MICROBIOLOGICAL SURVEILLANCE GUIDELINES

The guidelines and what they are:

The guidelines are a document that has been developed to enable all endoscopy users to operate safely through a common best practice methodology. They cover all areas of the general day-to-day issues that arise in endoscopy departments. These include the cleaning and handling of endoscopes, automated re processing machines, PPE, patient requirements etc.

The part of the guidelines that you will be required to know is the microbiological surveillance of flexible endoscopes. As the guidelines have now been noted in the AS 5396:2023 standards it is now a regulatory requirement that the micro testing of flexible scopes with lumens be adopted within all facilities that use this equipment.

It is recommended that time is spent to go through the complete guidelines to familiarise yourself with the requirements placed upon staff that will be trained in Endoscopy Microbiological Surveillance

The following information has been restricted to coverage that only applies to the parts of the guidelines that pertain to and are important to know in relation to the testing of flexible endoscopes.

AS 5396:2023 refers to all surveillance of endoscopes to be done in accordance with the GENCA guidelines.

8.5 MICROBIOLOGICAL SURVEILLANCE OF FLEXIBLE ENDOSCOPES WITH CHANNELS

Flexible endoscopes with channels shall undergo microbiological surveillance.

Flexible endoscopes not subjected to terminal sterilization shall be tested in accordance with the GENCA Guidelines for Infection Prevention and Control in Endoscope.

Flexible endoscopes with channels that undergo terminal sterilization shall be tested in accordance with the facility's policy.

Loaned flexible endoscopes with channels, or returning from repair, shall undergo microbiological surveillance within 72 h of receipt.

Surveillance time frames

Differential risks of infection transmission mean that the following recommendations, which are themselves empirical, vary with both the proposed use of an endoscope and the method of disinfection: *(page 53 Infection Prevention and Control in Endoscopy 2021)*

10.4 Frequency of testing

- AFERs should be tested every **4 weeks.**
- Duodenoscopes, bronchoscopes and linear echoendoscopes should be monitored every **month.**
- All other gastrointestinal endoscopes and radial echoendoscopes should be monitored **every 3 months.**
- Endoscopes that have been reprocessed through a sterilisation cycle and stored in a wrapped state should be monitored **every 3 months as recommended by GENCA 2025 Guidelines**
- Endoscopes received on loan or after repair can be used after reprocessing without the need for quarantining; however:
  unless a microbiological culture has already been commercially completed and the result provided, endoscopes on loan or after repair are to be cultured within 72 hours of receipt of the instrument. The instrument should then be retested according to the routine schedule for the type of endoscope if it remains in use for that period of time.

Further microbiological screening may be undertaken, in consultation with a clinical microbiologist, if:
there is a clinical suspicion of cross-infection related to endoscopy;
positive surveillance cultures occur;
alterations are made to the plumbing of the endoscopy reprocessing area;
new reprocessing protocols are introduced in the unit;
new models of equipment (endoscope or AFER) are used; or
as a means of quality check for new staff responsible for endoscope reprocessing.

10.5 Microbiological testing protocols

Endoscopes should be sampled after standard processing and storage of at least 12 hours to allow detection of microorganisms arising from a biofilm. Endoscopes that have undergone sterilisation and are stored in a wrapped state should be removed from the packaging and tested at the interval indicated above. There should also be an interval of 12 hours from the last use of an AFER before microbiological sampling.

The volume of fluid required is different for each endoscope and will vary from 5 mL to 50 mL.

A sterilised reusable or single-use endoscope brush is passed down the biopsy channel and should also be performed on any brushable channel of any endoscope and ballon channel of an echoendoscope.

The brush will need to be handled using sterile gloves; sterile gowns are optional.