



# U.S. EPA's National Air Toxics Assessment (NATA) and Ethylene Oxide

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## The EPA National Air Toxics Assessment

- Every few years, EPA estimates health risks from air toxics across the country.
  - We estimate potential health risks from long-term exposures – 70 years.
- We estimate these risks using a computer modeling assessment known as the National Air Toxics Assessment, or “NATA.”
- NATA is what we call a “screening tool” – a broad look at *potential* risk in areas across the country
- NATA can’t tell any one person if your risk is elevated.
- The purpose of NATA is to help EPA and state and local air agencies know if there are areas, or pollutants, that we may need to look at more closely.
- Our most recent NATA – the one issued in August 2018 – showed us that we need to look more closely at ethylene oxide.

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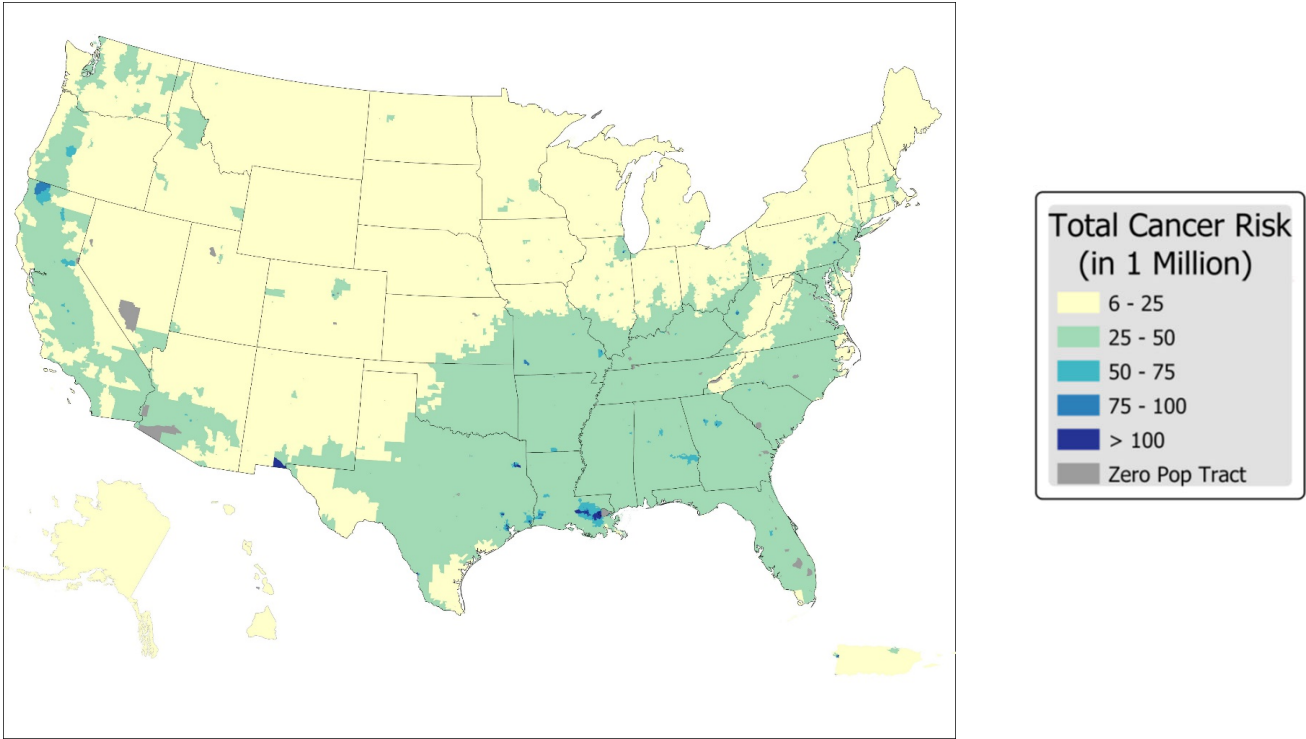
## The EPA National Air Toxics Assessment

- EPA uses the most recent information about emissions (what goes into the air) and health science information that is available when we put NATA together.
- For the NATA we released in August 2018, the emissions data are from 2014.
  - That's the most recent available. So follow-up is needed in any area where NATA shows we may need to look at risk more closely.
- The most recent health science information for ethylene oxide is from 2016.
  - That's when EPA updated the information that we use to estimate the risk of developing cancer if we are exposed to ethylene oxide for 24-hours a day, 365 days a year, for 70 years.
  - The 2016 information we have on how toxic ethylene oxide is has changed from what we previously knew (it is more toxic).



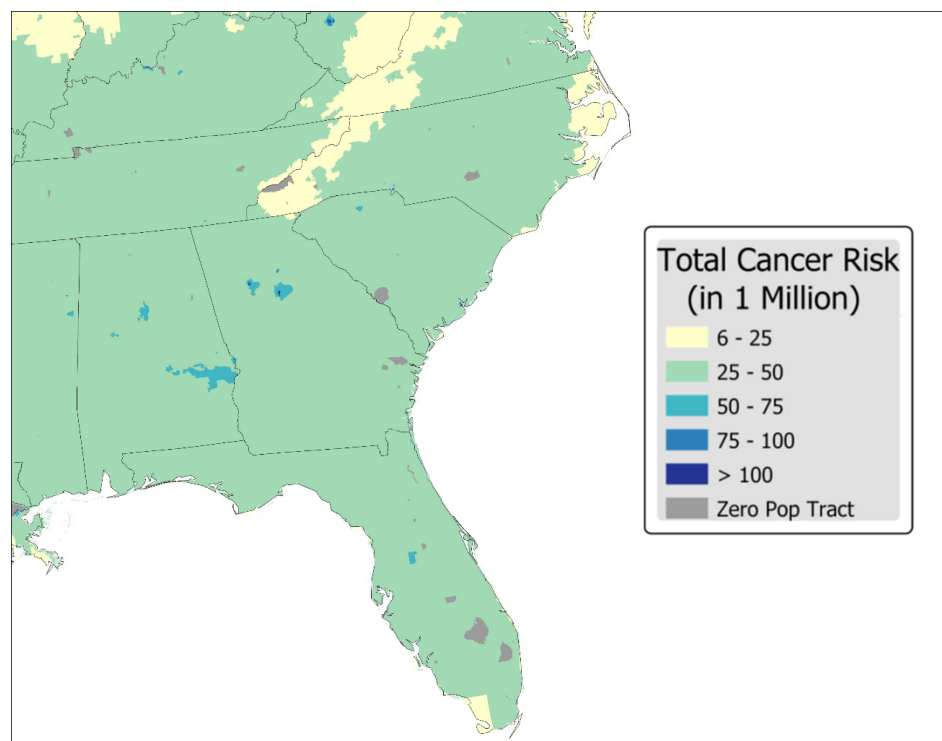


**NATA estimated average cancer risk: 30 in 1 million**





## NATA estimated average cancer risk – Southeast





## NATA estimated potentially elevated risk in some areas

- In some areas (census tracts), NATA estimated cancer risks greater 100 in 1 million - mostly from EtO
- This number refers to the upper end of what EPA *generally* has considered to be acceptable risk in its rulemaking process.
- 100 in a million (1 in 10,000) is not a standard or a regulatory action level – it tells us we need to look more closely to see if there is an issue.



## What EPA is doing to address ethylene oxide

- **Reviewing Clean Air Act regulations for facilities that emit ethylene oxide:**
  - EPA has begun reviewing its air toxics emissions standards for sources that emit ethylene oxide.
  - For air toxics, including ethylene oxide, the law requires EPA to set limits on how much different industries can put into the air.
  - The means that there is not a set level of ethylene oxide that is allowed in the outdoor air (like for ozone).
- **Getting additional information on ethylene oxide emissions**
  - EPA is working with state air agencies to get additional information how much ethylene oxide facilities put into the air.
  - Focusing first on facilities in areas where NATA told us we needed to take a closer look
  - Georgia will update you on that work.
  - What we are learning will help us as we review our regulations.
  - It also will help the us understand whether more immediate emission reduction steps are necessary in any particular locations.







## More information

- NATA can be found on the following website: <https://www.epa.gov/nata>
- EPA ethylene oxide website: <https://www.epa.gov/ethylene-oxide>