

Recommended Practices

Green Tobacco Sickness

Workers who plant, cultivate and harvest tobacco are at risk of suffering from a form of nicotine poisoning known as “Green Tobacco Sickness”. This illness causes nausea and vomiting that can lead to hospitalization and lost work time. Tobacco workers suffering from Green Tobacco Sickness are at greater risk for heat illness—a potentially deadly condition.

What is Green Tobacco Sickness?

Nicotine exposure from handling tobacco leaves may cause nicotine poisoning, also called Green Tobacco Sickness (GTS), with symptoms including nausea and vomiting. Risk of nicotine poisoning increases when the nicotine contained in the tobacco leaves mixes with rain, dew, or sweat, allowing nicotine to get onto the skin and pass into the bloodstream more easily. Workers may experience GTS symptoms while at work or several hours after the workday ends. About one quarter of workers harvesting tobacco in fields located in North Carolina suffered from GTS in a single season, according to a National Institute for Occupational Safety and Health (NIOSH)-funded study.¹ Although GTS symptoms normally do not last more than 24 hours after workers stop handling tobacco leaves, there are currently no comprehensive studies evaluating long-term effects.



Tobacco Plants

Some Workers are More Susceptible to Green Tobacco Sickness

Workers new to handling and harvesting tobacco are at increased risk for GTS. New workers may have a lower tolerance to nicotine exposure than previously exposed workers. New workers are also less likely to know about GTS and protection methods, emphasizing the need for their employer to provide adequate training. Additionally, children and adolescents may be more sensitive to chemical exposures, more likely to suffer from GTS, and may suffer more serious health effects than adults.^{2,3,4,5}

Health Hazards

Employers who employ tobacco workers must provide a workplace free from recognized hazards that are likely to cause death or serious harm to their workers. Nicotine and dehydration are recognized hazards in tobacco fields.

Nicotine is a hazard present in workplaces that require workers to handle tobacco leaves.

- Nicotine is a chemical that is able to pass through the skin and enter the bloodstream causing GTS, a form of nicotine poisoning.
- Nicotine absorption is more likely when it dissolves into rainwater, dew and sweat.
- GTS symptoms include nausea and vomiting. Additional symptoms include dizziness, headaches and cramps.
- Symptoms might not occur for several hours after nicotine overexposure.

