Policy for Determining Expiration Dates

The use of expired medical materials such as drugs, fluids or sutures in research animals is not considered to be consistent with adequate veterinary care and therefore materials must be labeled with an expiration date. In addition, in order to ensure sterility of supplies to be used in survival surgery, sterilized instruments and devices must also be labeled. This policy will provide information for determining the expiration dates of medical materials intended for use in all animal research at Purdue University.

General Recommendations

1. Order drugs and other medical supplies in quantities that can easily be used within the vendor’s expiration date.
2. All areas where drugs and other medical supplies are stored should be inspected on a monthly basis to ensure that expired items are identified and discarded appropriately.

Dating of Materials

1. Pre-packaged sterile medical products such as suture material or surgical gloves marked with an expiration date by the vendor cannot be used for survival procedures after that date, and should be discarded.
2. Sterilized surgical packs, supplies, devices or any other instruments used in survival surgeries must be marked with the date of sterilization and an expiration date based on the date of sterilization.
3. Cloth wrapped packs sterilized and stored appropriately should have an expiration date of six months from the date of sterilization.
4. Peel packs sterilized and stored appropriately should have an expiration date of one year from the date of sterilization.
5. Autoclaved materials should contain a chemical sterilization indicator within the package and be marked with an external chemical sterilization indicator such as autoclave tape. Chemical sterilization indicators such as heat sensitive autoclave tape turn color when the appropriate temperature for sterilization has been reached. A chemical indicator within the pack should also be used.
6. Sterilized materials should be stored in enclosed cabinets/drawers away from moisture and dust.

Dating of Medications

1. All medications intended for use in live animals must be labeled with an expiration date.
2. Drugs without manufacturer’s expiration dates should be dated upon receipt. The researcher should determine the stability of the drug in order to predict a reasonable
shelf life. This is commonly obtained from the manufacturer. If stability is unknown, the drug should not be used beyond one year from purchase.

3. If drugs are reconstituted they must be marked with the contents, concentration, date of reconstitution and manufacturer’s recommended expiration date.

4. If drugs are aliquoted so that they are no longer in the original container, they must be marked with the contents, concentration and manufacturer’s expiration date.

**Dating Drug Mixtures and Fluids**

1. If refrigerated between uses, multi-dose containers of fluids, entered using aseptic technique, used for IV, IP, SC administration (e.g. normal saline, lactated Ringers) expire 30 days after opening if kept refrigerated and after 7 days if not refrigerated.

2. If a drug is transferred unchanged into a sealed, sterile container (e.g. empty sterile vial) using aseptic technique it should retain its original expiration date.

3. If a drug is diluted or mixed with another compatible drug and transferred to a sealed, sterile container using aseptic technique, it expires in 30 days (or at the earliest expiration date of the component drugs, whichever comes first).

**References**

University of Connecticut IACUC Policy: Policy #SI-10-2013

Centers for Disease Control and Prevention (CDC) – Infection Control