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# Farmer Dies After Being Pinned By Bucket Of Skid Loader

MN FACE Investigation 04MN002

Date: July 26, 2004

## SUMMARY

A 29-year-old male farmer (victim) died after being pinned by the bucket of a skid loader that he used for various tasks associated with his herd of dairy cows. After completing the morning milking he apparently used the skid loader for one or more tasks associated with the dairy operation. At some point, he drove the skid loader into an outside area adjacent to the dairy barn. Near the front of the skid loader, a steel fence post was found on the ground. He may have stopped the loader with the bucket in the raised position near the steel post. It appeared that he began to exit the skid loader to pick up the steel post. When he began to exit the unit, a control lever that controls raising and lowering of the loader got caught in his coveralls. As he moved forward, the control lever was pulled forward and the loader lowered and struck the victim. It continued to lower resulting in the victim being pinned between the front frame of the unit and the loader bucket.

Later that day, the victim's brother arrived at home from school. After he changed clothes he went to the barn to help his brother with evening chores. He could not find his brother in the barn and then noticed that the loader was not parked in its usual parking area. He searched the areas outside the barn and discovered the victim and the loader. He ran to the house and told his dad what had happened. The victim's father rushed to the scene and also placed a call to emergency personnel who arrived at the scene a short time later. Rescue personnel removed the victim from the loader and pronounced him dead at the scene. MN FACE investigators concluded that, in order to reduce the likelihood of similar occurrences, the following guidelines should be followed:

- **skid loader operators should enter or exit the operator's seat only when the bucket or other attachment is in the fully lowered position, or when available lift arm supports are in place, and;**
- **machine engines should be stopped before workers leaving the operator's seat.**

## INTRODUCTION

On February 23, 2004, MN FACE investigators were notified of a farm work-related fatality that occurred on February 20, 2004. The county sheriff's department was contacted and a copy of their report of the incident was obtained. A site investigation was conducted on May 25, 2004 by a MN FACE investigator. During MN FACE investigations, incident information is obtained from a variety of sources such as law enforcement agencies, county coroners and medical examiners, employers, coworkers and family members.

## INVESTIGATION

A 29-year-old farmer died while using a skid loader to perform tasks associated with his herd of dairy cows. He had taken over the dairy operation from his father in 1998 and had approximately 35 dairy cows at the time of the incident. The victim lived on a different farm place that was several miles from the site of the incident. After taking over the dairy operation, he continued to run it from his father's farm because of the dairy equipment that was in place at his father's farm. This arrangement required the victim to arrive at his father's farm several times each day to perform the necessary work associated with the dairy herd.

On the morning of the incident the victim arrived between 6:00 a.m. to 6:15 a.m. his normal morning arrival time. He parked his pickup near the dairy barn, entered the barn and began the daily morning work associated with milking the dairy cows. His father owns and operates a small business in a nearby town and left the farm place a short time later in the morning. He noticed his son's pickup near the barn as he left the farm site but he did not talk to him that morning. The father and son would routinely arrive and leave the farm several times each day but often did not meet and talk with each other.

After taking over the dairy operation from his father, the victim purchased a used rubber tired skid loader. He purchased the unit to perform various tasks associated with the dairy herd, tasks such as feeding the cows and calves, transporting hay bales, and cleaning the dairy barn and an area called a free stall barn where the dairy cows were kept during the day and night. The exact age and model of the unit could not be determined because it was no longer at the farm at the time of the site investigation. The victim's father estimated that it was approximately 12-14 years old.

The skid loader was in good operating condition and no mechanical failures were found on the unit when it was examined after the incident was discovered. The unit was operated completely by hand levers, it did not have any foot controls. Located at each side of the operators seat was a vertical hand lever. The lever on the left side controlled the forward and reverse travel of the unit. The lever on the right side controlled the hydraulic system for the loader and enabled the loader to be raised and lowered and the loader bucket to be tilted forward and back.

After completing the morning milking, the victim apparently used the skid loader for one or more tasks associated with the dairy operation. At some point, he drove the skid loader into a fenced cattle pen area adjacent to the barn, the area where the incident occurred and where he was found. It could not be determined exactly what he was doing in the area at the time of the incident. Near the front of the skid loader, a steel fence post was found on the ground. What may have happened is that the victim stopped the loader with the bucket in the raised position near the steel post. It appeared that he then began to exit the skid loader to pick up the steel post. When he began to exit the unit, the right side control lever got caught in the coveralls he was wearing. A photo taken by emergency personnel after the incident was discovered showed the lever still caught in the victim's coveralls. As he moved forward, the control lever apparently was pulled forward and the loader suddenly lowered. It apparently struck the victim almost immediately as it lowered. It continued to lower resulting in the victim being pinned between the front frame of the unit and the loader bucket.

Later that day, the victim's younger brother arrived at home from school at about 3:30 p.m. After he changed clothes he went to the barn to help his brother with evening chores. He could not find his brother in the barn and then noticed that the loader was not parked in its usual parking area. He then searched the areas outside the barn and discovered the victim and the loader in the fenced cattle pen. He ran to the house and told his dad what had happened. The victim's father rushed to the scene and also placed a call to emergency personnel who arrived at the scene a short time later. The victim was examined and pronounced dead at the scene.

After the incident occurred, the engine of the skid loader kept running until it ran out of gas. When the incident was discovered, the engine was not running however the ignition key was found in the on position. The victim's sister was returning home from college on the day of the incident and had tried to call him several times during the day, beginning at about 9:30 a.m. Based on her inability to reach him, it is believed that the incident occurred before 9:30 a.m. although an exact time could not be determined since the victim was working alone.

## CAUSE OF DEATH

The cause of death on the death certificate was head and brain trauma.

## RECOMMENDATIONS/DISCUSSION

**Recommendation #1: Skid loader operators should enter or exit the operator's seat only when the bucket or other attachment is in the fully lowered position, or when available lift arm supports are in place.**

**Discussion:** Most models of skid loaders are designed, like the one involved in this incident for operator entry and exit over the top of bucket when it is in its fully lowered bucket. A raised bucket may lower unexpectedly and pin or crush an individual who is positioned under the bucket. Skid loader operators should use the lift arm supports provided by and recommended by the manufacturer when it is necessary to work or move around the machine with the bucket in a raised position. If an older machine is not equipped with lift arm supports then operators should never enter or leave the machine unless the lift arms and attached bucket or other device is in the fully lowered position.

**Recommendation #2: Machine engines should be stopped before workers leaving the operator's seat.**

**Discussion:** Whenever workers leave a machine's operator compartment or platform, they should stop the machine's engine and secure or activate all safety devices such as brakes to reduce the risk of injury to themselves or other workers who approach the machine. Workers should never perform any machine service or repair with the engine running unless directed to do so by the operator's manual. If any service or adjustments require that the engine be in operation, at least two persons should be present to ensure that the tasks can be safely completed and all safety recommendations must be followed to safely complete the task. Although the victim in this incident was not performing any service or repair on the loader, he apparently attempted to leave the operator's seat with the engine running since the ignition key was found in the on position.

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