# UL 1069

# The Standard for Safety for Hospital Signaling and Nurse Call Equipment

Jenny Fields

**UL Standards & Engagement** 



# Agenda

- Introduction
- UL 1069 today
- What is it?
- Why is this important?
- Basic requirements
- Clinical IT Networks
- Class 2 Power Supplies

- Supplementary Devices
- Wireless Networks
- Construction and Performance
- Current Activity
- Related Activity
- More Information
- Getting Involved



Three organizations. One shared mission.

Working for a safer world.











Over **1,700** standards and documents published

**400** technical committees with over **4,000** technical members

**100+** dedicated staff located in 8 countries

# History of UL 1069

First edition was published in March 1974

Eighth edition was published in February 2024

American National Standard Accreditation



**UL 1069** 

#### STANDARD FOR SAFETY

Hospital Signaling and Nurse Call Equipment



# UL 1069 Today



### UL 1069 8<sup>th</sup> Edition

- Published February 8, 2024
- Encompassed editorial updates from series of recent revisions
- Expanded existing requirements that permitted use shared Clinical IT networks



# What is it?



Scope -

1.1 The requirements in this Standard cover the individual units and equipment that operate within the context of a fundamental hospital signaling nurse call system (NCS).



1.2 A fundamental NCS provides audible and visual communication between patients and staff in a health care facility and conforms to the minimum requirements established in the Health Care Facilities Code, NFPA 99, and the National Electrical Code, NFPA 70.



1.3 Accessory equipment or devices which are intended to be interfaced with a fundamental NCS to initiate routine calls or supplementary operation and which do not initiate emergency or code call signaling can be evaluated for compliance with applicable requirements described in this Standard.



- 1.4 A minimal fundamental NCS performs the following operations:
- a) Call Initiation Activation of a staff or patient request for assistance via fixed or portable call initiation station,
- b) Notification Call annunciation (audible and visual) at a primary call notification station,
- c) Notification Call-placed indicator (visual) on the call initiation station,
- d) Notification Call annunciation at a corridor dome light,
- e) Notification Zone annunciation (audible and visual) on a zone dome light, and
- f) Call reset/cancellation.



1.5 A fundamental NCS may employ a wireless interface to perform fundamental operations or a supplementary operation such as notification at a redundant portable nurse's station.



1.6 The units comprising a fundamental NCS covered by this Standard are intended to be installed in patient care areas, staff areas, and support areas of a health care facility in accordance with the National Electrical Code, NFPA 70, and the Health Care Facilities Code, NFPA 99.



- 1.7 These requirements do not cover medical and dental equipment, line isolation monitors, X-ray equipment, electrically heated pads, therapeutic lamps, refrigerated oxygen therapy equipment, food warming cabinets and carts, equipment employed in inhalation anesthetizing or hazardous locations, office intercoms, or similar equipment and products covered by individual requirements.
- 1.8 These requirements do not cover equipment employed in an area of hyperbaric oxygenation, in which a patient is exposed during oxygen therapy to pressures greater than ambient atmosphere.



# Why is this important?



# UL 1069 – why is this important?

Nurse Call Systems provide crucial communication channels between patients and caregivers

UL 1069 provides facilities a minimum level of expected performance



# Basic requirements



# UL 1069 – basic requirements

#### **Call Initiation**

- Provides one or a combination of call types
  - May provide supplementary two-way voice communication, if serving one or more beds, each bed shall be uniquely identified and discretely accessed
- A call initiation station intended to be mounted in a space intended to be a bath area (accessible by floor/pull cord)
- Visual indicator



# UL 1069 – basic requirements

#### **Call Notification**

- Audible and visual annunciation at a wired primary call notification station
- Audible and visual annunciation at a nurse's duty station which is intended for installation at a fixed location.
- Visual annunciation at a wired or wireless corridor dome light. Audible annunciation at the corridor dome light is permitted.
- Visual annunciation at a wired or wireless zone dome light. Audible annunciation at a zone dome light is permitted.
- The nurse call system shall identify the location of the staff or patientinitiated call.
- Visual and audible signals for a code call and staff emergency call shall be individually identifiable and distinct from all other nurse call signals.



# UL 1069 – basic requirements

#### Call reset or cancelation

The ability to return the nurse call system to a normal quiescent state upon restoration of a call event. Calls initiated by fundamental NCS equipment may only be canceled at the originating patient care area or room of origin. The following means of call cancellation shall be permitted:

- 1) When two or more stations are located in the same area and all are visible from any call location, the call event may be canceled at any station in the same area.
- 2) A routine call may be canceled remotely if two-way audio communication has been established, with the end-to-end connection verified prior to hang-up, between the calling patient care area or room of origin and the remote location.
- 3) A code call or an emergency call annunciated on a Call Notification Device or Portable Annunciation Device must be canceled by an action separate and unique from terminating communication.
- 4) A routine call may be canceled upon detection of staff presence in the patient care area or room of origin by the NCS directly or communicated by a supplementary system.



# Clinical IT Networks



#### UL 1069 – Clinical IT Networks

If a Nurse Call System is deployed using a clinical IT network where either (a) or (b) below applies, no segment of the clinical IT network shall be considered as part of the fundamental NCS, or evaluated as such, provided:

- a) Two or more segments of a Nurse Call System are connected using one or more segments of a clinical IT network where each NCS segment is operating on their own dedicated network that is capable of independently performing fundamental NCS operation as defined in 2.2.1.2.
- a) Two or more segments of a Nurse Call System are connected using one or more segments of a clinical IT network where the NCS segments are not capable of independently performing fundamental NCS operation as defined in 2.2.1.2 and the system meets the requirements of 17.24, 18.3, and 46.1(k).



# Class 2 Power Supplies



# UL 1069 – Class 2 Power Supplies

Non-evaluated sources shall be permitted to supply power to permitted components, with requirements for documentation and risk assessment



# Supplementary Devices



# UL 1069 – Supplementary Devices

Provision for the interface and signaling of medical device alerts or any signaling not included in 2.2.1.2(a) or 2.2.1.2(b) is permitted and shall be considered supplementary operation and shall meet (a) or (b) below:

- a) Provision for two-way audio (voice) communications is permitted and shall be considered supplementary operation. A call initiation station that provides supplementary two-way voice communication shall provide a visual or aural signal to indicate voice circuit operation
- b) It is permissible for the fundamental NCS to perform supplementary operation with wired or wireless equipment such as:
  - 1) Supplementary notification at a redundant portable annunciation device or redundant portable nurse's station, or
  - 2) Supplementary call initiation of a routine call such as housekeeping or maintenance via supplementary call initiation device.



# Wireless Devices



### UL 1069 – Wireless Devices

#### Requirements include:

- Batteries
- Signaling



# Construction and Performance



#### UL 1069 – Construction and Performance

Products that meet 62368-1 fulfill related requirements

Additional requirements are necessary due to use case and signaling



requirements

# Current Activity



### UL 1069 – current activity

Task Group working on revision of standard

- Continues effort to ensure current technologies are incorporated
- Looking to upcoming technologies



# Related Activity



### UL 1069 – related development

UL 2560 – The Standard for Safety of Emergency Call Systems for Assisted Living and Independent Living Facilities

- Under the same Technical Committee as UL 1069
- Applies to emergency call systems in non-acute care settings
- Also being revised via Task Group effort



Where can you find more information?



#### How to Access Standards Content

- Standards can be viewed online for free via the Digital View feature on our <u>UL Standards & Publications Site</u>. Simply create a free account to get started. ISO and IEC adoptions are not available for digital view due to their copyright.
- Members of our Technical Committees get access to the standards associated with their committees via the Committee Library in our Collaborative Standards Development System (CSDS).
- Educational YouTube tutorials on accessing UL Standards Documents that may be helpful for participants:
  - Accessing UL Standards Documents: Free Digital View
  - Accessing UL Standards Documents: CSDS Committee Library



Help shape the development of this work



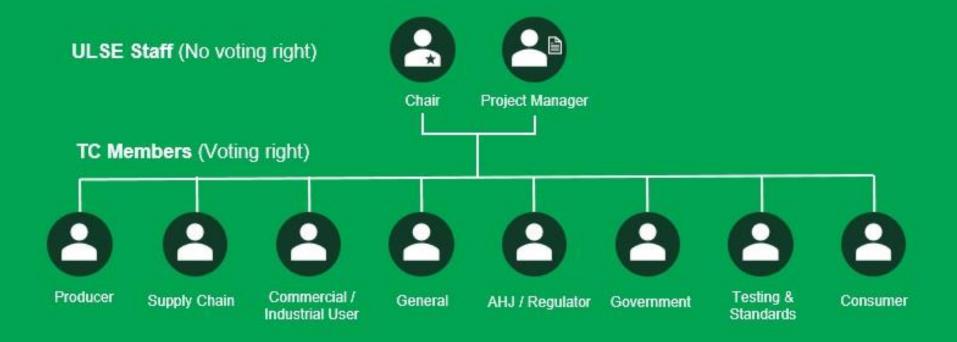
# Benefits and Importance of TC Membership

- Participation is free, online, 24/7
- Access to complimentary copies of latest standards
- Influence and awareness of new requirements
- Opportunity to network
- Contributing to making a safer world





#### **ULSE Technical Committee**

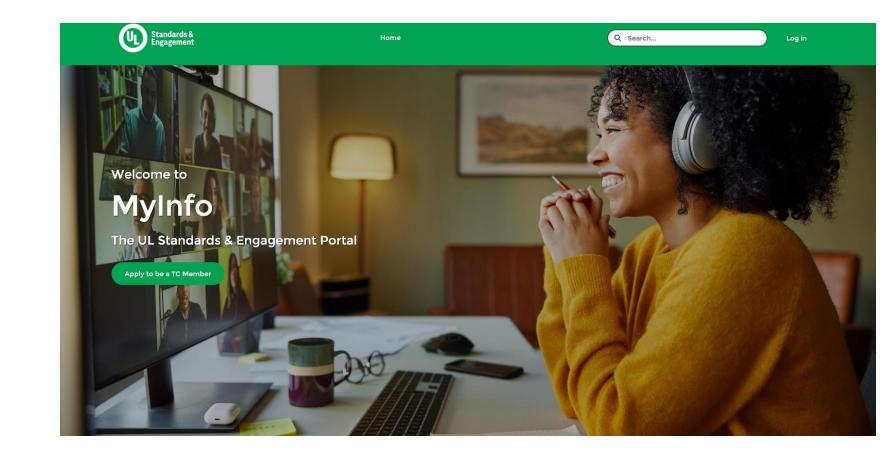




- Consensus body that votes and approves UL standards
- Committee with a balance of interests (no category greater than 1/3 of total)
- Open to anyone
- No fee to participate

#### MyInfo Portal

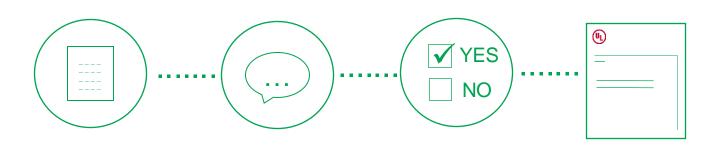
- Apply for technical committee membership
- Maintain profile and set communication preferences
- s.ul.org/MyInfo (case sensitive)

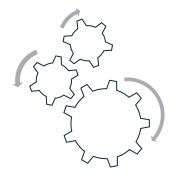






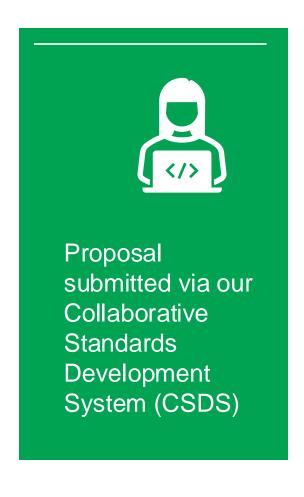
#### **UL Standards Development Process**

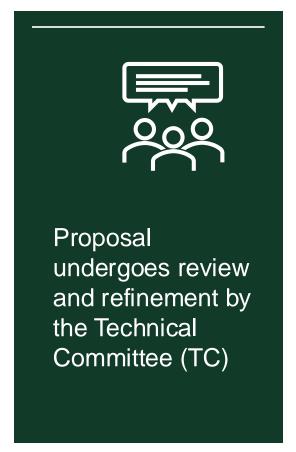






#### How Standards are Developed







Consensus among
TC members
determines adoption
or rejection of
proposed standard



Successful proposal results in new/revised standard that is published for global stakeholders



No membership fees or other costs to participate in our open, transparent process

### Thank you!

Jenny Fields Jennifer.Fields@ul.org

