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CGA M-28—2022

**GUIDELINE FOR ASSESSMENT
OF HEALTHCARE FACILITY
MEDICAL OXYGEN SYSTEMS**

FIRST EDITION

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Bulk Distribution Equipment and Standards Committee

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1 Introduction

Health care facilities experienced an unprecedented demand for oxygen from bulk medical oxygen supply systems, due to the impact of the COVID-19 pandemic. Many of these facilities found that their existing bulk medical oxygen supply systems were inadequate for the heavy demands for oxygen with extremely high gas flow rates. In addition, most facilities did not have any plans in place on how to upgrade or supplement their existing equipment to quickly react to these increased demands.

This publication is intended to help health care facilities assess their infrastructure needs based on expected demand. Assessment results will help to facilitate discussions between health care facilities and bulk medical oxygen suppliers on infrastructure and/or supply equipment changes needed to ensure adequate supply of medical oxygen at patient use points based on lessons learned from the COVID-19 pandemic.

2 Scope

This publication aids in the assessment of bulk medical oxygen supply systems and health care facility medical oxygen pipelines to support medical oxygen demands. Where the bulk medical oxygen supply system is unable to adequately provide medical oxygen due to a change in demand, this publication provides recommendations for modifying the health care facility pipeline and/or the bulk medical oxygen supply system.

This publication does not address the capabilities of medical oxygen equipment used for patient treatment.

3 Definitions

For the purpose of this publication, the following definitions apply.

3.1 Publication terminology

3.1.1 Shall

Indicates that the procedure is mandatory. It is used where the criterion for conformance to specific recommendations allows no deviation.

3.1.2 Should

Indicates that a procedure is recommended.

3.1.3 May

Indicates that the procedure is optional.

3.1.4 Will

Is used only to indicate the future of a degree of requirement.

3.1.5 Can

Indicates a possibility or ability.

3.2 Technical definitions

3.2.1 Auxiliary source connection

Secondary tie-in point of the same size as the health care facility medical oxygen pipeline which is located immediately on the patient side of the source valve [1].¹

3.2.2 Bulk medical oxygen supply system

Assembly of equipment for supplying medical oxygen, including but not limited to, a stationary tank(s) that is permanently installed through anchoring to a foundation, pressure regulators, pressure relief devices (PRDs), vaporizers, manifolds, and interconnecting piping that is designed to be filled at the health care facility with cryogenic oxygen and that terminates at the source valve.

¹ References are shown by bracketed numbers and are listed in order of appearance in the reference section.