

Key Points

- ➔ Green tobacco sickness (GTS) is an illness that occurs because of exposure to green tobacco.
- ➔ Risk factors include age, environmental conditions, personal tobacco use, type of labor performed and type of contact.
- ➔ Nicotine can be absorbed through the skin.
- ➔ GTS IS PREVENTABLE.
- ➔ GTS is debilitating, resulting in discomfort and lost productivity.
- ➔ Treatment is available, but symptoms can be avoided altogether by learning about GTS and ways to prevent GTS.



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GREEN TOBACCO SICKNESS



Green Tobacco Sickness

Green tobacco sickness (GTS) is an illness that occurs because of exposure to green tobacco. Normally, the leaves of the tobacco plant are dry, but in the morning or after a storm, they are wet. The nicotine from the tobacco mixes with the water on the leaves and the sweat from the worker. This allows the nicotine to penetrate into the skin and pass into the bloodstream. When the workers cannot change clothes, the nicotine stays on them all day in direct contact with their skin.



Risk Factors

Age: Young workers are more likely to develop GTS.

Environmental Conditions: Laborers in hot, wet conditions are more likely to develop GTS.

Personal Tobacco Use: It is unwise to use smoking as a way to prevent GTS because tobacco users still experience sickness when their usual nicotine intake is exceeded by handling tobacco.

Type of Labor: Harvesting tobacco involves a greater risk of developing GTS.

Contact: Direct or prolonged contact of nicotine with skin increases workers' risk. Cuts and abrasions also provide another direct route of nicotine entry into the bloodstream.

Prevention Is Our Intention: Tips to Avoid GTS

- ◆ Educate yourself and others regarding the causes and symptoms of GTS.
- ◆ Wear long sleeve shirts, gloves and/or raingear to minimize skin exposure to the green plant. (However, be careful to not overheat.)
- ◆ Periodically change wet or tobacco-soaked clothes.
- ◆ If possible, harvest for less than seven hours a day.
- ◆ When possible, work in cooler, drier conditions.
- ◆ Wait to work until leaves have dried.
- ◆ Take breaks periodically because incidence of GTS increases with amount of physical exertion.
- ◆ Wash your hands and body with warm soapy water after working.

How It Works

Nicotine, found in tobacco plants, is soluble in water, causing it to be drawn out onto the surface of the leaves by rain, dew or perspiration. From there, the nicotine is absorbed through the skin, where it passes directly into the bloodstream and is distributed throughout the body. The nicotine temporarily affects part of the brain, and may cause reflex vomiting, and may excite nerves in the gastrointestinal tract that bring about nausea and cramping.



Symptoms

- ◆ Nausea
- ◆ Vomiting
- ◆ Weakness
- ◆ Dizziness
- ◆ Stomach cramps
- ◆ Headache
- ◆ Difficulty breathing
- ◆ Paleness
- ◆ Excessive sweating
- ◆ Fluctuations in blood pressure and heart rate

Symptoms are similar to those caused by heat stress and pesticide exposure, and as a result, GTS is oftentimes misdiagnosed. These symptoms may present themselves in as little as one hour after starting work and can last from 12 to 48 hours. This sickness is usually non-life-threatening, and only severe cases require medical attention due to extreme dehydration from fluid loss associated with vomiting. GTS is debilitating, resulting in discomfort and lost productivity.

Treatment

There are several nonprescription medications that are used to treat GTS. Be sure to only take one medication and talk to a doctor or pharmacist before taking any medication, especially if you have other medical conditions.

GTS can be altogether avoided with the proper precaution, but first one must know that the crop they are working with can cause them harm. This knowledge is the best means of prevention. Please educate those who work with tobacco, because they should know about this potential job hazard.

