

## First In – First Out

Best practice to ensuring quality control with items that expire includes awareness, documentation and communication of expiration dates. Additionally, using a rotation plan – a method of “first in-first out” – and checking expiration dates of new stock to ensure new items are added to existing inventory to support the process of a rotation plan.

- **Awareness:** knowing which items have expiration dates, knowing where to find expiration dates and how to interpret/determine expiration dates. Interpretation could include determining the date of manufacture, then adding the life expectancy to calculate the expiration date.
- **Documentation:** efficient and effective recording of inventory that includes the explanation of a manufacturer’s expiration date coding. A rotation plan would ensure that supplies expiring first are used first.
- **Communication:** ensuring those ordering and/or using the product (e.g., materials management, nursing units, housekeeping, maintenance, food services, etc.) have access to information for determining expiration dates and for stock rotation processes.

Numerous items used in healthcare have *expiration*, *best before* or *use by* dates, such as medications, antiseptic products and personal protective equipment (e.g., masks).

Some dates of manufacture may be easy to locate and understand – some may not. A vendor may use the Julian calendar along with its specific manufacture code(s). The following is an actual situation regarding a general use mask.

An employer received supplies from two vendors. In consultation with the site’s materials management area, it was established that the general use mask actually does have an expiration date. The date determines how long after manufacturing the mask maintains full integrity. After five years the elastic ear bands get weak and may be subject to breaking. The manufacturer will not guarantee optimum protection for the hazard the mask is designed to protect. The possible integrity breakdown occurs five years after the product manufacture date and the recommendation from the vendor, for optimum protection, is to replace the item after the five year period.

The following is an example of determining an expiration date.

The box of masks was stamped with **AM9181D61**. By contacting the manufacturer, the employer received this explanation:

- AM is manufacture coding
- The first number is the year manufactured (in this example the “9” means 2009)
- The next 3 numbers indicate the number of days in the year (in this example “181” means it was made on or about June 30<sup>th</sup>)
- D61 is also manufacture coding

It is determined that these masks were made on or about June 30, 2009. The five year expiration from the date of manufacturer would therefore be on or about June 30, 2014.

Are you aware of the products that expire and how to determine an expiration date?

### Safety Talk Discussion

**Be Accountable: Choose safety - work safe - and go home injury free!**