

4 examples of Julian dating for SPD tracking; label symbol question

by Stephen Kovach



QI just moved to a different medical facility, and they use Julian dating. This is different than what I have used before. I thought there is only one form of Julian dating. Are there more?

AThe Julian date is the continuous count of days since the beginning of the Julian period and is used primarily by astronomers, military and in software for easily calculating elapsed days between two events (e.g., food production date and sell by date). It starts January 1 as 001.

Many departments use Julian dates to show when the sterilization of their items occurred, and I have seen Julian dating used in many formats over the years. It is important to read the policy at your specific facility. Here are some examples of Julian dating and a translation of how it is used.

Example 1

Julian Date 12032 (YYDDD)
 = 2012, February 1

Julian Dates	Correlation
12032 (YYDDD)	February 1, 2012
12 (YY)	Year 2012
032 (DDD)	Day 32 = Feb 1

The first two digits (YY) represent the year the item was sterilized. The last three digits (DDD) represent the day of the year starting with January 1 as 001 and continuing with each day of the year in sequence.

Example 2

Julian Date 03212 (DDYY)
 = February 1, 2012

Julian Dates	Correlation
03212 (DDYY)	February 1, 2012
032 (DDD)	Day 32 = Feb 1
12 (YY)	Year 2012

In Example 2, the digits invert. The first three digits (DDD) represent the day and the last two (YY) represent the year the item was sterilized.

Example 3

Using Julian dating for Date-only (DDD)

Julian Date 028 = January 28

In Example 3, notice the year is not part of the Julian date. It uses the first three digits (DDD) to represent the month/day only. At many medical facilities for which I have worked, they just use the Julian date on Biological Indicators and wrapped items.

Example 4

026210105 (DDD|YY|SS|LL)

Example 4 combines the Julian date and sterilization information to make nine-digit segments.

- The first three digits 026 equal the date January 26.
- The fourth and fifth digits 21 in this example represent the year 2021.
- The sixth and seventh digits 01 is the sterilizer number, thus, sterilizer 01 was used to sterilize this item.
- The eighth and ninth digits 05 represent the load, which was the fifth load of the day.

Digit Segments	Correlation
026	January 26 (DDD)
21	Year: 2021 (YY)
01	Sterilizer number (SS)
05	Load of the day (LL)

All packages intended for use as a sterile product should be labeled with the lot control identification. The "sterilization label" or "load sticker" should include: (a) the sterilizer identification number/code, (b) the date of sterilization, and (c) the cycle number. This is necessary if a sterilization recall is required, and items must be retrieved. Julian dating, in my view, makes it easy for tracking items sterilized because the Julian day, or Julian day number (JDN), is the number of days that have elapsed since January 1.

As you can see, there are many ways to track sterile supplies that are sterilized in-house using the Julian date system. This dating system allows a facility to meet the requirements in the various standards a medical device reprocessing department must abide by for "Best Practice."

QCan you tell me what this symbol means? (See Figure 1). I saw it for the first time on one of my peel pouches.



Figure 1

AMedical device manufacturers have various standards they need to follow. Symbols are one way to communicate a universal message.

When it comes to labeling, two of the many standards manufacturers follow are ISO 15223 and ISO 20417. The symbol you asked about means, "Do not use if the sterile barrier system is damaged." **HPN**

References

Association of Surgical Technologies (AST). (2009) *AST Standards of Practice for Packaging Material and Preparing Items for Sterilization*. https://www.ast.org/uploadedFiles/Main_Site/Content/About_Us/Standard_Packaging_Materials_Preparing_Items.pdf.

IAHCSMM: Instrumental to Patient Care®. (2016) *IAHCSMM CCSVP Vendor Education Program Module 4 Sterilization*. https://www.iahcsmm.org/images/Education/CCSVP_Modules/CCSVP_Module_4_July_2016.pdf.

n.a. (1976; 2010). Infection Control/Central Service: Sterilization Quality Assurance Procedure. *Hospital Topics*, 54(4), 1-44. DOI: <https://doi.org/10.1080/00185868.1976.9950346>. <https://www.tandfonline.com/doi/abs/10.1080/00185868.1976.9950346?needAccess=true&journalCode=vhos20>.

University of Toledo Medical Center Sterile Processing Department (UTMCSPD). (2006; 2020). Subject: Operation of Steam Sterilizers in SPD. https://www.utoledo.edu/policies/utmcs/sterile_processing/pdfs/SP3-3-operation-of-steam-sterilizers-in-spd.pdf.

Quora. (2020). *Why does the military use the Julian date system?* Quora, Inc. <https://www.quora.com/Why-does-the-military-use-the-Julian-date-system>.



Here is an example of a label gun and labels you can use.