

MEETING LOG

SUBJECT: ASTM Computer Vision Based Drowning Detection Systems/Residential Pools

LOCATION: Teleconference call

DATE: May 27, 2020

ENTRY DATE: June 3, 2020

LOG ENTRY SOURCE: Susan Bathalon

COMMISSION ATTENDEES:

Susan Bathalon, EXHR

Rick McCallion, EXHR

Other ASTM ATTENDEES:

Alan Korn, Abby's Hope Foundation

Don Huber, Consumer Reports

Eyol Golan, Pool detection product developer

Susan J. Hilaski, PHTA

Stephen Kuscsik, UL Lighting Engineer

Molly Lynyak, ASTM

Contact ASTM for a full list of attendees.

MEETING SUMMARY:

The ASTM computer based pool detection draft agenda was approved and introductions were made. A draft version of the standard was distributed for review.

The participants discussed the ISO/TC 83/WG 4, *Computer Vision Systems for the Detection of Drowning Accidents in Commercial Swimming Pools*, standard for commercial pool drowning sensor detection. Several representatives on the ISO committee were unsupportive of the publication of this standard for two reasons: (1) the standard seems to be developed around one manufacturer's technology where a patent exists and a license must be purchased to perform the tests in the standard (2) the ISO performance requirements need further development to reliably detect drowning. There was discussion that the ASTM residential version of computer-based drowning detection appears to have similar issues. The ISO/TC 83/WG 4, standard will be distributed, reviewed and discussed further.

The participants discussed the scope of the standard. Eyol Golan, a manufacturer, drafted the standard with the idea that new safety technology such as an electronic computer vision can add notification features to caregivers that a drowning event is occurring. The notification and sensor technology is not a passive barrier swimming pool feature, such as isolation fencing or pool gates. The approach of the standard is intended to offer safety beyond those of pool alarm products.

Participants discussed several drowning events and when activation of notification is needed in a computer based sensor system. The participants were concerned that the draft standard requires alarming only when the victim is limited in motion and partially submerged or fully touching the pool bottom. The concerns were that these conditions are similar to common fatal drowning events. Detection of a drowning event at pool bottom or mid-water depth may be too late to save lives. The terms "drowning" and "drowning risk" were discussed with suggestions to rely on World Health Organization (WHO) terminology. The importance of timing of life saving actions in submerged water were discussed.

The participant discussed the need for standards to use performance requirements as the basis for requirements to prevent injuries and fatalities. The development of these requirements are typically thought participants in the standard. There was concern that the draft ASTM standard needs revision to prevent tailoring the requirements to fit a single product. CPSC staff asked why the artificial intelligence (AI) term was attached to this standard, as the t draft standard references an algorithm software detection system with no indication of AI features. The ISO standard participants stated that the AI term was carried from previous ISO meetings, even though the development of AI is not available in any pool sensing product. This scope and title should be changed to reflect the existing technology rather than futurist computer advanced AI technology.

Next Steps:

The scope of the standard will be developed in a task group with CPSC participation. The scope TG will upload drowning information into the ASTM collaboration site. The TG conference call meeting is TBD.

