



**Department
of Health**

Questions from the Hoosick Falls Community Participation Work Group

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**1. Types of cancer linked to PFOA –
Including (but not limited to) thyroid and
breast cancer, are they tied to one
another and/or village and/or town data
and PFOA?**

1. TYPES OF CANCER LINKED TO PFOA INCLUDING (BUT NOT LIMITED TO) THYROID AND BREAST CANCER

- In 2024 EPA determined that PFOA is likely to be carcinogenic to humans
 - Based on evidence specific to **testicular and kidney** cancers.
 - Weaker evidence for cancer types including **bladder, breast, and prostate**, but a large amount of uncertainty remains.
- NASEM findings (2022)
 - Sufficient evidence of an association – **kidney cancer**
 - Suggestive evidence of association **breast and testicular cancer**

2. Cancer rates in the surrounding area and connection (real or perceived) to old water source – At that time of contamination discovery, it was determined that there was not a cancer cluster in Hoosick Falls. Is that still the case and how is data collected to determine if there is a cancer cluster? Has the number of breast cancer cases been identified in Hoosick Falls?

2. CANCER RATES IN THE SURROUNDING AREA AND CONNECTION (REAL OR PERCEIVED) TO OLD WATER SOURCE

- The 2017 cancer report for the Hoosick Falls area identified:
 - A statistically significant elevation in lung cancer cases
 - A statistically significant deficit in thyroid cancer cases
 - 57 cases of breast cancer observed and 65 expected
 - Assessed cases diagnosed between 1995 and 2014
- A recent review of cancer surveillance data through 2020 did not show any new trends or show any additional elevations.
 - Only lung cancer was elevated during the combined timeframe of 1995-2020
 - No strong evidence from the scientific literature suggesting a link between PFOA exposure and lung cancer



3. How cancer rates are attributed - For example, if someone lived in Hoosick Falls, moved away and was then diagnosed with cancer, is the case attributed to Hoosick Falls?

3. HOW CANCER RATES ARE ATTRIBUTED

- Our cancer analyses are based on data from the NYS Cancer Registry, which collects information about all diagnoses of cancer in NYS.
- The information in the NYS Cancer Registry is based on the patient's residence at the **time of diagnosis**.
- An individual who moved away from Hoosick Falls and was then diagnosed would not be included.
- Conversely, an individual who recently moved to Hoosick Falls and was then diagnosed would be included.



4. Other health concerns of PFOA – In 2016 when contamination was discovered, there was a study presented on cancer and its related to PFOA. It was old at that time, are there new studies that can be shared at the April meeting?







4. OTHER HEALTH CONCERNS OF PFOA

- PFAS Multi-Site Health Study, National in Scope, Includes Hoosick Falls
 - Joint effort of NYSDOH and SUNY Albany, funded by CDC/ATSDR
- Health outcomes
 - Cardiovascular diseases (dyslipidemia and hypertension)
 - Diabetes (Obesity and Metabolic Syndrome)
 - Thyroid disease
 - Childhood Antibody/Vaccine Response
 - Pregnancy Complications
 - Childhood Neurobehavioral Outcomes



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4. OTHER HEALTH CONCERNS OF PFOA - *FROM NASEM 2022 REPORT

CATEGORY OF ASSOCIATION	HEALTH OUTCOMES WITH INCREASED RISK ASSOCIATE WITH PFAS EXPOSURE
<p> Sufficient evidence of an association Based on strong evidence, there is high confidence that there is an association between exposure to PFAS and the health outcome. It is unlikely that the association is due to chance or bias.</p>	<ul style="list-style-type: none"> • Decreased antibody response (in adults and children) • Dyslipidemia (in adults and children) • Decreased infant and fetal growth • Increased risk of kidney cancer (in adults)
<p> Limited suggestive evidence of an association Based on limited evidence, there is moderate confidence that there is an association between exposure to PFAS and the health outcome. It is possible that the association is due to chance or bias.</p>	<ul style="list-style-type: none"> • Increased risk of breast cancer (in adults) • Liver enzyme alterations (in adults and children) • Increased risk of pregnancy-induced hypertension (gestational hypertension and preeclampsia) • Increased risk of testicular cancer (in adults) • Thyroid disease and dysfunction (in adults) • Increased risk of ulcerative colitis (in adults)
<p> Inadequate or Insufficient Evidence to Determine an Association Based on inconsistent evidence, a lack of evidence, or evidence of insufficient quality, there is moderate confidence that there is an association between exposure to PFAS and the health outcome. No conclusion can be made about a potential association.</p>	<ul style="list-style-type: none"> • Immune effects other than reduced antibody response, and ulcerative colitis; Cardiovascular outcomes other than dyslipidemia; • Developmental outcomes other than small reductions in birthweight • Cancers other than kidney, breast, and testicular; Reproductive effects other than hypertensive disorders of pregnancy; Endocrine disorders other than thyroid hormone levels; Hepatic effects other than liver enzyme levels; Respiratory effects; Hematological effects • Musculoskeletal effects, such as effects on bone mineral density; Renal effects, such as renal disease; Neurological effects
<p> Limited Suggestive Evidence of No Association Based on at least limited evidence, there is at least moderate confidence that there is NO association between PFAS and the health outcome.</p>	<ul style="list-style-type: none"> • No outcomes were identified.

CANCER INCIDENCE INVESTIGATION - HOOSICK FALLS, NY (2017)

**Table 4. Observed and Expected Numbers of Cancer Cases, Village of Hoosick Falls
January 1995 – December 2014⁴**

Cancer Type	Observed	Expected
Oral Cavity / Pharynx	11	9
Esophagus	--	5
Stomach	12	7
Colorectal	57	48
Liver / Intrahepatic Bile Duct	8	4
Pancreas	8	12
Larynx	--	3
Lung / Bronchus**	91	65
Females Only:		
Female Breast	57	65
Cervix Uteri	--	3
Corpus Uterus	16	14
Ovary	8	7
Males Only:		
Prostate	61	56
Testis	0	2
Urinary Bladder (including <i>in situ</i>)	22	26
Kidney / Renal Pelvis	12	13
Brain / Other Nervous System	--	6
Thyroid**	--	10
Hodgkin Lymphoma	--	2
Non-Hodgkin Lymphoma	19	19
Multiple Myeloma	--	6
Leukemia(s)	14	14
Melanoma	20	16
All Other Types	44	39
All Types (Total)	480	453

