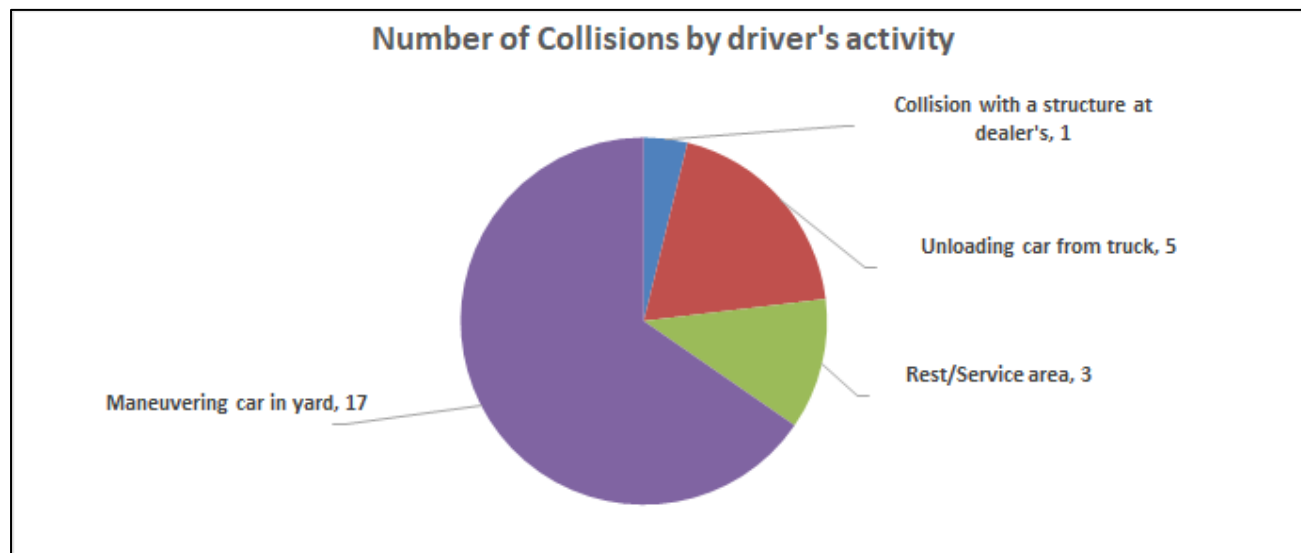


Fig. 6. Number of Collisions by driver's activity

6.6 Transport incidents

Fifteen incidents involved accidents during the road transport phase. Severity within this group is more serious than in the *loading/unloading* category: both fatal incidents are classified here, and one *less-than-serious* injury was also recorded. The remaining twelve are *Near miss*

Causes of Incidents include insufficient safety distance, a structural failure in which an entire upper deck assembly collapsed onto the vehicles on the lower deck during transit and three events where a fire started on the load.

6.6.1 Analysis — Fatal Incident 1

This incident involved a third-party vehicle (a van) colliding with the car transporter while it was in motion on the road. The nature of the collision — a van impacting the carrier — suggests the truck driver may have had limited ability to avoid or mitigate the outcome. The injuries documented (head, back, eyes, torso, face) indicate extensive multi-body trauma consistent with a high-energy road collision. No environmental factors were identified as contributory.

The incident highlights the inherent road risk faced by car carrier drivers, who operate large, high-profile vehicles on public roads and are exposed to third-party driver behavior beyond their direct control.

6.6.2 Analysis — Fatal Incident 2

This incident involved the car carrier truck colliding with a tow truck that was parked on the side of a highway. The collision resulted in a fire that engulfed the vehicle, leading to the driver's death. The injury recorded (head) is consistent with impact trauma. The post-incident countermeasures described by the reporting company — a safety campaign focused on driving times, rest, and road attention — suggest that driver fatigue or inattention may have been considered as contributing factors, though this is not explicitly confirmed in the submission data.

The involvement of a low-cabin tractor is notable. Low-cabin vehicles (also referred to as flatnose tractors) are common in European car carrier operations. Their cab geometry differs from conventional high-cabin trucks and may affect forward visibility of low-profile stationary objects at road level, particularly in highway conditions.

The positioning of the tow truck on the side of the highway — potentially without adequate warning markings — represents an external hazard. The combination of high vehicle speed on a highway, a parked obstacle, and the subsequent fire demonstrates the potential for catastrophic outcomes from what may appear to be a relatively routine road scenario.

7 Concluding Remarks

ECG Members are encouraged to adopt, share and improve the ECG standards in order to achieve improvements year on year. Here below the takeaways of this report. and safety standards.

- **Loading and Unloading Remains the Highest-Frequency Risk Zone**

Nearly half of all reported incidents (51 of 91) occurred during loading or unloading. Slip, Trip and Fall is the leading cause in this context, producing the highest concentration of serious injuries across the entire dataset. Members should prioritize deck housekeeping, surface inspection in adverse weather, and structured movement protocols on elevated working surfaces.

- **Road Transport carries the highest consequence risk**

Both fatal incidents and the most complex multi-vehicle collision scenarios occurred during road transport. The industry's road exposure — including third-party road users, highway driving, and delivery-to-dealer routes — is a key risk vector that cannot be controlled solely through internal procedures. Defensive driving, rest time compliance, and route hazard awareness are the primary mitigation levers available to members.

- **Collision is the most frequently reported circumstance overall**

With twenty-six incidents across all contexts, collision is the leading circumstance in the dataset. Car-to-car contacts in yard environments dominate, but road-based

collisions carry higher severity potential. Both categories warrant continued management attention.

- **Near-miss reporting culture is an asset**

The high proportion of near-miss reports (55 of 91 incidents with severity data, or 60%) reflects a functioning safety reporting culture across the membership. This data is valuable precisely because it surfaces precursor events before they escalate. The association should continue to encourage near-miss reporting and should treat this volume not as reassurance, but as intelligence about systemic risks requiring pre-emptive action.

- **Specific equipment vulnerabilities are documented**

Moveable deck ramps inside superstructures (cited in 5 item-failure incidents), safety cables on posts (2 incidents), and winch failures (1 incident) are the most frequently cited equipment items in failure-related events. Members should review inspection and maintenance regimes for these components.

- **Fatalities demand continued industry-level attention**

The two fatalities recorded in 2025 are a sobering reminder of the potential consequences of road transport operations. Both involved experienced truck drivers in standard operational scenarios — not exceptional circumstances. The industry should continue to invest in driver welfare, fatigue management, and systemic road safety measures, while acknowledging that some exposure to third-party risks cannot be eliminated unilaterally.

8 References

Main references to consult and be up to date on ECG operational and safety standards.

ECG guidelines – safe loading process	Link	Illustrate step-by-step how to safely perform loading and unloading operations.
ECG guidelines – safe yard design	Link	It describes in detail how a safe yard should be designed in order to be safe for operations. It contains 4 chapters on: site entrance, truck loading/unloading area, yard roads and load preparation areas.
ECG guidelines – safe retailers	Link	Retailer escalation process to address safety issues encountered by drivers when delivering (or collecting) loads at dealerships and other remote delivery locations.
ECG Operations Quality Manual	Link	This manual is intended to be used as a management/supervisory guide when training staff on handling procedures.

Table 5. ECG standards reference

This report was produced on behalf of the association based exclusively on incidents submitted by members. All statistics and observations are drawn directly from the submission data. No comparative trend analysis has been performed in the absence of a validated multi-year dataset. Members are encouraged to submit all future incidents — including near misses — to ensure the collective dataset continues to represent the broadest possible picture of industry safety performance.