

Understanding Chemical Splash Risks and Choosing Proper PPE

By NASCO Industries, Inc. | August 27, 2025 | Safety

For more than 40 years, our focus has been clear: keeping crews safe when the job is at its toughest. Few threats are more dangerous or more underestimated than chemical splash exposure. In refineries, drilling rigs or chemical manufacturing, even a split-second of contact with hazardous liquids can cause life-changing injuries.

The problem is; chemical splash risks don't always get the attention they deserve until it's too late. That's why, as a U.S. manufacturer of protective outerwear, we're here to raise awareness and provide solutions. Our goal is simple: help workers and safety professionals understand the danger and choose the right PPE to guard against it.

What Type of PPE Protects Against Chemical Splashes?

When dealing with chemicals, the right PPE can mean the difference between safety and injury. Chemical splashes can damage skin, burn eyes or compromise your lungs if fumes are involved. That's why chemical-resistant gear is essential.

PPE that protects against chemical splashes includes:

- Gloves made of neoprene, nitrile or PVC.
- Face shields or goggles.
- Boots with chemical-resistant soles.
- Full-body suits or jackets.

One critical component that's often overlooked is outerwear. Our PetroWear™ products are built not just to withstand inclement weather but also to protect against chemical exposure. These products are constructed from materials that resist penetration from hazardous liquids while maintaining durability and flexibility on the job.

What PPE Is Advised for Chemical Risks?

OSHA and NFPA offer clear guidance for PPE related to chemical hazards. The advised gear depends on the type and concentration of chemicals, as well as the form of exposure, liquid, vapor or mist.

When evaluating PPE options, look for:

- Chemical-resistant fabrics rated for the specific hazard.
- Seam-sealed outerwear to prevent liquid intrusion.
- Coverage that protects the neck, arms and legs.
- Flame resistance, especially if you work near arc flash risks.

For workers like electricians, who face exposure to both chemicals and electrical hazards, dual-protection gear is essential. That's where our gear stands out. It's engineered to protect both arc flash and chemical splash, without sacrificing comfort or movement. We understand that protection should never come at the cost of performance.

Where Are Chemical Splash Hazards Most Common?

Chemical splash risks are more widespread than many think. These environments often involve unpredictable weather, fast-moving operations and tight schedules.

You'll often find splash hazards in:

- Utility maintenance zones.
- Petrochemical sites.
- Oil rigs and gas fields.
- Water treatment plants.
- Chemical manufacturing and transport.

In these settings, the combination of wet conditions, pressurized systems and chemical exposure increases the chance of a serious incident. That's why it's critical to outfit workers with PPE that doesn't fail when things get tough.

Our PetroWear™ products are made for these moments. They are built to withstand sudden exposure and support workers even in the roughest conditions, because we know the job doesn't stop when the rain starts.

How Do You Choose the Correct PPE for Chemical Splash Protection?

Choosing the right PPE starts with understanding the specific hazards on the job.

Here's a streamlined process:

- Know the chemicals involved: Refer to Safety Data Sheets (SDS) to understand the risks and recommended protection levels.
- Assess the type of exposure: Determine if workers face light splashes, full immersion or vapor hazards.
- Match materials to the hazard: Select chemical-resistant fabrics tested for the specific substances in use.
- Verify safety standards: Look for compliance with OSHA, ASTM or NFPA guidelines to ensure reliability.
- Check fit and comfort: Gear should allow movement and all-day wear to encourage proper use.
- Consider multi-hazard protection: If there's also an arc flash risk, choose dual-rated PPE like our lineman gear for combined protection.

Why NASCO PPE Is a Trusted Choice

We're proud to be a U.S. based company that builds gear for American workers. Every piece of equipment we design is made with one goal: protection you can trust.

Here's why customers keep choosing NASCO:

- Over four decades of industry experience.
- Outerwear made in the USA.
- Specialized industrial raingear for chemical and flame resistance.
- Purpose-built gear with arc flash protection.
- Seam-sealed, tested and rated for real-world use.

- Committed to customer support before and after purchase.

Our FR rainwear isn't a one-size-fits-all solution. We work with customers across industries to deliver exactly what they need—nothing more, nothing less.

Final Thoughts: Safety Starts with the Right Gear

Chemical splash incidents happen quickly. Once they do, there's no time to reach for the right protection. That's why preparation matters.

By understanding the risks and choosing the proper PPE, you're doing more than meeting safety rules; you're protecting lives and livelihoods. Whether it's our industrial raincoats or linemen gear, you can count on us to deliver gear that works as hard as you do.



NASCO Industries PetroStorm™ is designed to be the lightest weight multi-hazard protective outerwear available. With both flash fire and arc protection, PetroStorm™ is great for Upstream and Downstream Oil and Gas operations. It offers multi-hazard protection in a comfortable, lightweight, functional design.

Looking for the Right PPE?

Choosing PPE shouldn't be a guessing game. Let NASCO help you find the right solution.

Contact [our team today](#) to speak with safety gear experts who understand your industry and know what it takes to stay protected on the job.

For Australasian Inquiries

Contact
ArcFlashWear
E: i@arcflashwear.com.au
T: +61 (0)419 311 482