# A screen shot of a computer Description automatically generatedAgrichemical safety

Most farmers know to be careful with chemicals because they may be harmful but taking extra time to learn how to properly use, store, transport and dispose of the chemicals they use can prevent unintended injury or illness. Common agrichemicals include fuels, lubricants, pesticides, herbicides and veterinary chemicals. Any compound should be treated with caution and used strictly according to manufacturer guidelines. Chemical exposure can lead to acute and chronic health effects. Such health effects may include organ damage, nervous system damage, cancer, birth defects, etc.

*There are four routes of exposure listed below:*

* **Inhalation** – the breathing into the lungs of dust, mists, vapors or smoke.
* **Ingestion** – taking into the mouth and digestive system contaminated food, drink, tobacco products, etc.
* **Absorption** – contact of a chemical with the skin or mucous membranes such as the eyes, nose, mouth, ears. The  
  contacted chemical readily enters the bloodstream through these pathways.
* **Injection** – the forcing of a substance into the body through a needle, high pressure or puncture from a contaminated  
  object.

Take precautions to prevent these types of exposures on a farm. Always read the Safety Data Sheets (SDS) for all chemicals. These chemical data sheets list the precautions for use, possible health effects, safety controls to use such as personal protective equipment (PPE), contact numbers in case of exposure or large spill/release and withholding periods for crops and livestock.

For proper storage of chemicals be sure to keep them in their original containers with the original labels. Store chemicals in a secure place that is well ventilated, temperature controlled if possible and a containment solution such as a large catch basin under the storage shed or cabinet. Always store chemicals and PPE separate to protect the PPE from contamination. Always keep a record of the chemicals that you buy, use and store. If you must transport chemicals, avoid hauling them with food, water, animal feed, etc. to prevent cross contamination. Further, take all the appropriate PPE with you and a written record of what you are carrying in case of a spill.