Wake Forest™ Baptist Health	HANDLING DRY ICE	Effective Date:	10/1/2019
		Revised Date:	NEW
		Contact:	Laboratory Compliance, QA & Safety
CLIA Laboratory Director Signature:		Date Approved:	10/7/19

1) **General Policy Statement:**

It is the policy of Wake Forest Baptist Medical Center to use all chemicals according to established and appropriate protocols and/or procedures.

The purpose of this policy is to provide general information regarding the use and handling of dry ice.

a. **Scope:** Dry Ice is the solid form of carbon dioxide. It is used primarily as a cooling agent. The extremely cold temperatures make the solid dangerous to handle without protection due to burns caused by freezing (frostbite). While generally not very toxic, the outgassing from it can cause hypercapnia (abnormally elevated carbon dioxide levels in the blood) due to buildup in confined locations. Follow the precautions below.

b. **Responsible Department/Party/Parties:**
   i. Policy Owner: Department of Laboratory Pathology
   ii. Procedure: Department of Laboratory Pathology
   iii. Supervision: Department of Laboratory Pathology
   iv. Implementation: Department of Laboratory Pathology

2) **Definitions:** For purposes of this procedure, the following terms and definitions apply:

a) Dry Ice: Solid carbon dioxide or dry ice which converts directly to carbon dioxide gas at -78°C (-109°F) is often used in laboratories.

3) **Policy Guidelines:**

Handling Dry Ice:

Dry ice can be hazardous to workers if not handled properly. Follow the precautions below.

a. General Precautions When Working with Dry Ice:

- Avoid eye or skin contact.
- Never handle dry ice with bare hands.
- Use cryogenic gloves, which are designed specifically for working in freezers below -80°C and for handling containers or vials stored in these freezers.
- Cryogenic gloves need to be loose-fitting so that they can be readily removed if a piece of dry ice falls into them.
- Always use appropriate eye protection.
- Do not use or store dry ice in confined areas, walk-in refrigerators, environmental chambers or rooms without ventilation.

b. First Aid:

- In case of exposure to cryogens or dry ice, remove any clothing that is not frozen to the skin.
- Do NOT rub frozen body parts because tissue damage may result.
- Obtain medical assistance as soon as possible.
- Place the affected part of the body in a warm water bath (not above 40°C).
- Never use dry heat.
- Go to employee health and complete an Occurrence report.

4) Review/Revision/Implementation:

a) Review Cycle: Each 2 years

i. All new policies/procedures/guidelines and those that have major revisions must be reviewed/signed by the CLIA Laboratory Director.

ii. Review/sign-off can be completed by the designated section Medical Director or section manager in the following circumstances:

- Biennial review
- Minor document revisions

b) Office of Record: Laboratory Compliance, QA & Safety

11) Related Policies: WFBH Employee occurrence link: https://employeeocc.wakehealth.edu/

12) References: OSHA Laboratory Safety Cryogens and Dry Ice 3408 Rev. 10/2011

13) Attachments:

14) Revision Dates:

Review/Revision Date	Review/Revision Description	Signature