Jackknife and Underride Crashes in 18-Wheeler Crash Claims

Underride and jackknife crashes are two kinds of tractor-trailer collisions that frequently cause severe injuries. In an underride crash, a smaller vehicle slides partly or fully under a trailer or truck body. A jackknife occurs when the tractor and trailer fold toward each other, often across several lanes. Each type raises its own evidence questions for a truck accident lawyer.

Why underride crashes are so dangerous

According to the Insurance Institute for Highway Safety (IIHS), large trucks are taller and have greater ground clearance than cars, so a lower vehicle can slide beneath a trailer, and strong underride guards can stop that from happening. If a car goes under a trailer, the trailer can intrude into the passenger compartment, bypassing much of the crash protection built into the front of the car.

Rear impact guards on trailers are governed by Federal Motor Vehicle Safety Standards No. 223 and No. 224, found at 49 CFR 571.223 and 571.224, and 49 CFR 393.86 covers rear impact guards on trucks in service. IIHS reports that NHTSA finalized a stronger rear guard rule in 2022. In a June 2024 report to Congress under the Bipartisan Infrastructure Law, NHTSA put the annual average at 89 deaths among light passenger vehicle occupants in two-vehicle crashes where the passenger vehicle strikes the side of a trailer or semi-trailer and underrides it. A truck crash attorney will want to know whether the truck accident attorney consultation trailer had a compliant guard and what condition it was in.

What causes a jackknife

Most jackknife crashes begin with a loss of traction. State commercial driver manuals explain that locked trailer wheels make the trailer tend to swing around, which is more likely with an empty or lightly loaded trailer. Hard braking, excessive speed for conditions, wet or icy pavement, poorly adjusted brakes and shifting cargo can each play a part. Federal Motor Vehicle Safety Standard No. 121 covers air brake systems, including antilock brakes, but antilock brakes reduce wheel lockup without eliminating every skid.

Photos of the folded rig show where the vehicles came to rest, not which unit lost control first. A tractor skid and a trailer swing can look alike after the fact, so reconstruction relies on tire marks, ECM speed and brake data, brake adjustment readings and the load records. A truck accident attorney typically asks for the brake inspection history and the bill of lading for that reason.

Rollovers and blocked lanes

FMCSA's Large Truck and Bus Crash Facts 2022 reports that overturn, or rollover, was the first harmful event in 4 percent of fatal crashes involving large trucks. A jackknifed or overturned rig can block several lanes, leading to secondary collisions with vehicles that cannot stop in time. Poor trailer visibility at night is another recurring issue in underride cases, which is why the retroreflective sheeting required on many trailers under 49 CFR 393.11 gets a close look. A commercial truck accident lawyer often reviews the police crash report and scene photos for lighting and visibility problems.

Building the evidence

Responsibility may reach beyond the driver: the trucking company for maintenance and training, the loader for cargo securement under 49 CFR Part 393, and the manufacturer if a guard or brake component was defective. A big rig accident attorney will usually ask that the trailer, the guard and the brake components be preserved before any repairs. Each state sets its own statute of limitations and fault rules, and this is general information, not legal advice or a prediction about any claim.