

# Tour Guide for the ATSDR Comparison Value Viewer

ATSDR Comparison Value Viewer

## ATSDR Comparison Value Viewer


Air inhalation

Soil ingestion

Water ingestion

Close

version: 06March2017. NOTE: Exposure doses will no longer be calculated with this tool.



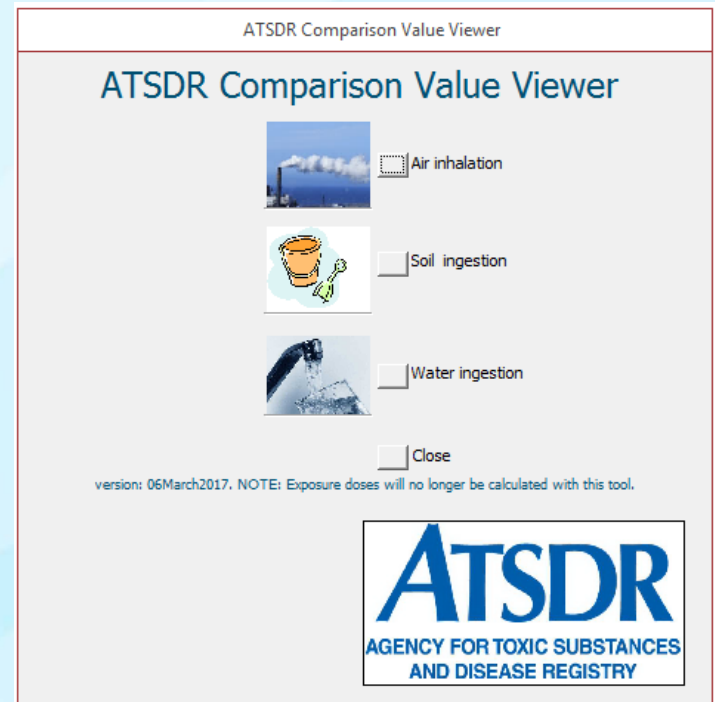
March 2017

# Who We Are - ATSDR

- ❑ ATSDR is a federal public health agency of the U.S. Department of Health and Human Services.
- ❑ Our goal is safeguard and protect health by preventing exposures to toxic substances.
- ❑ Our Land Reuse Health Program integrates public health principles into redevelopment.

# ATSDR Comparison Value Viewer

- ❑ The ATSDR Comparison Value Viewer is a computer program that provides users with ATSDR Health Comparison Values for chemicals in three media (Air, Soil, and Water)
- ❑ This tool requires Microsoft® Access® (1997 or later)

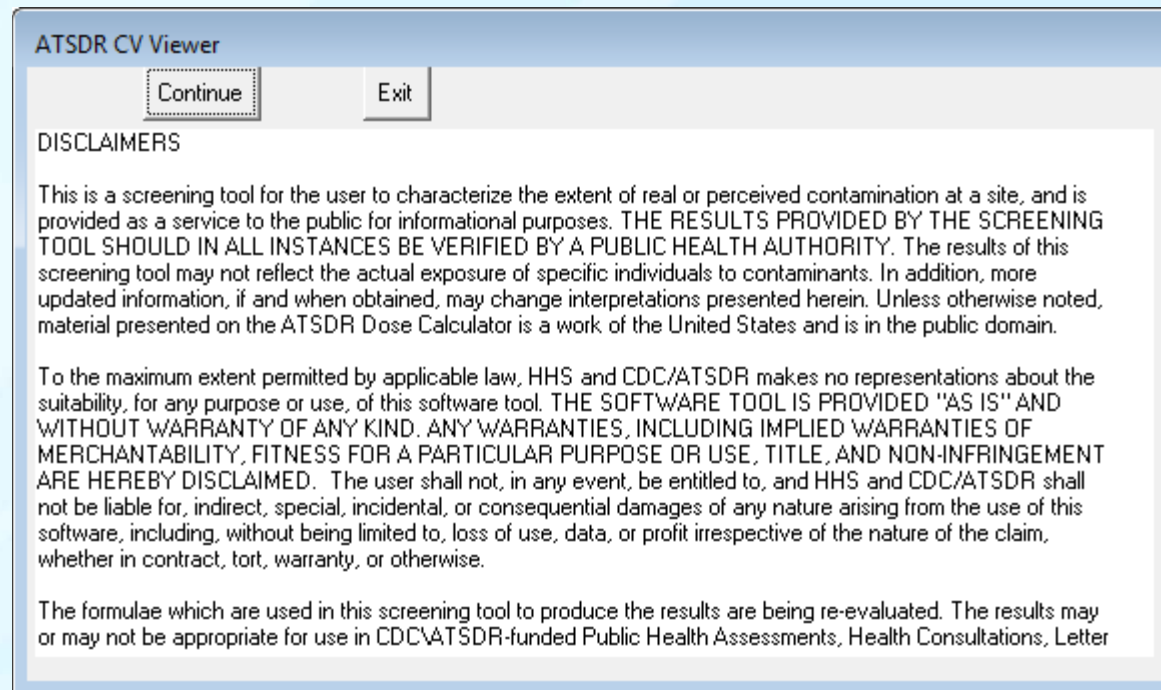


# ATSDR Comparison Value Viewer-Features

- ❑ Provides three media-specific scenarios: Air, Soil, and Water
- ❑ Displays ATSDR health comparison values
- ❑ Provides suggested value for consideration when evaluating chemical exposures
- ❑ Assists reviewers of Land Reuse sites

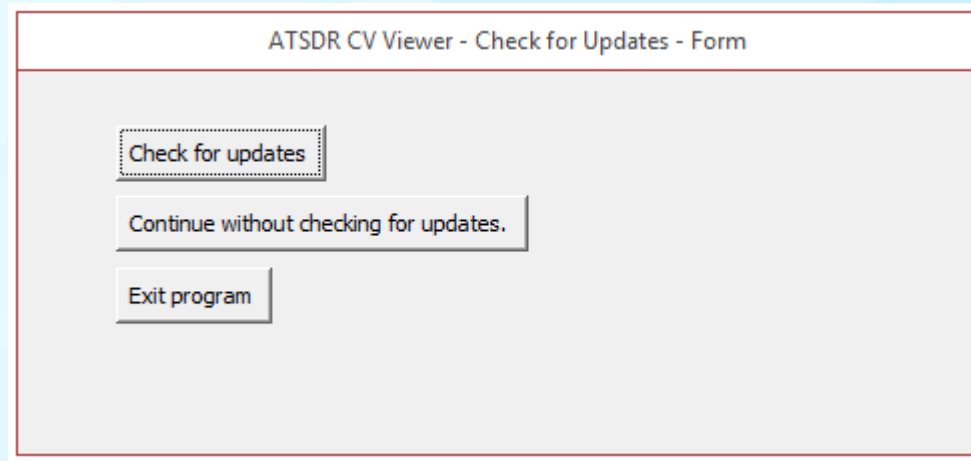
# ATSDR Comparison Value Viewer

The first screen displayed is the disclaimer. Select either “Continue” to proceed with the Comparison Value Viewer or “Exit” to quit the program.



# ATSDR Comparison Value Viewer

The next screen displayed provides the user with the ability to check for upgrades or continue without checking.



ATSDR CV Viewer - Check for Updates - Form

Check for updates

Continue without checking for updates.

Exit program

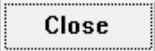
The image shows a screenshot of a software dialog box titled "ATSDR CV Viewer - Check for Updates - Form". The dialog box has a light gray background and a thin red border. It contains three buttons stacked vertically. The top button is labeled "Check for updates" and has a dotted border. The middle button is labeled "Continue without checking for updates." and has a solid border. The bottom button is labeled "Exit program" and has a solid border.

# ATSDR Comparison Value Viewer-Air

Enter chemical by selecting:  
“Common Name,”  
“Synonym,”  
or “CASN.”

*The CASN is the  
Chemical Abstract  
Registry Number.*

ATSDR Air Comparison Values



Common Name:

Synonym:

CASN:

Chemical Name Selected:

CASN Selected:

**Suggested CV:**

Health Comparison Values | Cancer Classification | Useful Equations

**ATSDR Inhalation Comparison Values**

Chronic Values	Intermediate Values	Acute Values
Chr EMEG/MRL: <input type="text"/> µg/m <sup>3</sup>	Int EMEG/MRL: <input type="text"/> µg/m <sup>3</sup>	Acute EMEG/MRL: <input type="text"/> µg/m <sup>3</sup>
CREG: <input type="text"/> µg/m <sup>3</sup>	Int EMEG/MRL: <input type="text"/> ppb	Acute EMEG/MRL: <input type="text"/> ppb
Chr RMEG/RfC: <input type="text"/> µg/m <sup>3</sup>		
Chr EMEG/MRL: <input type="text"/> ppb		
CREG: <input type="text"/> ppb		
Chr RMEG/RfC: <input type="text"/> ppb		

**Air Comments**

ATSDR Comparison Value Date:

# ATSDR Comparison Value Viewer-Air

Example chemical: 1,3-Butadiene

The Tool looks up the associated comparison value for the selected chemical. The “Suggested CV” category and values are then highlighted.

ATSDR Air Comparison Values

Close

Common Name: 1,3-BUTADIENE

Synonym:

CASN:

Chemical Name Selected: 1,3-BUTADIENE

CASN Selected: 000106-99-0

**Suggested CV:** CREG

Health Comparison Values | Cancer Classification | Useful Equations

**ATSDR Inhalation Comparison Values**

Chronic Values		Intermediate Values		Acute Values	
Chr EMEG/MRL:	µg/m <sup>3</sup>	Int EMEG/MRL:	µg/m <sup>3</sup>	Acute EMEG/MRL:	µg/m <sup>3</sup>
CREG:	3.3E-02 µg/m <sup>3</sup>	Int EMEG/MRL:	ppb	Acute EMEG/MRL:	ppb
Chr RMEG/RfC:	2.0E+00 µg/m <sup>3</sup>				
Chr EMEG/MRL:	ppb				
CREG:	1.5E-02 ppb				
Chr RMEG/RfC:	9.0E-01 ppb				

**Air Comments**

ATSDR Comparison Value Date: Nov2016

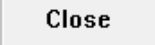


# ATSDR Comparison Value Viewer-Air

Example chemical: 1,3-Butadiene

For Air CVs, the values are often presented in both common units ( $\mu\text{g}/\text{m}^3$  and ppb).

ATSDR Air Comparison Values

 Close

Common Name: 1,3-BUTADIENE

Synonym:

CASN:

Chemical Name Selected: 1,3-BUTADIENE

CASN Selected: 000106-99-0

Suggested CV: CREG

Health Comparison Values | Cancer Classification | Useful Equations

**ATSDR Inhalation Comparison Values**

Chronic Values	Intermediate Values	Acute Values
Chr EMEG/MRL: <input type="text"/> $\mu\text{g}/\text{m}^3$	Int EMEG/MRL: <input type="text"/> $\mu\text{g}/\text{m}^3$	Acute EMEG/MRL: <input type="text"/> $\mu\text{g}/\text{m}^3$
CREG: 3.3E-02 $\mu\text{g}/\text{m}^3$	Int EMEG/MRL: <input type="text"/> ppb	Acute EMEG/MRL: <input type="text"/> ppb
Chr RMEG/RfC: 2.0E+00 $\mu\text{g}/\text{m}^3$		
Chr EMEG/MRL: <input type="text"/> ppb		
CREG: 1.5E-02 ppb		
Chr RMEG/RfC: 9.0E-01 ppb		

**Air Comments**

ATSDR Comparison Value Date: Nov2016


The "ATSDR Comparison Value Date" is listed here.

# ATSDR Comparison Value Viewer-Air

Example chemical: 1,3-Butadiene

“Cancer Classification” is displayed on this tab.

ATSDR Air Comparison Values



**Common Name:** 1,3-BUTADIENE

**Synonym:**

**CASN:**

**Chemical Name Selected:** 1,3-BUTADIENE

**CASN Selected:** 000106-99-0

**Suggested CV:** CREG

Health Comparison Values | **Cancer Classification** | Useful Equations

**Cancer Classification**



<b>DHHS (NTP):</b>	(1) Known human carcinogen
<b>IARC:</b>	(1) Carcinogenic to humans (sufficient human evidence)
<b>EPA:</b>	(CA) Known/likey human carcinogen
<b>Mutagen:</b>	

# ATSDR Comparison Value Viewer-Air

Example chemical: 1,3-Butadiene

“Useful Equations”  
are displayed on this  
tab.

ATSDR Air Comparison Values

**Common Name:** 1,3-BUTADIENE

**Synonym:**

**CASN:**

**Chemical Name Selected:** 1,3-BUTADIENE

**CASN Selected:** 000106-99-0

**Suggested CV:** CREG

Health Comparison Values | Cancer Classification | **Useful Equations**

1)  $C_{\mu\text{g}/\text{m}^3} = C_{\text{ppb}} * \frac{\text{Mol Wt}}{24.45}$

2)  $C_{\text{ppb}} = C_{\mu\text{g}/\text{m}^3} * \frac{24.45}{\text{Mol Wt}}$

# ATSDR Comparison Value Viewer-Soil


Example chemical: Arsenic

The Tool looks up the associated comparison value for the selected chemical. The “Suggested CV” category and values are then highlighted.

Notes are listed here.

The “ATSDR Comparison Value Date” is listed here.

ATSDR Soil Comparison Values

 **Close**

**Common Name:** ARSENIC

**Synonym:**

**CASN:**

**Chemical Name Selected:** ARSENIC

**CASN Selected:** 007440-38-2

**Suggested CV:** Chronic EMEG child

Health Comparison Values | Cancer Classification

**ATSDR Comparison Values**

Chronic Values (ppm)	Intermediate Values (ppm)	Acute Values (ppm)
Chronic EMEG Child: 1.7E+01	Intermediate EMEG Child:	Acute EMEG Child: 2.9E+02
Chronic EMEG Adult: 2.4E+02	Intermediate EMEG Adult:	Acute EMEG Adult: 4.0E+03
CREG: 2.5E-01		
Chronic RMEG Child: 1.7E+01		
Chronic RMEG Adult: 2.4E+02		

Additional CVs (ppm)

Acute EMEG Pica Child: 2.7E+01

Intermediate EMEG Pica Child:

**Soil Comments**

The CREG for arsenic in soil is below national background levels; Therefore, it is recommended that the soil chronic EMEG/RMEG be used for screening arsenic in soil.


**ATSDR Comparison Value Date:** Nov2016

# ATSDR Comparison Value Viewer-Soil

Example chemical: Arsenic

“Cancer Classification” is displayed on this tab.

ATSDR Soil Comparison Values



**Common Name:** ARSENIC

**Synonym:**

**CASN:**

**Chemical Name Selected:** ARSENIC

**CASN Selected:** 007440-38-2

**Suggested CV:** Chronic EMEG child

**Cancer Classes**

<b>DHHS (NTP):</b>	(1) Known human carcinogen
<b>IARC:</b>	(1) Carcinogenic to humans (sufficient human evidence)
<b>EPA:</b>	(A) Human carcinogen
<b>Mutagen:</b>	


# ATSDR Comparison Value Viewer-Water

Example chemical: Chlordane

The Tool looks up the associated comparison value for the selected chemical. The “Suggested CV” category and values are then highlighted.

The “ATSDR Comparison Value Date” is listed here.

ATSDR Water Comparison Values



Common Name:

Synonym:

CASN:

Chemical Name Selected:

CASN Selected:

**Suggested CV:**

Health Comparison Values

**ATSDR Comparison Values (ppb)**

Chronic Values	Intermediate Values	Other Values
Chronic EMEG Child: <input type="text" value="4.2E+00"/>	Intermediate EMEG Child: <input type="text" value="4.2E+00"/>	MCLG: <input type="text" value="0"/>
Chronic EMEG Adult: <input type="text" value="1.6E+01"/>	Intermediate EMEG Adult: <input type="text" value="1.6E+01"/>	MCL: <input type="text" value="2.0E+00"/>
CREG: <input type="text" value="6.9E-02"/>		Action Level: <input type="text"/>
Chronic RMEG Child: <input type="text" value="3.5E+00"/>		
Chronic RMEG Adult: <input type="text" value="1.3E+01"/>		
LTHA: <input type="text"/>		

**Water Comments**


ATSDR Comparison Value Date:

# ATSDR Comparison Value Viewer-Water

Example chemical: Chlordane

“Cancer Classification” is displayed on this tab.

ATSDR Water Comparison Values



**Common Name:** CHLORDANE

**Synonym:**

**CASN:**

**Chemical Name Selected:** CHLORDANE

**CASN Selected:** 000057-74-9

**Suggested CV:** Water CREG

**Cancer Classes**

**DHHS (NTP):**

**IARC:** (2B) Possibly carcinogenic to humans (limited human evidence; less than sufficient evidence in a

**EPA:** (KL) Known/likely human carcinogen

**Mutagen:**

# For more information

## ATSDR Land Reuse Health Program

Web: <https://www.atsdr.cdc.gov/sites/brownfields/index.html>

Email: [ATSDR.LandReuse@cdc.gov](mailto:ATSDR.LandReuse@cdc.gov)

**For more information please contact Agency for Toxic Substances and Disease Registry**

4770 Buford Highway NE, Chamblee, GA 30341

Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

Web: <http://www.atsdr.cdc.gov>

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Agency for Toxic Substances and Disease Registry.