Why Tire Blowouts Cause Catastrophic Truck Accidents On Georgia Highways

How Heat, Pressure, And Skipped Maintenance Turn A Set Of Wheels Into A Weapon

Imagine driving down I-75 just south of Atlanta. The traffic is heavy, the morning sun is in your eyes, and the 18-wheeler in the lane beside you is doing 70 mph. Suddenly, there is a loud crack like a rifle shot, a black streak whips across the pavement, and the trailer beside you starts to drift. The driver fights the wheel. The truck jerks left, then hard right. Within seconds, what was a routine commute has become a multi-vehicle pileup with crushed sheet metal, shattered glass, and people who will not walk away the same.

A tire blowout on a fully loaded tractor-trailer is not the same as a flat on a passenger car. When 80,000 pounds of steel and freight lose control of one of its eighteen wheels at highway speed, the consequences are almost always severe. At the Law Offices of Gary Martin Hays & Associates, P.C., our Georgia truck accident lawyers have seen how a single failed truck tire blowout can change dozens of lives in a single afternoon.

Blowouts look like freak events from the outside. They almost never are. The mechanical story behind them usually starts weeks or months before the crash, in a yard where decisions about cost, maintenance, and time pressure quietly stack the deck against everyone sharing the road.

Why Tire Blowouts Are More Common Than They Should Be

Commercial truck tires are engineered to carry enormous loads over long distances. They are not, however, indestructible. Every tire on a tractor-trailer operates inside a narrow band of acceptable temperature, pressure, tread depth, and load distribution. When any one of those variables slides too far out of range, the inner structure of the tire begins to break down. By the time a driver sees a warning sign, the tire is often already on borrowed time.

Heat is the central villain. As a truck rolls down a Georgia interstate in the summer, friction between the tire and the asphalt raises internal temperatures. Underinflation makes it worse because the sidewall flexes more with each revolution, converting that flex into more heat. Old tires lose elasticity. Retreaded tires can separate at the bond line. Any of these failures can leave the casing weakened in a way that nothing on the dashboard reveals until the tire lets go.

When the failure finally arrives, it does so violently. A casing splits or a tread peels away, and the driver suddenly has to control a swerving, unbalanced rig at speed. That is rarely a fight the driver wins.

How A Single Failed Tire Becomes A Multi-Vehicle Crash

Most people picture a blowout as a flat tire. On a tractor-trailer, it is closer to a partial loss of the vehicle. The truck pulls hard toward the side of the failure, the load can shift, and the trailer can begin to swing. From there, the chain of consequences is depressingly familiar to anyone who handles these cases.

A driver who reacts too aggressively can jackknife the trailer, folding it across multiple lanes. A truck that crosses into oncoming traffic can cause a head-on collision. A tractor that loses speed too quickly can be rear-ended by a passenger vehicle traveling at full highway speed, and the lower deck of the trailer can lead to an underride crash with catastrophic results for the smaller vehicle.

For example, a steer-axle blowout at 65 mph gives the driver almost no margin to recover. The front end of the cab pulls toward the failed side, the steering goes light, and the truck tracks toward whatever happens to be next to it. If a sedan is in the next lane, the sedan absorbs the energy.

That's why blowout cases so often involve multiple injured victims, not one.

The Mechanical Failures That Sit Behind Most Blowouts

Tire failures rarely come out of nowhere. When investigators dig into the casing, the maintenance file, and the carrier's policies, certain patterns repeat themselves.

- **Underinflation Across A Long Run:** A tire running ten or more PSI below spec will overheat on a long Georgia interstate haul, especially in summer. Routine pre-trip inspections are designed to catch this; they often do not.
- **Worn Or Cracked Sidewalls:** Sidewall fatigue from age, ozone exposure, or curb strikes can fail at speed even when tread depth still looks acceptable.
- **Mismatched Or Mixed Tires On A Single Axle:** Pairing tires of different sizes, brands, or wear levels concentrates load unevenly and accelerates failure of the weaker tire.
- **Overloaded Or Unbalanced Cargo:** Loads exceeding axle ratings or shifted to one side push individual tires beyond their rated capacity. Overweight loads add risk every mile.
- **Retread Separation:** Recap tires can separate at the bond line if the casing was already compromised or the retread was applied to an unsuitable carcass.
- **Outdated Or Defective Replacement Parts:** Tires that have sat in a warehouse too long or that were manufactured with internal flaws may fail well before their expected service life.

In one or more of these patterns, the failure was not random. It was set up over time.

What Federal Regulations Say About Truck Tires

The Federal Motor Carrier Safety Administration sets minimum requirements for commercial tire condition under 49 C.F.R. § 393.75. Steer tires must have at least 4/32 of an inch of tread depth in every major groove. All other tires must have at least 2/32 of an inch. Tires showing fabric exposure, sidewall separation, or signs of structural damage cannot be used in interstate operation.

Carriers are also required to perform documented pre-trip inspections, periodic maintenance, and out-of-service repairs. The FMCSA's carrier safety ratings capture the carrier's history of compliance with these standards, and that history can become powerful evidence when a tire fails.

Georgia adopts the federal motor carrier rules under O.C.G.A. § 40-1-8 and applies them to commercial vehicles operating in the state. A blowout tied to a regulatory violation is not just a mechanical failure. It is often a clear breach of duty.

Who Can Be Held Liable When A Truck Tire Fails?

Tire blowout cases tend to involve more potential defendants than a typical car accident. The investigation has to follow the failure backward to determine exactly who set the conditions that led to it.

- **The Trucking Company:** Carriers are responsible for inspection, maintenance, and replacement schedules. Skipped inspections, deferred maintenance, and pressure to keep trucks rolling all sit on the carrier.
- **The Driver:** A driver who notices vibration, bulging, or unusual heat and chooses to keep driving has contributed to the failure that follows.
- **The Maintenance Vendor:** Third-party shops responsible for tire installation, balancing, or rotation can share responsibility when their work falls below industry standards.
- **The Tire Manufacturer:** Defective design, faulty materials, or flawed retread processes may give rise to a product liability claim against the maker.
- **The Shipper Or Loader:** Improperly distributed cargo that pushes axle weights beyond rated limits can shift exposure onto the company that loaded the trailer.

When the picture is clear, settlements come faster. When it is murky, the case has to be built carefully and quickly before evidence disappears.

Why Evidence Disappears Fast In Tire Failure Cases

The single most important step after a serious blowout crash is preservation. Tire fragments scatter, the truck moves, the driver completes paperwork that may or may not match what really happened, and the carrier may dispatch a service crew to clean the scene before any investigator arrives.

Critical evidence that needs to be locked down includes:

- **The Failed Tire And Casing:** The casing tells the story. Heat damage, separation patterns, sidewall cracking, and tread wear can identify the root cause.
- **Maintenance And Inspection Records:** Pre-trip inspection logs, work orders, tire purchase records, and rotation logs reveal what the carrier knew and when. Poor maintenance records are themselves a form of evidence.
- **Electronic Control Module Data:** The truck's ECM captures speed, braking input, throttle position, and warning codes in the seconds before the crash. Black box downloads often confirm whether the driver was already speeding, fatigued, or reacting late.
- **Driver Logs And Hours Of Service:** A driver who blew out a tire at hour fourteen of an eleven-hour limit is not the only problem. The carrier that allowed it shares the blame. Patterns of driver fatigue and hours-of-service violations often surface here.

- **Cargo Manifests And Weight Tickets:** If cargo loading contributed to overheating or uneven wear, the documentation will show it.

A spoliation letter sent to the carrier within days of the crash is often the difference between proving a pattern and watching the records vanish.

How Tire Blowouts Multiply Other Driving Failures

Even a fully maintained tire can be pushed past its limit by a driver who is rushed, tired, or distracted. The same patterns that produce other catastrophic truck wrecks show up in blowout cases.

A driver under pressure to make a delivery may skip a pre-trip inspection. A driver pushed by aggressive dispatch scheduling may keep rolling on a tire that is clearly heating up. A distracted driver may miss the early vibration that should have prompted a pull-off. The blowout is the headline; the underlying culture is the story.

When fault is shared, Georgia's modified comparative fault rule under O.C.G.A. § 51-12-33 allows recovery as long as the injured party is less than fifty percent at fault, with damages reduced by the percentage assigned. In a multi-defendant blowout case, that allocation is usually the central battle.

The Injuries Blowout Crashes Tend To Produce

Because the energy released in a tractor-trailer crash dwarfs the protection inside any passenger vehicle, the injuries that follow are often life-altering.

Common outcomes include:

- **Traumatic Brain Injuries:** Head trauma from sudden deceleration can change cognition, mood, and earning capacity for the rest of a person's life.
- **Spinal Cord Damage:** Spinal injuries from crush forces or violent twisting can produce partial or full paralysis.
- **Crush And Internal Injuries:** Trapped occupants can suffer crush trauma to organs, vasculature, and limbs, often requiring repeated surgeries.
- **Multiple Fractures:** Pelvis, femur, ribs, and clavicle fractures are common in side impacts and rollovers.
- **Wrongful Death:** When the worst happens, surviving families can pursue wrongful death and punitive damages under O.C.G.A. § 51-4-1 and related statutes.

The medical bills alone can run into seven figures. Add lost income, future care, and the ripple effects on a family, and the financial picture grows quickly.

When A Blowout Case Crosses Into Punitive Territory

Most negligent maintenance is just that, negligent. But there are cases in which the carrier's choices cross a different line. When a fleet manager is told repeatedly that a tire is failing and chooses to keep the truck running, when retreads are installed on casings the supplier flagged

as unsuitable, or when inspection records have clearly been altered, the case can support punitive damages.

That kind of evidence rarely arrives by accident. It comes from depositions, document subpoenas, and a willingness to litigate the case all the way through. Carriers know this. So do the insurers behind them.

Gary Literally Wrote The Book On Truck Wrecks In Georgia

Attorney Gary Martin Hays and attorney Sarah R. Jett literally co-authored the legal guide to tractor-trailer wreck claims in Georgia. Since 1993, our firm has been documenting how mechanical failure, regulatory violation, and corporate decision-making intersect in cases like these. With over $1 billion recovered for Georgia families, our team knows what evidence to chase, what questions to ask, and how to keep a case from quietly settling for less than it is worth.

If you were hurt or lost a loved one in a Georgia truck accident involving a tire blowout, the maintenance file may already be incomplete, and the casing may already be in a salvage yard. Time matters. Contact us today for a free case evaluation, and let our legal team help you understand whether you have a case and what your next steps may be under Georgia law. We work entirely on a contingency-fee basis, which means there are no upfront costs, no hourly billing, and no attorney's fee unless we secure a recovery for you.