Burley Tobacco Production requires much attention to worker safety primarily because of its labor intensive nature. Most of the labor requirements for burley tobacco production is hands-on. As with many agronomic crops burley tobacco requires certain crop protectants to be applied during production to establish profitable yields and quality. Grower and applicator safety is of utmost importance. Growers should have or obtain a pesticide applicator’s license and all pesticide applications should be made or supervised by a certified applicator. Most all burley is hand harvested and requires the use of a sharp hatchet like “Tobacco knife” to cut plants and a very sharp spear like instrument is used to place plants on a stick. Workers must be properly trained to use these tools to minimize risk of injury. Once tobacco is cut and sticks are picked up out of the field workers climb up into the barn and stand on tier rails to hang tobacco. All tier rails in barns and structures need to be checked for strength and stability prior to workers climbing or putting weight on them. The harvest and housing process can put workers at risk of green tobacco sickness. Especially when workers are working in tobacco that is wet. A recent development in market preparation, primarily in the marketing of big bales, requires additional attention to worker safety. These are just some of the areas that growers need to be concerned with providing worker safety during burley tobacco production.

Applying Crop Protectants

Burley tobacco generally requires herbicides, insecticides, fungicides/plant activators, and plant growth regulators during the production season. Most applications are made mechanically with a tractor pulled or self powered sprayer. However, some growers still hand-apply sucker control materials to burley tobacco. All workers should be trained in pesticide safety and all applications should be made and/or supervised by a certified applicator to ensure worker safety. Any workers applying crop protectants should be provided proper protective equipment determined by the label of the compound being applied. All fields where applications have been made should be properly posted to clearly inform workers of all pesticide applications. Workers should be properly informed of reentry intervals for fields that have been treated with a crop protectant. Workers should be familiar with the product label.

Cutting & Housing Tobacco

Workers should be trained to use a tobacco knife and spear to reduce the risk of being injured during cutting. Workers can maintain better control of the spear if sticks are sharpened on both ends allowing the stick to be pushed into the soil and the spear placed securely on the other end. Less
experienced workers can work in teams to reduce the risk of injury. However this will likely reduce harvest efficiency. After tobacco is cut and wilted workers remove tobacco from the field and house it in curing facilities. Hanging tobacco in barns or other curing structures can be very dangerous if proper precautions are not taken. Prior to harvest all curing structures should be evaluated for tier rail strength and stability. Tier rails should be properly spaced and secured to maximize worker safety.

Green Tobacco Sickness

Workers should be cautioned that cutting or housing wet tobacco could cause Green Tobacco Sickness. Green tobacco sickness (GTS) is an illness resulting from the dermal absorption of dissolved nicotine. Nicotine is an alkaloid present in tobacco and is very water soluble making it much easier to be exposed. The biggest risk of exposure for workers is during topping, harvest, and housing tobacco. Generally workers are more likely to be effected by GTS if exposed for long periods of time to wet tobacco due to the water solubility of nicotine. Individual response to GTS varies based on dose, sensitivity, and size of worker. Workers that use tobacco products seem to be more tolerant to nicotine exposure. Symptoms generally occur 3-17 hours after exposure. Symptoms include nausea, vomiting, dizziness, and increased heart rate. Symptoms can exist 1-3 days so workers should follow instructions of a medical professional.

To reduce risk of GTS workers should avoid contact with wet tobacco. Tobacco should be allowed to dry prior to topping, cutting, and housing. If workers must work in wet tobacco they should be provided proper waterproof clothing to protect themselves from becoming wet from the tobacco. Workers should also be careful to not overheat since generally this clothing doesn’t allow for good air circulation. If worker’s clothes do become wet they should change out of wet clothes into dry clothes and wash wet clothes prior to wearing again. If workers become ill due to GTS they should be provided medical attention.

Market Preparation

Market preparation requires more hours of hand labor than all other aspects of production combined. The process of maximizing efficiency has lead to the marketing of large bales, replacing small traditional bales. These bales have introduced new risks to workers in both making and handling. Most large balers operate by hydraulics from tractors or self contained units. Workers should stay clear of pressing mechanism when baler is in use. **Workers should never climb inside the baler while making bales.** Large bales range in size from 550 to 650 pounds with a dimension of approximately 42 inch cube. Thus, handling these bales generally requires a tractor or front end loader. Make sure specific and adequate space is designated for the baling process. Worker safety should never be compromised in the interest of efficiency.