



THE DOMINO SAFETY THEORY

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BACKGROUND: The Domino Safety Theory was developed by pioneer industrial safety experts H.W. Heinrich and Alfred Lateiner to provide a graphic sense of how industrial injuries can occur and be avoided.

An accident occurs from a sequence of events. It is a chain reaction. Picture five dominoes in a row to illustrate the sequence.

The first domino **Background** - represents a worker's lifestyle and personality

The second domino **Personal Characteristics** – represents a worker's attitude, level of knowledge, and physical and mental conditions

The third domino **Unsafe Acts and Unsafe Conditions** – represents a worker's behavior and unsafe job conditions

The fourth domino **The Accident** - represents the unplanned event caused by an unsafe act or condition

The fifth domino **The Injury** – represents someone getting hurt



For any given incident, not much can be done about a worker's **background and personal characteristics**. The domino that must be targeted is **unsafe acts and unsafe conditions**. When an **unsafe act** is detected, the worker should be **stopped**; the situation should be **studied**; a **safer way** to perform the task must be found; **instruct and train** the worker to do it the safer way; **check and retrain** as necessary; and as a last resort **discipline** the worker. When an **unsafe condition** is detected, the condition needs to be **removed, guarded, or warned against**.

In the woods there is special protection for workers. That protection is **Personal Protective Equipment** (hard hats, gloves, eye and ear protection, chain saw chaps, and safety boots). Picture the five dominoes standing in a row. Put your hand between the fourth domino, **The Accident** and the five spot domino, **The Injury**. What happened? There was an accident, but there was not an injury. As the chain reaction begins with the first four dominoes falling together, the dominoes fell into your hand, which represents **Personal Protective Equipment, (PPE)**. **The Injury** was avoided, and the chain reaction of the five dominoes was broken because of **Personal Protective Equipment**.

The supervisor or manager on the logging crew is the closest to the action and can target improvements in **Unsafe Acts and Unsafe Conditions**. The supervisor or manager has the opportunity and authority to control unsafe acts and conditions. The **Opportunity** and **Authority** add up to the supervisor or manager having the **Responsibility** to control accidents on their job. Being alert for, illuminating, stopping, and correcting **Unsafe Acts and Unsafe Conditions** will result in the reduction of accidents.

Prepared by the Southwide Safety Committee of the Forest Resources Association Inc.

Please follow equipment manufacturers' recommendations for safe operation and maintenance procedures.