MAFES Dawg Tracks



April 23, 2007

Safety Tips: Protect Your Hearing



We keep reiterating that agriculture is one of the three most hazardous industries, along with construction and mining. We keep reminding ourselves that each year hundreds of farmers and ranchers are killed, and hundreds of others are seriously injured. There are many hazards associated with farming; some are easily detectable, and others will take an extended period of time to show up. Sometimes time exposure is the key to these injuries. Noise levels are a prime example of a hazard that can result in an injury, due to time exposure over a great period of time.

Farmers perform a lot of different types of work in noisy environments, such as driving tractors and operating chain saws. Sometimes working with livestock can cause the noise level to exceed the recommended limits. A recent study done by an Iowa farm clinic found that 70% of the farmers given hearing tests were below normal for their age. Nearly onethird of these had hearing loss to the degree that a hearing aid was necessary.

Repeated exposure to noisy environments or a single incident of an extremely noisy condition can cause hearing loss. Tests have shown that noisy environments can cause a decrease in productivity, restrains communication, and will increase the potential for work-related accidents. Noisy environments can cause fatigue, which results in the increased risk of an accident.

MEASURING NOISE LEVELS:

Noise Levels are measured in a term called the decibel. Below are some noise levels events and the decibel level that is generated.

EVENT	DECIBEL LEVEL
Whisper	50
Normal Conversation	70
Vacuum Cleaner	82
Car Horn	100
Chain Saw	125
Rock Concert	130
Jet Plane	160
Shot gun Blast	170
TRACTORS	DECIBEL LEVEL
CASE 1070	94
IH1466	91
Case-IH 685	95
John Deere 2155	95
Ford 5640	97

On a national scale, the National Institute of Occupational Safety and Health (NIOSH)) rates hearing loss as one of the top ten work-related conditions induced by noise levels.

The Environmental Protection Agency (EPA) estimates 10% of the 3.6 million U.S. farm workers are exposed to noise levels in excess of 85 decibels. The additional 11.8 million family farm workers, part-time workers, and hired workers can very well be exposed to hazardous noise levels.

HEARING LOSS PREVENTION:

Hearing loss can be prevented. There are a variety of ways to reduce agricultural noise. Following are some tips that can aid you in aborting excessive agricultural noise levels:

- Replace or repair worn, loose, or unbalanced machine parts.
- Make sure that all machine parts are well lubricated.
- Install a good, high-quality muffler on all enginepowered pieces of equipment.
- When possible, isolate yourself from noise sources with an acoustic tractor cab.

EAR PROTECTION:

If you are working continuously in high-level noisy areas, you should wear some type of hearing protection. There are two type of protection that work effectively when fitted properly:

Ear Muffs – Muffs provide the most protection. Noise reduction will vary greatly depending on the size, shape, seal material, shell mass, and type of suspension.

Ear Plugs - Plugs are another type of hearing protection that is available. Plugs are usually made from plastic, rubber, or foam. When you buy earplugs, respect them as you would any other piece of equipment. Be sure that they fit snugly. Tight fit is acquired in the ear canal when the plug is inserted. Earplugs and muffs do not affect your ability to communicate with those around you. People usually can't give verbal warnings because of the noise levels anyway. A co-worker can still get your attention with the ear protection in place. Some people think that you can use cotton for noise protection. Cotton doesn't furnish any noise level protection for low-frequency noise or high-frequency levels.

As has been stated a couple of times above, agriculture work is extremely dangerous in all areas besides noise levels. It should behoove us to use any available means of protection so that we can arrive home each night safe, healthy, and in one piece. We should remember that unlike some other health problems, once you have a hearing loss, no treatment could correct the problem.

