



# EtO Medical Monitoring

**35 YEARS OF BREATHING TOXIC ETHYLENE OXIDE:  
THE DAMAGE IS NOT YET KNOWN**

**PRESENTING A PROPOSAL FOR  
MEDICAL MONITORING  
IN WILLOWBROOK, IL and VICINITY**

(Click the buttons to navigate to the topic of interest, or just click the Next button to step sequentially through all of the content)

[HOME](#)

[NEXT](#)

[PRINCIPLES & ASSUMPTIONS](#)

[TUMOR LATENCY PERIODS](#)

[DISEASE & ILLNESS MONITORING](#)

[SUPREME COURT / CHALLENGES](#)

[WHO SHOULD BE MONITORED?](#)

[TELL US YOUR STORY](#)

[FOLLOW US OR VOLUNTEER](#)

[RESOURCES & REFERENCES](#)

[FREQUENTLY ASKED QUESTIONS](#)

[SPOTLIGHT ON THE EXPERTS](#)

[ABOUT US](#)

No representations, suitability for any purpose or warranty is provided. Care was taken during creation, however errors or omissions are possible and the entire risk is burdened to the user. Other content owned by their authors and any Company name and / or products mentioned herein may be the trademark of their respective owners.  
Website Copyright © 2019 EtO Medical Monitoring.

## PRINCIPALS & ASSUMPTIONS:

### What Is “Medical Monitoring”?

According to JEROME R. DOAK, and his paper “*What is Medical Monitoring And when is a Motion to Dismiss Advisable*” ([Click here](#)):

Monitoring in a legal context is a “theory of liability in which persons with no ascertainable injuries or symptoms seek to recover the costs of screening for health problems caused by exposure to hazardous substances. The alleged ‘injury’ in medical monitoring lawsuits is most often characterized as an increased risk of disease, and the alleged damages are the costs of ‘monitoring’ for disease. Instead of monetary damages, some plaintiffs ask for so-called ‘equitable’ relief in the form of a court-funded and court-established medical monitoring program.” Therefore, there are both **Medical Monitoring Funds** and **Medical Monitoring Programs** that can result from litigation in the form of toxic mass tort.

[Click here](#) for an example of a successful Medical Monitoring program.

***We are of the opinion that the Willowbrook-area residents could be in a position to demand that the local polluters who have exposed them to long-term airborne ethylene oxide proceed with litigation to insure that they cover the cost of ongoing health monitoring. In particular, breast cancer would be a disease state that could qualify for either a medical monitoring fund or program.***

### Medical Monitoring Claims Must Meet Certain Assumptions and Principles:

According to JEROME R. DOAK, and his paper “*What is Medical Monitoring And when is a Motion to Dismiss Advisable*” ([Click here](#)):

Tort liability for medical monitoring arises when a person is (1) **involuntarily exposed to a hazardous substance**, (2) **due to a defendant’s negligence**, thereby (3) **creating an increased risk of the person’s developing some (4) future disease**, for which there is (5) **a cost-effective and medically efficacious screening test that will (6) assist in the early detection and (7) effective treatment of the targeted disease.**

***We are of the opinion that the chronic air pollution Willowbrook area residents have been exposed to does, or will, meet the above assumptions to merit a Medical Monitoring claim.***

## TUMOR LATENCY PERIODS:

One over-arching concern we hear echoed among community members is their mounting fears and anxieties regarding potential future illnesses and cancers, after this documented 35 years of toxic pollution. In fact, we are well aware the certain cancers will take years to show up in the bloodstream, the lymphatic system, or to be detected systemically. One such data point to consider is the minimal tumor latency which may help to prognosticate future illness that has yet to be recognized, never mind yet to be quantified in the IL Department of Health Cancer database.

The 9-11 Medical Monitoring and Treatment program, first established in 2012 and modified as recently as 2015, has been a primary example of the type of repository necessary for the baseline establishment of minimum latencies of cancers by category. WTC 9.11 Minimum Latency & Types or Categories of Cancer ([Click here](#))

For example, the 1/6/2015 revision stated the minimum time that could be reasonably expected to produce a cancer after exposure was to be:

- (1) Mesothelioma—11 years, based on direct observation after exposure to mixed forms of asbestos;
- (2) All solid cancers (other than mesothelioma, lymphoproliferative, thyroid, and childhood cancers)—4 years, based on low estimates used for lifetime risk modeling of low-level ionizing radiation studies;
- (3) Lymphoproliferative and hematopoietic cancers (including all types of leukemia and lymphoma)—0.4 years (equivalent to 146 days), based on low estimates used for lifetime risk modeling of low-level ionizing radiation studies;
- (4) Thyroid cancer—2.5 years, based on low estimates used for lifetime risk modeling of low level ionizing radiation studies; and
- (5) Childhood cancers (other than lymphoproliferative and hematopoietic cancers)—1 year, based on the National Academy of Sciences findings. According to the James Zadroga 9/11 Health and Compensation Act of 2010 ("Act") (42 U.S.C. §§ 300mm to 300mm-61), a determination that an individual's 9/11 exposure is substantially likely to be a significant factor in aggravating, contributing to, or causing an individual's health condition must be made based on an assessment of the following: (1) the individual's exposure to airborne toxins, any other hazard, or any other adverse condition resulting from the terrorist attacks; and (2) the type of symptoms and temporal sequence of symptoms (42 U.S.C. § 300mm-22(a)(2)). With regard to the temporal sequence of symptoms, cancers do not occur immediately after exposure to a causative agent and they usually take many years up to several decades to manifest clinically.

We believe that there is just cause to utilize the existing animal research on Ethylene Oxide chronic exposure, a database that spans from studies published in the 1940s until present day, to extrapolate hypotheses regarding tumor latency periods in residential settings. Since the CDC has been instrumental in assisting the 9-11 Medical Monitoring program for victims of the hazards resultant from that toxic air, we would like to work with the CDC /ATSDR liaison to Willowbrook to better understand the illnesses that are yet to be observed in our suburban locale, particularly given the number of pediatric patients known to have been exposed.

## DISEASES AND ILLNESSES ASSOCIATED WITH ETHYLENE OXIDE:

Chronic, low level exposure to ethylene oxide has been linked to a variety of illnesses. Most notably cancer, neurological issues, respiratory irritation and potentially miscarriages. To summarize, ethylene oxide is a known mutagen, carcinogen and endocrine disruptor:

- ATSDR - Ethylene Oxide CAS# 75-21-8 (\*updated 1999) ([Click here](#))
- ATSDR - Toxicological Profile for Ethylene Oxide (\*updated 1990, 122 pages) ([Click here](#))
- ATSDR - Public Health Statement CAS# 75-21-8 (\*updated 1990, 4 page summary) ([Click here](#))
- OSHA - Ethylene-Oxide-Fact Sheet (updated 2002) ([Click here](#))
- EPA - Ethylene-Oxide Hazard Summary (\*\*updated December, 2018) ([Click here](#))
- NIH - Ethylene Oxide - Cancer-Causing Substances ([Click here](#))

In addition, on March 29, 2019 Illinois Department of Public Health released their retrospective study of cancer rates that sheds light on actual cancer incidence from the era of 1995-2015. Their retrospective study data was focused on the vicinity of the point source of ethylene oxide in Willowbrook, IL ([Click here](#))

Some highlights from the IDPH Report:

- Two study areas were created based on census tracts and an air sampling/exposure model. Study area 1 included nine census tracts around the Sterigenics facility, and study area 2 included study area 1 and eight additional census tracts. These were compared to cancer rates in DuPage County and an additional State cohort of 5 counties.
- The total cancer cases in study area 1 was 4,534 cases and study area 2 was 9,416 cases. When analyzing observed versus expected cancers for male and female from study area 2 compared to DuPage County there were 168 additional incidences of cancers found.
- Breast cancer was elevated by about 10%, when comparing the study areas to the state reference group. The elevation became non-significant when the study areas were compared to the county reference group. This change could be plausibly explained by the fact that DuPage County has consistently displayed higher levels of breast cancer compared to other counties in the state (IDPH-ISCR 2018). Despite the loss of statistical significance, there was still a suggestion that breast cancer was high even in relation to DuPage County warranting further investigation.
- Hodgkin's lymphoma rates were observed to be high in females of study area 1. Non-Hodgkin's lymphoma rates in females displayed a consistent and increasing trend over the time period examined, and was statistically significant in the most recent time period, 2009-2015.
- Other adult cancers observed to be diagnosed at higher rates than the county include: Female pancreatic cancer in study areas 1 and 2, ovarian cancer in study area 1 and bladder cancer in study area 1. Male prostate cancer was observed to be high in both study areas.

***We would add the following concerns of the IDPH study. The census tract scheme used for study area 1 (population 31,808) and study area 2 (population 72,029) may be inadequate to thoroughly assess the impact from the presumed Primary ethylene oxide source. This is due to the irregularly shaped borders of each census tract surrounding the point source, causing***

***the study to include a significant number of people to the south that are far away from the source, and left out others to the east who are generally closer to the point source. A significant percentage of the people included in the study area 1 may therefore be many miles downwind from the point source.***

***\*We note that the ATSDR Fact Sheet supplied to the Willowbrook, IL and vicinity contains a revision only as "recently" as 1999. Clearly, there is need for updated data in terms of chronic, long term, low dose exposure data in a residential community.***

***\*\*While the EPA Hazard Sheet was updated as of 12/2018, we feel that the depiction of the lifetime cancer risks being downplayed is not a scenario that has been borne out as of yet in our Willowbrook, IL and vicinity communities.***

## SUPREME COURT / CHALLENGES:

### Challenge Comes in Establishing a Precedent-Setting Proposal to the Illinois Supreme Court:

Courts in a handful of states have recognized medical monitoring in the absence of a present physical injury either as an independent tort claim or as a theory of “remedy” that substitutes for injury in otherwise traditional negligence claims. Other courts have outright rejected medical monitoring without present injury, while in many states medical monitoring remains an open question. Illinois is one such state that remains in a “grey area” in terms of accepting medical monitoring claims.

**We are of the opinion that just because it hasn't been done doesn't mean it can't be done.**

According to Bexis, 2009 Medical Monitoring - Another 50-State Survey" ([Click here](#))

“...courts in Illinois are all over the lot, and the state’s Supreme Court has not yet resolved the issue. Several federal district court opinions (not all in Illinois) have concluded that Illinois **would recognize independent claims for medical monitoring**. *Stella v. LVMH Perfumes & Cosmetics USA, Inc.*, 564 F. Supp.2d 833, 836 (N.D. Ill. 2008); *Gates v. Rohm & Haas Co.*, 2007 WL 2155665, at \*4-5 (E.D. Pa. July 26, 2007) (applying Illinois law); *Muniz v. Rexnord Corp.*, 2006 WL 1519571, at \*6-7 (N.D. Ill. May 26, 2006); *Carey v. Kerr-McGee Chemical Corp.*, 999 F. Supp. 1109, 1119 (N.D. Ill. 1998). State courts, on the other hand, have been quite a bit more hesitant. See *Jensen v. Bayer AG*, 862 N.E.2d 1091, 1100-1101 (Ill. App. 2007) (medical monitoring claims “lack merit”); *Lewis v. Lead Industries Ass’n, Inc.*, 793 N.E.2d 869, 877 (Ill. App. 2003) (declining to permit a medical monitoring remedy as an independent equitable claim); *Campbell v. A.C. Equipment Services Corp.*, 610 N.E.2d 745, 748 (Ill. App. 1993) (cautioning that this decision “should not be construed as recognizing” medical monitoring); see also *Guillory v. American Tobacco Co.*, 2001 WL 290603, at \*7 (N.D. Ill. 2001) (rejecting medical monitoring)

Another Interpretation of Medical Monitoring can take the form of **Patient Education and Advocacy**, in which local area Physicians engage in ongoing continuing education to inform on the status of health risks, incidence and prevalence of illnesses attributable to Ethylene Oxide exposure. In addition, we recognize the strength of patient advocacy and herald those who are brave enough to tell their stories of overcoming health struggles they believe may be attributable to Ethylene Oxide’s carcinogenic, mutagenic, and endocrine-disrupting principles. You will see featured patients in our Tell Us Your Story section of this website; we encourage Illinois residents to submit their health struggles so that we may begin the final phase of our joint mission: the establishment of a local registry of health hazards that show a demonstrable correlation with anticipated negative consequences of long-term Ethylene Oxide exposure.

For as stated in the *IL Department of Public Health Cancer Incidence Assessment near Sterigenics in Willowbrook, IL, 1995-2015* “this study represents the first study of its kind in the nation.” ([Click here](#)) However, other states have been successful in creating a multi-faceted statutory framework supporting Medical Monitoring from a medico-legal standpoint. Vermont is one such example. ([Click here](#))

**We are of the opinion that there exists tremendous potential to engage local and regional physicians in the process of educating others. We anticipate successful recruitment of volunteers from the medical community who will be willing and eager to work on the medical monitoring of their patients, families, and neighbors in order to better understand the complex interrelationship between environmental toxicity and human health response.**

## WHO SHOULD BE MONITORED:

***We believe anyone that has been exposed to Ethylene Oxide is at greater risk of illness. Your exposure is unknown, but you can get an understanding of the EtO concentration as collected by US EPA from November 13, 2018 through March 31, 2019 by reviewing the slides US EPA used during the summary of the entire testing regime. ([Click here](#))***

***A more insightful answer might suggest census tracts used by IDPH are an additional source of information, albeit an imperfect one because their use of census tracts with their irregular shapes and distances from the emitter result in erratic distances from source. The population size IDPH determined for study area 2 is 72,049 potential exposed persons. This only tells us a small part of the story and that is because the population is mobile. According to U.S. Census 11.2 percent of the population moves each year. If you perform a simple analysis of the population over a twenty-year period, you'll discover the number of people that have health concerns numbers more than 4 hundred thousand people.***



Click map for expanded view

**TELL US YOUR STORY:**

**James Crandell** Blog "Sterigenics and Me" ([Click here](#))

## **FOLLOW US & VOLUNTEER:**

Exposure to Ethylene Oxide in varying concentrations and durations may have placed your health at risk. If you are concerned about your future health, please send us your email. [Click here](#)

Are you a healthcare worker willing to volunteer to collaborate in the development of this project? [Click here](#) to add your medical specialty and contact information.

Your contact information will be kept confidential and will not be revealed to 3rd parties, or sold or other used or exploited. The total impact on you may be emails from us as we proceed with building this project.

## **RESOURCES AND REFERENCES:**

**D&DL** - Bexis, 2009 Medical Monitoring - Another 50-State Survey ([Click here](#))

**DOAK, J. R.** - What is Medical Monitoring And when is a Motion to Dismiss Advisable ([Click here](#))

**EtOMM** - Community member comments on IDPH Cancer study with additional material ([Click here](#))

**EtOMM** - Glossary of Terms ([Click here](#))

**EtOMM** - EtOMedical.com/org website contents as a PDF ([Click here](#))

**ATSDR** - Public Health Statement EtO CAS# 75-21-8 ([Click here](#))

**ATSDR** - Toxicological Profile for Ethylene Oxide (updated 1990,\* 122 pages) ([Click here](#))

**ATSDR** - Public Health Statement CAS# 75-21-8 (updated 1990,\* 4 page summary) ([Click here](#))

**OSHA** - Ethylene-Oxide-Fact Sheet (updated 2002) ([Click here](#))

**IDPH** - Cancer Incidence Assessment near Sterigenics in Willowbrook, IL, 1995-2015 ([Click here](#))

**C-8** - Medical Monitoring Program ([Click here](#))

**LEG** - State of Vermont Medical Monitoring legislation ([Click here](#))

**US EPA** - Ethylene Oxide Monitoring Data Willowbrook, IL April 26, 2019 ([Click here](#))

**US EPA** - Ethylene-Oxide Hazard Summary (\*\*updated December, 2018) ([Click here](#))

**NIH** - NIH Ethylene Oxide - Cancer-Causing Substances ([Click here](#))

## FREQUENTLY ASKED QUESTIONS:

### What is Medical Monitoring?

▪ *Monitoring in a legal context is a “theory of liability in which persons with no ascertainable injuries or symptoms seek to recover the costs of screening for health problems caused by exposure to hazardous substances.*

### What cancers and illness have been associated with ethylene oxide exposure?

▪ *According to Centers for Disease Control and US EPA the following diseases have been associated with EtO exposure. (Check back soon)*

### What should my doctors know or what should I be telling them?

▪ *The standard of care for examining long-term residential exposure is in its infancy. To date we are aware of one medical monitoring recommendation. Presented during the May 7, 2019 seminar on Ethylene Oxide - Building Awareness for Primary Care Physicians and other clinicians. ([Click here](#)) Dr. Susan Buchanan, Clinical Associate Professor and Associate Director of the Occupational and Environmental Medicine Residency Program, is dual-certified in Family Medicine and Preventive Medicine/Occupational Medicine. has suggested having your healthcare provider order a complete blood count (CBC) . ([Click here](#))*

### Since the primary ethylene oxide source has been temporally sealed and is no longer emitting ethylene oxide, does that mean I am no longer at risk?

▪ *Exposure to ethylene oxide and resulting illness onset may be as many as 14 years post exposure before the illness has presented or detected. Additionally, EtO remains persistent in the air subject to EtO's half-life and metrological dispersion. Better insights to remaining risk can be found in the US EPA slide summary for the EtO monitoring from November 13, 2018 through March 31, 2019 and this includes about 45 days after seal order that yielded dramatically lower concentrations. ([Click here](#))*

### How much exposure to ethylene oxide is considered safe?

▪ *Essentially zero, the EPA established that 0.00021 µg/m<sup>3</sup> will cause one additional cancer in a million. For more information on risks. ([Click here](#))*

### If I can't smell ethylene oxide, can it make me sick?

▪ *Ethylene oxide is not detectable by smell until high concentrations are present. Different studies and people have reported smelling EtO from 260 ppm to 700 ppm. These levels are exceptionally high and pose serious risks. Any level of ethylene oxide above 0.00021 µg/m<sup>3</sup> poses risks.*

(Use your browser's back button to continue viewing EtoMedical after reading any external (Click here) documents.)

## **SPOTLIGHT ON THE EXPERTS:**

**Dr. Peter Orris, MD, MPH** - Synopsis and Points from his presentation hosted by GGHH Network 5-16-2019 ([click here](#))

**Illinois State Medical Society** - Resolution Removing Ethylene Oxide as a Medical Sterilant from Healthcare (A-19) ([click here](#))

## ABOUT US:

**We represent** concerned citizens with varied professional backgrounds who have united under one common goal: to aid with “early intervention” for potential new diagnoses subsequent to documented environmental EtO exposure.

**We plan** to focus on several arms of this project: (1) Physician-Projected Exposure-Outcomes Education, Citizen/Community Health Advocacy Education (What to Expect When You Have Been Chronically Exposed guidelines). (2) The establishment of a regional registry for collation of health impacts that otherwise are not reflected in the IL Department of Public Health Cancer database. (3) to exhaustively explore the potential for filing a class action/mass toxic tort with request for a Medical Monitoring Fund or Medical Monitoring Program that would result in assurance that yet-to-be known health damages are covered at no expense to the residents of the region. (4) To impact healthcare legislation when it comes, including toxic exposure history to establishing risk for some illnesses such as breast cancer.

**We promise** not to ask you for money and will solicit only your volunteerism in the form of allocating time to stopping EtO toxic polluters in the Western Suburban region of Chicago.

**Join us**, we're just getting started and this website was officially launched May 29, 2019. To submit your email to our growing list of people interested in Medical Monitoring. ([Click here](#))

**We thank:** Stop Sterigenics Admins and the 6,000 Facebook Group, [www.StopSterigenics.com](http://www.StopSterigenics.com), Stop EtO In Lake County Admins and Supporters, #Sleuths, Sen. John Curran, Mayor Gary Grasso, Assistant Village Administrator Evan Walter, Trustee Guy Franzese, Trustee Tony Schiappa, Burr Ridge Environmental Quality Council, Mayor Frank Trilla and Willowbrook Trustees, Michael Hawthorne, Michelle Youngerman, Dave Savini, M.G. and Judy and Patrick.



35 Years Unknowingly Breathing EtO:  
Health Damages are Still Unknown

*\* Promoting Patient Advocacy, Physician Education, Medico-Legal Support, and Legislative Reform as our Community Navigates the Complications of Chronic Ethylene Oxide Exposure*

[est. May 29, 2019] \* All-Volunteer Advocacy