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# How To Set And Track Hang-Time Limits For Flexible Endoscopes


Hang-time limits for flexible endoscopes have been a hot topic among GI, Infection Control and Sterile Processing professionals for the last several years. With no consensus emerging in hang-time limits (sometimes called an endoscope's shelf life), hospitals are left to make this decision on their own. With different stakeholders within the hospital looking at different guidelines, such as those from SGNA or AAMI, conflicting data may be reviewed before making a decision. Furthermore, since there is no consensus, some hospitals have taken a conservative view of the research and set very low limits, while other hospitals have pointed to the lack of conclusive research and have set higher limits.

## How Different Oversight Bodies Have Set Their Guidelines

Many major industry and research groups have recently published their best practices for flexible endoscope reprocessing. A lot of attention has been placed on the subject over the past few years due to the spike in reports of endoscope-related infection risks at US hospitals. In an effort to help hospitals standardize and improve upon their endoscope reprocessing protocols, several groups have published their guidelines including:

1. Centers for Disease Control and Prevention (CDC)

2. American Society for Gastrointestinal Endoscopy (ASGE)

3. Society of Gastroenterology Nurses and Associates (SGNA)

4. Association for the Advancement of Medical Instrumentation (AAMI)

5. Association of PeriOperative Registered Nurses (AORN)

While these different societies have come to similar conclusions about best practices relating to endoscope reprocessing, finding consensus when it comes to hang-time limits has been elusive. The reason is that the various research papers that have been published on the subject point to differing, though not necessarily conflicting, data points. Some recent studies point out that there is no significant risk of contamination after 5 days of hanging in storage,[1] while others point to no significant risk after 7 to 14 days.[2]

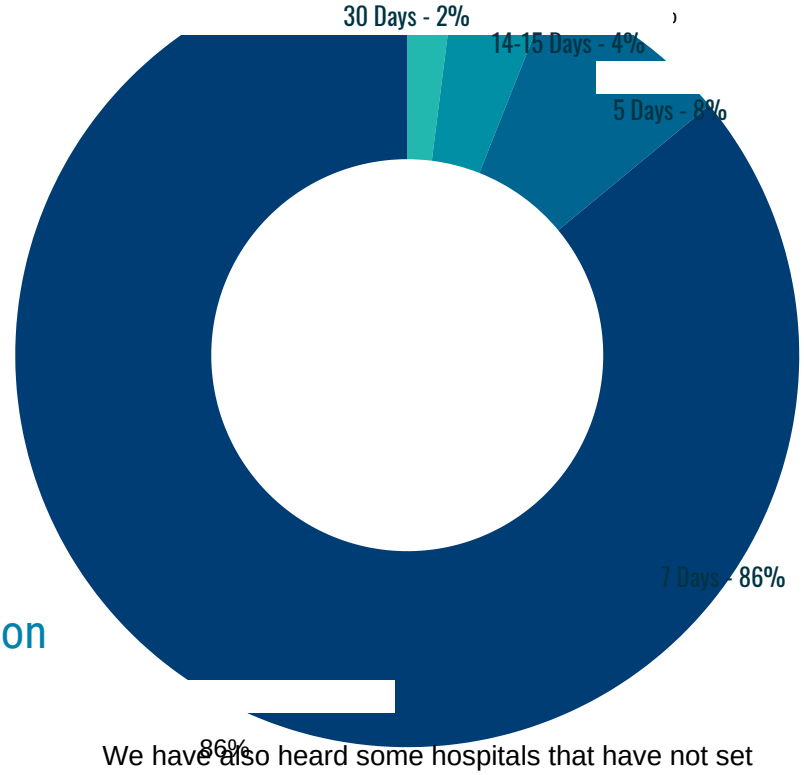
Per ASGE's comprehensive flexible endoscope guideline published in 2011:

> Although reuse within 10 to 14 days appears to be safe, the data are insufficient to provide a maximal duration for use of appropriately cleaned, reprocessed, dried and stored flexible endoscopes…In the interest of utmost caution, AORN and the Association for Professionals in Infection Control and Epidemiology espouse maximal storage intervals without reprocessing of 5 and 7 days, respectively.[3]

## How Other Hospitals Have Set Their Hang-Time Limits

As part of our industry research, we have talked to hundreds of hospitals and ambulatory centers about where they have set their hang-time limits. By far, the most common limit we have seen is 7 days (nearly 90% of hospitals sampled). Though 7 days seems to be the most common, we have heard other hospitals using the following limits in this order: 5 days (nearly 10%), 14/15 days (less than 5%) and 30 days (less than 2%).

### Survey of US Hospital Hang-Time Limits




We have also heard some hospitals that have not set a limit because they believe they have such high usage rates of their scopes that they never sit in storage for more than a couple of days before they are used again in a procedure. We do not recommend this practice for 2 reasons. First is that since the hospital is not actively monitoring their hang-time limits, they don't have any actual data showing how long each scope is in storage between each use. They are using anecdotal data to make decisions rather than making

evidence-based decisions. Second, they are making decisions based on the current state of their endoscopy practice. However, their scope usage rates will change over time as their number of scopes increases, their physicians turnover, procedure volume increases or decreases, procedure types go in or out of favor, etc. You have to start measuring this vital statistic, set a reasonable limit and monitor it in order to ensure the long-term health of your practice and patients.

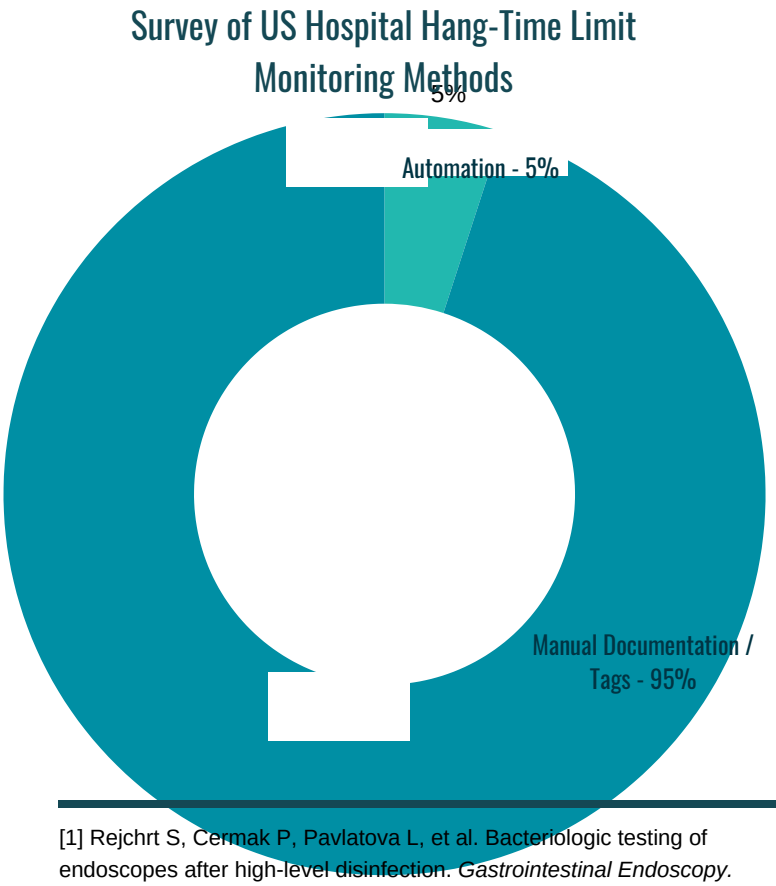
## How Hospitals Monitor Their Hang-Time Limits

Nearly 95% of the hospitals that we have talked to indicate that they use paper tags to track their hang-time limits. This method requires paper or plastic tags to be placed on each scope immediately after reprocessing that shows either the last date of reprocessing or the date at which the hang-time limit will elapse. While having a system in place is better than no system, this particular process has several drawbacks:

1 *It's inefficient.* When using physical tags to track the hang-time limit of each scope, the burden is on clinical staff or techs to check each tag daily to see which scopes are approaching their limit. When you're tracking dozens or hundreds of scopes in a particular hospital, the amount of time spent rounding each area to check all the scope tags can add up to several hours per week. This is time that could be better spent on patient care.

2 *It's not sterile.* The minute you attach a tag to a reprocessed scope, you are putting a non-sterile object on your high-level disinfected or sterilized scope. Whenever someone checks a tag, they put their hands on the tag, and that tag in turn touches your scope. Whatever germs that were on the employee's hand may have transferred on to the reprocessed scope, adding a non-sterile element into the equation.

3 *Surveyors don't like it.* We have heard stories about surveyors from agencies like The Joint Commission who have had issues with these manual methods of tracking endoscope hang time. They point to 2 main reasons why these methods are sub-optimal: a) they require a paper trail, while many surveyors prefer electronic logs and b) they introduce a potentially non-sterile component to your HLD endoscopes.




[1] Rejchrt S, Cermak P, Pavlatova L, et al. Bacteriologic testing of endoscopes after high-level disinfection. *Gastrointestinal Endoscopy.* 2004;60:76-8.

[2] Vergis AS, Thomson D, Pieroni P, et al. Reprocessing flexible gastrointestinal endoscopes after a period of disuse: is it necessary? *Endoscopy*. 2007;39:737-9.

[3] American Society for Gastrointestinal Endoscopy and the Society for Healthcare Epidemiology of America. Multisociety guideline on reprocessing flexible gastrointestinal endoscopes: 2011. *Gastrointestinal Endoscopy.* 2011;73:1075-1084.

# There's a better way: automation

iRIScope from Mobile Aspects was introduced in the last several years to change documentation for endoscope management from a manual process to an electronic record. Using RFID technology, you can now literally have your scopes alert you when they need to be reprocessed.

The way RFID technology helps automate endoscope management is both simple and highly effective. Attaching medical-grade RFID tags to your endoscopes allows each scope to be tracked electronically as it goes through the HLD process. Because you now have an electronic time stamp of each scope's most recent reprocessing stored in a database, intelligent analytics built into iRIScope will push endoscope reprocessing alerts right to your inbox.

No more log books, no more paper tags - just electronic documentation that makes your department more effective and more efficient. All the time staff spends looking at paper tags to see which scopes need to be washed is now turned into time spent on patient care. And patient safety and accreditation likelihood have improved because your disinfected scopes are less prone to contamination.

## Automated Scope Monitoring Workflow

Endoscope reaches shelf-life limit → Re-wash alert is generated by software → Real-time alert is sent to your phone → Endoscope is located by employee for reprocessing