Example policy for ScopeDryCheck™ for the Detection of Residual Moisture Prior to Storage in a Cabinet or Reuse.

NOTE: This document is an example of a policy that may be instituted in a healthcare facility for the detection of residual moisture prior to storage in a cabinet or reuse. The actual policy in a facility must be based on variables, logistics, and risk-assessments that are specific to your facility.

Subject: Detection of residual moisture in lumens/channeled items.

Department: Central Service/Endoscopy

Approved By: [Name of Dept Supervisor/Manager]

Effective: [Enter the date when this will take effect]

Revised: May 2022

Purpose: To check for residual moisture in lumens/channeled items.

Policy: To be used on the clean side (post air drying and high-level disinfection) to test for residual moisture in items that are required to be completely dry for low temperature sterilization or to check endoscopes for residual moisture prior to storage in a cabinet or reuse.

Rationale: Residual moisture that remains in an endoscope or lumen/channeled item can allow for microbial proliferation. Purging the item with compressed air will ensure moisture is removed prior to storage or reuse. Testing a lumen/channel for moisture can be performed with the ScopeDryCheck™ to detect remaining moisture.

Standards and Professional Society Recommendations:

A. AAMI ST91:2021 states the following[1]:
   1. If performing manual drying, verify the endoscope is dry per your health care facility's policy.
   2. It may be necessary to reevaluate the drying process as additional tools become available to verify the effectiveness of drying.
   3. Endoscopes are to be stored in an area that is clean, well-ventilated, dust free to keep the endoscopes dry and prevent exposure to potentially hazardous microbial contamination.
   4. Endoscope cabinets are closed cabinets designed for storage of flexible endoscopes that circulate HEPA-filtered air or instrument air through the cabinet and each endoscope channel at continuous positive pressure.

5. Endoscopes should be stored suspended vertically or horizontally in a cabinet designed for storage in a way to allow circulation of air in accordance with the endoscope manufacturer's written IFU.
6. Before storage, the channels of the high-level disinfected endoscope should be dry to help prevent bacterial growth and the formation of biofilm. If a drying cabinet is not used, dryness can be checked by using dryness indicators.

B. AORN states the following in their endoscope processing guidelines[2]:
   1. Any moisture remaining on the exterior and interior surfaces of the endoscope can facilitate microbial growth and biofilm formation during storage.
   2. Because bacteria can double in population every 20 to 30 minutes, an inadequately dried endoscope contaminated with only one or two viable bacteria can, after eight hours of storage, be contaminated with tens of thousands of bacteria. These multiplying bacteria could pose a risk for infection.
   3. Purging the endoscope channels with instrument air or using a mechanical drying system facilitates drying without introducing contaminants into the clean device, removes residual alcohol, and reduces the likelihood of contamination of the endoscope by waterborne pathogens and the transmission of pathogens that may result in patient infection.

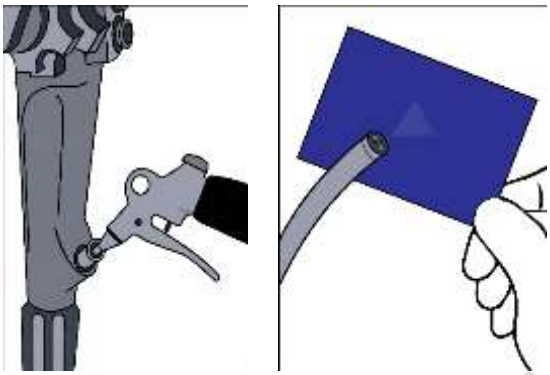
C. According to SGNA[3], facilities should perform the following for drying endoscopes:
   1. Flush all channels with alcohol until the alcohol can be seen exiting the opposite end of each channel.
   2. Purge all channels with air.
   3. Use compressed air that has been filtered to remove microorganisms.
   4. Avoid the use of excessively high-air pressure that can damage the internal channels of flexible endoscopes.

***Procedure*:**

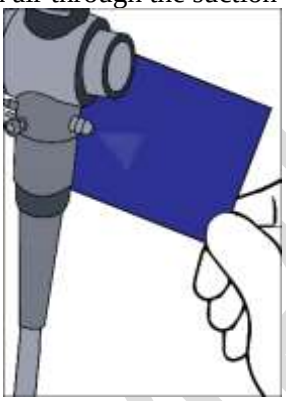
ScopeDryCheck™ Instructions for Use (IFU)

Residual Moisture Assay: For detection of residual moisture in lumen/channeled items.

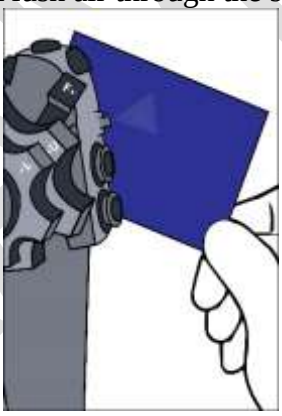
1. With dry gloved hands (using the same air source used to dry the scope) flush air through the biopsy port after drying any lumen/channeled items, in accordance with the manufacturer's IFU.
2. On the other side of the blue note card (blue side facing up), with a gloved hand, hold the ScopeDryCheck™ in one corner (of the card) ready to test if the lumen/channel is dry. While blowing air, aim the scope one centimeter (1 cm) away from the card in the following sequence:
3. Distal end - Flush air through the biopsy port.



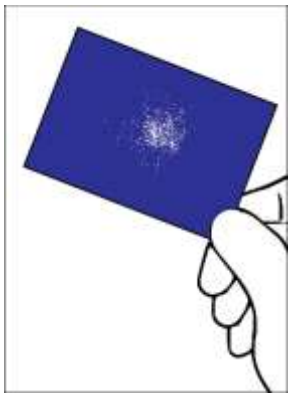
A. Suction connector- Flush air through the suction valve port.



B. Auxiliary water inlet- Flush air through the suction valve port.



4. If any white dots are visible at any time during this test procedure, resume drying of the item, then retest with a new card.



5. Repeat test until no white dots are visible.

***Principle*:**

The blue note card is meant to be used for the detection of any remaining moisture; though, an air flush is the preferred technique to detect moisture.

Range of Application:
For lumens/channeled items.

Measuring Range:
The ScopeDryCheck™ can detect down to 50 nL (or 0.05 [1/20] µL) of residual moisture.

Interferences:

If white dots are visible on the card the item is not dry. Repeat drying steps and retest with another area of the card to check for residual moisture. Note: The drying card may also detect residual isopropyl alcohol since it has water in it.

Storage*:*
Store in cool dry place at 60- to 80 °F with relative humidity of 30 - 60% rh. Avoid exposure to moisture.

Shelf life:
There is a two (2)-year shelf life from the date of manufacturer.

Responsibility:

The departmental manager is responsible for training, and for assuring initiation, completion, and analysis of the monitoring assessment activity for testing for residual moisture in lumen/channeled items.

Sample Competency for Lumen/Channeled Items for Residual Moisture

Name: _____

Competency Statement: Complies with policy and procedure for testing lumened/channeled items and endoscopes for residual moisture.

Key:
1 = Performs independently and consistently. Asks for assistance in new situations.
2 = Performs with minimal guidance and direction. Asks for assistance when necessary.
3 = Performs with maximal guidance and direction. Preceptor dependent. Consistently needs assistance.

Comments:
_____
_____
_____

Competency Achieved: _____ Date: _____
Evaluator: _____
Learner: _____

Critical Behavior	1	2	3
Review Hospital Policy on cleaning of items along with the IFU of the ScopeDryCheck™ Test.			
Describes the purpose of cleaning and decontamination of the item with lumens/channels.			
Selects and wears the proper PPE for this task.			
Gather appropriate supplies to perform test on the lumen/channel (ScopeDryCheck™).			
Select the item to be tested for residual moisture.			
Gloves must be worn throughout the test procedure to avoid contamination of the test.			
Take one ScopeDryCheck™ card to perform test on the lumen/channel.			
Use the same air source used to dry the item or scope and flush air through biopsy port.			
(With gloved hand) hold the ScopeDryCheck™ in one corner of note card with blue side up ready to test the lumen/channel to be sure it is dry.			
Aim the item or scope 1-cm away from the card in the following sequence: A. *Distal end*: Flush air through biopsy port. B. *Suction connector*: Flush air through the suction valve port.			

C. *Auxiliary water inlet*: Flush air through the suction valve port.			
Look for white dots at any time during this test procedure. If visible, continue drying the item, then retest with a new card.			
Repeat test until there are no white dots visible on the ScopeDryCheck™ card.			

***References*:**

[1]. ANSI/AAMI ST91:2021 *Flexible and semi-rigid endoscope processing in health care facilities*. Association for the Advancement of Medical Instrumentation (AAMI). www.aami.org

[2] Association of periOperative Registered Nurses. (2021). *AORN Guidelines for Perioperative Practice 2021* [Section 8.9]**.** www.aorn.org.

[3] Society of Gastroenterology Nurses and Associates, Inc. (2018, November 16). *Standards of Infection Prevention in Reprocessing Flexible Gastrointestinal Endoscopes*. SGNA. p 26. Retrieved 2019, November 18. https://www.sgna.org/Portals/0/SGNA%20Standards%20of%20infection%20prevention%20in%20reprocessing_FINAL.pdf?ver=2018-11-16-084835-387.