

2020 AirToxScreen Update

April 6, 2023

Background

- ▶ AirToxScreen provides screening-level estimates of the risk of cancer and other serious health effects from inhalation of more than 100 air toxics.
 - ▶ Uses National Emissions Inventory and the Multi-Pollutant Platform
- ▶ Three years of AirToxScreen data (2017, 2018, and 2019) were released in calendar year 2022
 - ▶ Consistent with previous national-scale assessments for air toxics, results were provided at the census tract
- ▶ The 2020 AirToxScreen assessment will transition results from the census tract scale to the census block scale for public release

AirToxScreen Mapping Tool Update

- ▶ Three years of AirToxScreen data (2017, 2018, & 2019) now available in the tool.
- ▶ Coming Soon: tab for the 2019 Hazard Indices dashboard

AirToxScreen

2019 Cancer Risk | 2018 Cancer Risk | 2017 Cancer Risk

AirToxScreen Mapping Tool (based on 2019 emissions)

Zoom to State(s): None | Zoom to County(s): None | Select Minimum Risk to Include: No number selected | Select Only Tracts With Chan...: None

To get started:

- Select tract(s) on map using selector tool in upper left corner of map. When tract(s) are selected, associated lists and charts will appear under the map.
- Zoom to a specific area using the search tool in the upper right of map by typing in a place name or by using the State and County selector tools above the map.
- Filter tracts by risk level using the Risk Level selector tool above the map.
- Filter tracts with risk changes since the analysis was performed by using the Risk Change selector tool at the upper right of the dashboard. To display a popup containing more information about the risk change, click on the tract.

Newton County, GA
Tract ID: 13217100300

Risks in this tract are due in part to 2019 emissions of ethylene oxide. Emissions of ethylene oxide in this tract have gone down since 2019, and risks are lower. For more information about the change in emissions, please visit: [here](#)

Population (2010)	8,377
Area (m2)	34,949,619
EPA Region	EPA Region 4
Total Risk (in a million)	400

Legend

Tract Changes (click in the tract for more info)

Cancer Risk (2019)

Total Risk (in a million)

- > 100 - 400
- > 75 - 100
- > 50 - 75
- > 25 - 50
- 5 - 25
- Zero Population Tracts

Facility Level Emissions (2019)

- Facility Shutdown

Tract Location Data

Search...

EPA Region: EPA Region 4
State: GA
County/Parish: Newton County
Tract ID: 13217100300
Total Risk (per million): 400
Area (m2): 34,949,619
Population (2010 Census): 8,377

EPA Region: EPA Region 4
State: GA
County/Parish: Newton County
Tract ID: 13217100400

Location | Air Toxic | Source

Risk by Air Toxic

Ethylene oxide	Risk 45.31%
Formaldehyde	Risk 38.26%
Other	16.42%

Risk by Source Type

Stationary Point	Cancer Risk 45.75%
SECONDARY	Cancer Risk 34.27%
BIOMGENICS	Cancer Risk 6.62%
Other	13.38%

Facility Emissions (tons)

Be	BD	Bo	Ne	Ni
be	at	st	wt	ss
rv	ri	at	on	hi
is	ob	le	Co	nb
lo	le	y	un	o
na	l	l	ty	Au
	l	l	La	to
	l	l	nd	mo
	l	l	fi	ti
	l	l	ll	ve
	l	l		Ma
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2020 AirToxScreen

- ▶ As part of the transition to census block-level results, we recently developed a new receptor approach for the dispersion modeling component of AirToxScreen.
 - ▶ Presentation on the new approach will be given at the upcoming National Air Toxics Conference.
- ▶ To test the new approach, we have generated draft preliminary risk results for stationary point sources based on dispersion modeling alone.
- ▶ We are sharing those results with our state, local, and tribal (SLT) agency partners as a preliminary **draft** risk preview.
 - ▶ Purpose of this preview is to serve as an apples-to-apples comparison of the previous receptor approach (from summer 2022 point source review) and the new receptor approach. Allow SLTs additional time to preview areas of high risk at the block-level and prepare for the final 2020 AirToxScreen release.
 - ▶ Consists of the **top ~500 facilities by risk**
 - **The emissions and meteorology are consistent with what was released for the SLT review in Summer 2022.**
 - This data *is not* an indication of final risk or emissions for the 2020 AirToxScreen.
 - This data *is not* the final emissions file for any EPA modeling.
 - Each state has at least one facility in the preview.
 - This is not meant to be a review, however, if an error is noticed please let us know ASAP. Final modeling begins mid-April.
- ▶ Preview will be shared with SLTs today
 - ▶ Will include a previous recording of the new receptor approach presentation by James Thurman.