While there are a handful of universally toxic woods (e.g., yew), for most woods and woodworkers, toxicity is a complex but fundamentally individual matter. Some people will react to minor exposures to a given wood, while others can work with species that pose no obvious effect. What matters most is how we are exposed to those chemicals, how our bodies can react, and how we can protect against exposure to those chemicals.

Routes into the body

For wood to cause a toxic reaction in a person, chemicals from that wood have to make their way into the body. These chemicals can come from raw wood, treated lumber, or wood dust following hours or even days of use. It is the type and amount of chemical, as well as how much was exposed and how long, that will determine how the body can react.

Woodworkers may experience respiratory reactions from woodsmoke or from dust during woodworking or cutting. Direct contact with the skin or eyes may lead to various irritations or allergies. Exposure to dust can lead to chronic lung disease or even cancer.

The most common toxic reactions in wood is skin irritation. Your skin is the largest organ of your body, and it is designed to keep out chemicals. When the skin is exposed to certain chemical irritants, it will send a signal to the body to make more waste. This is a protective reaction, but it can also lead to allergic reactions.

Exposure to wood dust can cause irritation, inflammation, and allergy-like reactions in the respiratory system. Dust particles from wood can be absorbed by the respiratory system, and the body responds by producing an inflammatory response. The body’s immune system may react to the dust by producing antibodies that target the dust particles. These antibodies can cause inflammation, swelling, and pain in the lungs.

Toxic substances in wood dust

Wood dust contains a variety of chemicals, including resins, oils, and other organic compounds. These substances can cause irritation, inflammation, or allergy-like reactions in the respiratory system. The body’s immune system may react to the dust by producing antibodies that target the dust particles. These antibodies can cause inflammation, swelling, and pain in the lungs.

Wood dust can also contain other substances, such as metal shavings or dust, that can cause irritation or allergy-like reactions in the respiratory system. The body’s immune system may react to these substances by producing antibodies that target the dust particles. These antibodies can cause inflammation, swelling, and pain in the lungs.

The body’s toxic responses to wood dust

Wood dust can cause a range of reactions in the respiratory system, including allergy-like reactions. These reactions can vary in severity, from mild irritation to severe allergic reactions. The body’s immune system may react to the dust by producing antibodies that target the dust particles. These antibodies can cause inflammation, swelling, and pain in the lungs.

Toxicity is a complex but fundamentally individual matter. Some people will react to minor exposures to a given wood, while others can work with species that pose no obvious effect. What matters most is how we are exposed to those chemicals, how our bodies can react, and how we can protect against exposure to those chemicals.