

Team 1511 Rolling Thunder 2019 Safety Handbook



Goals:

- Explain what safety is
- Promote safety
- Make safety fun!

Mission Statement:

We pledge to try to keep everyone safe at all times. Safety goes further than just the pit area, we will carry it into our own shop area and our everyday lives. Safety can be as simple as announcing to everyone when you come through transporting large objects, and as serious as wearing safety glasses and gloves when grinding metal. Safety doesn't have to be boring. If safety is fun, more people will use it not as a practice, but as a good habit. In order for others to be safe, you must set constant examples of safe behavior and educate others on how to be safe. Don't just tell someone that they are doing something unsafe, explain to them the dangers of their actions and how they can use safety in that situation.

Our Definition of Safety:

Rolling Thunder defines safety as being cautious and alert when participating in or being around any potentially dangerous situations or actions. When deciding on whether you are doing something safe, ask yourself these questions: Am I putting the well-being of my peers in danger? Swinging a board around in the shop is not only dumb, but also dangerous. Am I using the right tool for the job? Using a bandsaw to cut a piece of paper would be an incorrect use of the tool. Am I using this tool/operating this machinery correctly? Always make sure that all guards are in place when using saws, grinders, or sanders. Also, always try to clean up after yourself to avoid potential injury to others.

What is the Purpose of Safety?

The answer is simple, to make FIRST more fun and less stressful. If you don't have to worry as much about safety because everyone acts safely, building and competing with your robot and team will be more fun and easier for everyone. The fewer things that you have to worry about, the more you can focus on having fun! Besides, it could be hard to explain to your parents why your new nickname is lefty.

Team Safety Training:

Team members must go through safety training before they are able to work in the shop. This starts with a mandatory safety presentation outlining the basics of the team's safety program. Then, students take a tour of the machine shop and learn from the teachers how to safely use each machine. After participating in both of these activities, students take an online test that students must score 100% on in order to work in the shop. During build season, our safety captains do weekly safety presentations on a variety of topics. This year's topics were:

- Safety & Common Sense
- Shop Safety
- Cleanup & Clutter
- Batteries & Chemical Safety
- Safe Lifting
- Competition Safety

Tool/Universal Safety:

- Always wear safety glasses in the shop area and when using tools outside the shop area
- Students should never operate machinery or tools that plug into an outlet without the supervision of an adult mentor or before receiving proper training on the operation and cleaning of that tool or machinery
- Utilize all guards and/or shields meant for machinery when it is in operation
- Always clean up after you have accomplished your goal to prevent injury of others in the future
- Be nice to each other. Don't use tools when you are angry- you are liable to injure yourself or others around you
- No horsing around near machinery or people using tools. You can hurt yourself or cause the person using the tool to get hurt by bumping into them or distracting them
- Secure objects before cutting or drilling them
- Use a spotter when climbing- the ladder can't watch you
- Wear gloves when grinding metal or plastic

- No food or drink in the work area. They can damage tools and make them unsafe to use or make surfaces sticky or slippery

Pit Guidelines:

- Always wear safety glasses when in the pits, on the practice field, or on the competition field
- Don't operate grinders or create sparks in the pits
- Don't run in the pits or the stands
- Warn others in the pit when transporting the robot on the cart
- Warn others before using a tool or enabling the robot
- PAY ATTENTION! Most accidents occur because one or more persons are not paying attention. Watch out for people using tools and transporting robots. Guidelines only make the pit safer, they don't make it completely safe
- Turn off the robot before working on it and disconnect the battery before working on its electrical components
- Wear gloves when lifting or carrying the robot
- Keep the pit area clean and neat with all tools put away and the floor swept
- Know where the fire exits, first aid kits, and MSDS sheets are
- No "daisy chaining" to get power in the pits. (Daisy chaining means to power a power strip via an extension cord or to hook multiple power strips together to obtain more outlets)
- Secure all valuables in the pit area to prevent damage or loss
- Children must be accompanied by an adult at all times