



**BILLING CODE 4163-19-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**Centers for Disease Control and Prevention**

**[Docket Number CDC-2018-0055, NIOSH 156-D]**

**Request for the Technical Review of 3 Draft Immediately  
Dangerous to Life or Health (IDLH) Value Profiles**

**AGENCY:** National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

**ACTION:** Request for comments.

**SUMMARY:** The National Institute for Occupational Safety and Health of the Centers for Disease Control and Prevention announces the availability of three (3) draft Immediately Dangerous to Life or Health (IDLH) Value Profiles now available for public comment for the chemicals bromine trifluoride, chlorine trifluoride, and ethylene dibromide. To view the notice and related materials, visit [www.regulations.gov](http://www.regulations.gov) and enter CDC-2018-0055 in the search field and click "Search."

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**DATES:** Electronic or written comments must be received by  
[**INSERT DATE 60 DAYS AFTER PUBLICATION DATE IN THE FEDERAL REGISTER**].

**ADDRESSES:** You may submit comments, identified by CDC-2018-0055 and docket number NIOSH 156-D, by any of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>  
Follow the instructions for submitting comments.
- *Mail:* National Institute for Occupational Safety and Health, NIOSH Docket Office, 1090 Tusculum Avenue, MS C-34, Cincinnati, Ohio 45226-1998.

*Instructions:* All information received in response to this notice must include the agency name and docket number [CDC-2018-0055; NIOSH 156-D]. All relevant comments received will be posted without change to [www.regulations.gov](http://www.regulations.gov), including any personal information provided. For access to the docket to read background documents or comments received, go to [www.regulations.gov](http://www.regulations.gov). All information received in response to this notice will also be available for public examination and copying at the NIOSH Docket Office, 1150 Tusculum Avenue, Room 155, Cincinnati, OH 45226-1998.

**FOR FURTHER INFORMATION CONTACT:** R. Todd Niemeier, NIOSH, Robert A Taft Laboratories, MS-C32, 1090 Tusculum, Cincinnati, OH 45226, telephone (513)533-8166 (not a toll free number).

**SUPPLEMENTARY INFORMATION:** NIOSH is requesting technical reviews of the three (3) draft IDLH Value Profiles. To facilitate the review of these documents, NIOSH requests that the following questions be taken into consideration:

1. Does this document clearly outline the health hazards associated with acute (or short-term) exposures to the chemical? If not, what specific information is missing from the document?

2. Are the rationale and logic behind the derivation of an IDLH value for a specific chemical clearly explained? If not, what specific information is needed to clarify the basis of the IDLH value?

3. Are the conclusions supported by the data?

4. Are the tables clear and appropriate?

5. Is the document organized appropriately? If not, what improvements are needed?

6. Are you aware of any scientific data reported in governmental publications, databases, peer-reviewed journals, or other sources that should be included within this document?

NIOSH seeks comments on 3 draft IDLH values and IDLH Value Profiles. The draft IDLH Value Profiles were developed to provide the scientific rationale behind derivation of IDLH values for the following chemicals:

Document #	Chemical	CAS
C-01	Bromine Trifluoride	(# 7787-71-5)
C-02	Chlorine Trifluoride	(# 7790-91-2)
C-03	Ethylene Dibromide	(# 106-93-4)

Each IDLH Value Profile provides a detailed summary of the health hazards of acute exposures to high airborne concentrations and the rationale for the proposed IDLH value with the chemical(s) of interest.

*Background:* In 2013, NIOSH published Current Intelligence Bulletin (CIB) 66 - Derivation of Immediately Dangerous to Life or Health (IDLH) Values [NIOSH 2013]. Since the establishment of the IDLH values in the 1970s, NIOSH has continued to review available scientific data to improve the protocol used to derive acute exposure guidelines, in addition to the chemical-specific IDLH values. The information presented in this CIB represents the most recent update of the scientific rationale and the methodology (hereby referred to as the IDLH methodology) used to derive IDLH values. The primary objectives of this document are to:

1. Provide a brief history of the development of IDLH values
2. Update the scientific bases and risk assessment methodology used to derive IDLH values from quality data
3. Provide transparency behind the rationale and derivation process for IDLH values
4. Demonstrate how scientifically credible IDLH values can be derived from available data resources.

The IDLH methodology is based on a weight-of-evidence approach that applies scientific judgment for critical evaluation of the quality and consistency of scientific data and in extrapolation from the available data to the IDLH value. The weight-of-evidence approach refers to critical examination of all available data from diverse lines of evidence and the derivation of a scientific interpretation on the basis of the collective body of data, including its relevance, quality, and reported results. Conceptually, the derivation process for IDLH values is similar to that used in other risk-assessment applications, including these steps:

1. Hazard characterization
2. Identification of critical adverse effects
3. Identification of a POD
4. Application of appropriate UFs, based on the study and POD
5. Determination of the final risk value.

## **Reference**

NIOSH [2013]. Current Intelligence Bulletin 66: Derivation of immediately dangerous to life or health (IDLH) values. Cincinnati, OH: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute

for Occupational Safety and Health, DHHS (NIOSH) Publication  
2014-100.

Dated: June 5, 2018.

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Centers for Disease Control and Prevention.

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