THOUGHTS FROM THE EDITOR – A focus on chemical and fertilizer safety

Dee Jepsen - State Agricultural Safety and Health Leader

As spring approaches, so does the outdoor work – especially in our lawn, gardens, and crop fields. This season brings risk for chemical exposures in all shapes and sizes, and to several audience groups. Because of these risks, this Ag S.T.A.T. issue focuses on chemical and fertilizer safety for all ages.

A particular concern is also for the unsuspecting roadway litter crews or mushroom hunters that may stumble across discarded anhydrous ammonia containers commonly used in illegal meth labs. A safety article is included in this month’s issue to specifically address what to do when meth lab items are encountered.

A SECOND ON SAFETY

The National Safety Council has declared April as National Injury Prevention Month.

To prevent slips and falls when climbing a ladder, place the base on a firm, solid surface. Never place the ladder on boxes, steps, or in the bucket of a loader tractor to gain extra height. If extra height is needed, seek a taller ladder.

YOUTH SAFETY - PROTECTING YOURSELF FROM FARM AND GARDEN POISONS

Kathy Mann – Agricultural Safety and Health Program Coordinator

‘Pesticide’ and ‘fertilizer’ are two basic terms for the numerous types of chemicals used on the farm or in the garden. Pesticides are used to remove pests such as weeds from crops and fertilizer is used to promote plant growth in order to increase yield. While these are important components, they can be a hazard if not handled properly.

There are four ways chemicals can enter your body:
1. Ingestion or oral exposure meaning the chemical is swallowed or ingested.
2. Dermal exposure is when the chemical is absorbed through your skin.
3. Inhalation exposure happens when the chemical is breathed. This is why it is important to use the correct mask or respirator.
4. Ocular exposure occurs when the chemical enters through the eye(s). Be sure not to rub your eyes with contaminated gloves or splash the chemical before your eye protection is in place.

When handling chemicals, Personal Protective Equipment (PPE) should be worn. Depending on the type and level of toxicity, this could include: a two-strap facemask, respirator, goggles, gloves, and boots. To find out which type of PPE is needed for that specific chemical, be sure to read the label completely. Every label lists what types and styles of PPE are required to be worn when handling and applying the chemical.

Beside the proper PPE, other steps can be taken to protect yourself and family members from these poisons. Chemical containers should be triple rinsed and properly disposed of, NOT REUSED. Be sure that after handling the chemicals and/or their container, always wash your hands. Another prevention step is to store chemicals safely, store them in a locked shed or cabinet when not using. This location should also be properly marked, ventilated and able to contain a spill from entering a water way or going down a drain.

For more information, check out the following Ohio State University Extension Factsheets found at www.ohioline.osu.edu
*Reading Pesticide Labels, AEX 192.1.53
*Pesticide Exposure- Training Module

CAMPS DEMONSTRATE FARM SAFETY TECHNIQUES FOR KIDS
Kathy Mann – Agricultural Safety and Health Program Coordinator

Farm Safety Round-Up Day Camps, sponsored through Ohio State University Extension, are designed to offer youth real-world experience and emphasize farm safety. A series of day camps will be offered across Ohio to teach school children about farm hazards and how to avoid injury.

Farm safety is important year-round, but spring kickoffs of the Ohio Farm Safety Round-Up Day Camp season, said Kathy Mann, an OSU Extension program coordinator in agricultural safety and health. Each year, some 1,000 youth statewide learn how to protect themselves and their family members from dangerous situations that can occur on or near farms, she said. The camp’s educational sessions teach youth, whether they live on the farm or just visit a farm, about the possible hazards they might encounter on the farm.
The camps will vary slightly in topic offering, but often teach ATV safety, grain safety, equipment safety, livestock safety and other important safety rules for the farm.

Camp dates, locations and contacts are below. Please contact each camp director for additional information about registration.

**Putnam County:** April 9 & 10 at the Gerding Farm. The camp is open to school groups only. Contact Ruth Gerding, camp coordinator, at 419-523-5608 ext. 238.

**Auglaize County:** May 18 at the Four Seasons Recreation Complex and Park. The camp is open to school groups only. Contact Don and Lois Baumer, Farm Bureau volunteers, at 419-628-3420.

**Wood County:** May 27 at the Agriculture Incubator Foundation. The camp is open to school groups only. Contact David Little, camp coordinator, at 419-833-3611.

**Wayne County:** June 8 at the Wayne County Fairgrounds. This camp will be open to the 4-H Cloverbuds in the County, ages 5-10. Contact Mel Rehm, Wayne Co. 4-H Program Assistant, 330-264-8722.

**Ross County:** July 2 from 9am -12 pm at the Hirsch’s Fruit Farm (Chillicothe, OH). This camp will be open to the community, with ages still to be determined. Contact Mary Fleming, 740-272-6313, for more information.

**Monroe County:** At a date to be determined. The camp will be open to school groups only. Contact Bruce Zimmer, an OSU Extension educator, at 740-472-0810 for more information.

**INJURY PREVENTION - Building Independence through Agriculture for People with Developmental Disabilities**

*Kent McGuire – Ohio AgrAbility Program Coordinator*

The Ohio AgrAbility Program recently hosted a workshop attended by 122 individuals from various organizations including County Boards of Developmental Disabilities, National AgrAbility, State AgrAbility Projects, OSU Extension staff, existing agricultural workforce programs and organizations looking to establish an agricultural workforce program. The purpose of the workshop was to discover how agriculture could be a viable work environment for individuals with developmental disabilities. The workshop created several positive outcomes including:

- A networking opportunity for existing agricultural programs to discuss similarities and differences between their programs, and share ideas for improving existing developmental disability employment models.
- An opportunity for Ohio AgrAbility to assist County Boards of Developmental Disabilities by providing worksite assessments and recommendations for job placement opportunities.

- Establish a knowledge base of ideas or best practices that can be utilized by developmental disability organizations and clients.

- Meet a need for service organizations by providing resources and information that can be used to help provide job placement opportunities in agricultural settings.

For more information about the Ohio AgrAbility Program visit agrability.osu.edu or contact Kent McGuire, OSU Agricultural Safety & Health, at mcguire.225@osu.edu or 614-292-0588.

**TRANSFERRING, TRANSPORTING, AND APPLYING ANHYDROUS AMMONIA**

Dewey Mann – Safety Research Associate

Answer: A common source of nitrogen fertilizer for Ohio crops.

Question: What is Anhydrous Ammonia (NH₃) Alex?

Knowing a few facts about NH₃ probably won’t get you on a game show, but it could help keep you safe around the farm.

The term anhydrous means “without water.” Stored as a liquid under pressure, NH₃ transforms to a gas at atmospheric pressure. This low temperature gas is caustic and will cause severe burns to eyes, exposed skin, and the respiratory tract.

The unintentional release of anhydrous ammonia can create a dangerous situation for both the handler and any bystanders, and might be caused by:

- Overfilling the tank
- Failure to bleed pressurized NH₃ from the hose before connecting or disconnecting
- Moving the tank before disconnecting the hose
- Faulty hitch pin or weakened tongue
- Faulty valves and deteriorated or out-of-date hoses
- External overheating of the storage container
- Overturning an applicator tank

How to stay safe when working around NH₃:

- Always have an ample water supply
- If contact with eyes or bare skin, flush area for 15 minutes with fresh water
- Always wear personal protective equipment (long sleeves, gloves, goggles, etc.)
- Never fill a tank over 8-5 percent of the tank's capacity, inspect and replace hoses and valves as needed, and bleed off pressure in the hose before disconnecting it
- Stay clear of hose and valve openings
Never try to repair the tank yourself; Seek a qualified technician
Never tamper with pressure relief valves
Use a proper hitch, safety chains and a Slow Moving Vehicle (SMV) sign when towing on the highway

What should you do if you drive on the scene of an over turned tank:
• Get UP WIND of the spill IMMEDIATELY
• Dial 911 and inform the local authorities
• DO NOT go near the area or any victims; you may also become a victim

For more information, please visit the OSU Factsheet, Safe Handling of Anhydrous Ammonia:
http://ohioline.osu.edu/aex-fact/0594.html

FARMERS LIKELY TO SECURE 4 MONTH SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) RULE DELAY
This article provided as courtesy of the Vermont Fuel Dealers Association

Recently, the Senate adopted an amendment by voice vote to the Continuing Resolution (CR) funding bill which, when approved by the House, will delay SPCC compliance deadlines for farmers. The amendment prevents funds from being used through fiscal year 2013 to implement requirements of EPA’s SPCC rule slated to go into effect on May 10, 2013 for farmers. The rule requires them to hire a certified professional engineer to design a SPCC plan and have secondary containment installed. As petroleum marketers well know, the SPCC rule is applicable to any facility, including farms, with an aggregate above-ground oil storage capacity of 1,320 gallons in tanks of 55 gallons or greater.

Senator Mark Pryor (D-AR) introduced a bill, which would increase threshold sizes for Aboveground Storage Tank (AST) regulation at the farm level, and allow more farms to self-certify. It provides an exemption from the SPCC rule to any farmer who has less than 42,000 total gallons of oil storage capacity and no single tank larger than 10,000 gallons. Similar legislation was introduced by Rep. Rick Crawford (R-AR) in the House. The measure adopted in the Senate only provides a compliance delay until September 30, 2013. On October 1, 2013, farms will have to comply with SPCC rules unless additional delays are legislated or provided by EPA.

PROTECTING YOURSELF AGAINST HOMEMADE METH LABS
Many meth "robbers" go to the agriculture fields this time of year to steal Anhydrous Ammonia. They use 2-liter pop bottles, BBQ grill size propane gas tanks, coolers, and other paraphernalia to collect and transport the stolen product to their meth labs. They often discard these same items along side of the road once they are done with them, only to be picked up by unsuspecting litter crews.
Chemicals and waste materials from meth labs can cause considerable harm to people and the environment. The cost of cleaning up rural meth labs can be as high as $150,000; and often falls on the shoulders of innocent property owners. The chemical residue can stay in the soil and groundwater for several years.

**Signs of a Meth lab:**
Vehicles used to transport meth lab supplies are usually older model pickup trucks, vans, rv’s and rental/moving vans. Items are usually kept covered up in vehicles. Chemical odors may come from the vehicle.
If you discover chemical odors coming from a field, orchard, shed or other structure, notify law enforcement immediately.
Be aware of boxes or drums with corrosive, flammable, poison placards.
Do not touch any laboratory glassware, discarded cold medicine boxes, or other chemical containers without wearing rubber gloves.

**What to do if you come across a Meth lab site:**
Remain calm to give yourself time to think clearly.
Immediately contact your local law enforcement agency.
Do NOT approach suspects. They are usually armed and dangerous.
Do NOT approach the lab area. Discarded containers, waste and other materials remaining from the Meth lab can be highly volatile. Do no try to clean up the area. The evidence should remain undisturbed until law enforcement arrives.
Do NOT smell the contents of any container.
Keep a safe distance as hazardous materials can ignite or the fumes may overcome you.

**What to do if you come across discarded Meth items alongside a road:**
If you are on a roadside litter pick-up team, always protect your hands from glass and sharp objects by wearing gloves. Leather gloves offer the best protection, but cotton gloves will also work.
If you discover an area with laboratory glassware, discarded cold medicine boxes, or other chemical containers, wear rubber gloves to protect your hands from any chemical residue.
Also wear rubber gloves to pick up other discarded items like BBQ grill propane tanks, 2-liter pop bottles, coolers, antifreeze containers, or rubber hoses that could have been used to transport anhydrous ammonia.
Use litter pick-up sticks to prevent yourself from handling items with chemical residues.
Wash your hands immediately after your clean-up shift is complete, or after contact with hazardous or unidentified liquids.
Seek medical attention if you think you were in contact with any meth lab products.

**How can I keep Meth labs away from my family and property:**
Make sure sheds, barns and other structures have proper locks and security systems.
Farmers who leave anhydrous ammonia nurse tanks in the fields overnight, should park
them off of the road, and preferably out of sight of roadway traffic. Regulator locks may be available to avoid stealing or tampering with the product. Establish a farm watch system or a "good neighbor" policy with people and operations around you. Keep an eye out for suspicious traffic in and around your property, and do the same for your neighbor. Develop positive communication with your local law enforcement.

**What Meth cookers leave behind:**
Paper boxes and packaging from cold tablets
Coffee filters soaked in alcohol or ether
Cans, plastic bottles, glass jars
Hot plates or electric skillets
Leftover chemicals
Used syringes
Plastic tubing
Plastic bags
Batteries

Meth labs can be found in different capacities in rural areas and small towns. Often the chemicals and equipment used in meth production are unstable and may be explosive and poisonous. Take precaution to protect yourself and others from these dangers.

(Portions of this article are adapted from the California Farm Bureau Federation, Rural Crime Prevention Program.)