

Letter Health Consultation

VANDY MUSGROVE PROPERTY

ALBANY, DOUGHERTY COUNTY, GEORGIA

EPA FACILITY ID: GAD980497044

**Prepared by
Georgia Department of Community Health**

OCTOBER 19, 2010

Prepared under a Cooperative Agreement with the
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

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LETTER HEALTH CONSULTATION

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Division of Public Health
Under Cooperative Agreement with the
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September 30, 2010

Carolyn Smith
Albany, Georgia Tools for Change, Inc.
Albany State University
Peace Hall
504 College Drive
Albany, GA 31705

RE: Vandy Musgrove Property, Albany, Dougherty County, GA
EPA #: GAD980497044

Dear Ms. Smith,

In fall 2009, the Georgia Division of Public Health GDPH received your request for information about environmental contamination and cancer rates for communities in Albany, Georgia. You also requested information about the potential for environmental contamination of an elementary school and school grounds that may have originated from a nearby state listed hazardous waste site. In addition to your request, U.S. Representative Sanford Bishop has contacted GDPH and expressed concern about cancer rates in the Albany area.

This letter is in response to your concerns about the potential for exposure to environmental contamination from the Vandy Musgrove hazardous waste site. Concerns about cancer rates are also addressed. The GDPH evaluated soil and groundwater data, cancer data, and community concerns from several sources including:

- CH2M Hill Corporation, *Compliance Status Report for the Vandy Musgrove Property, Albany, GA*. 11/1999.
- Georgia Environmental Protection Division, Letter Dougherty County Health Department. 9/29/1998.
- Georgia Division of Public Health, Comprehensive Cancer Registry. 8/2010.

Site Description and History

The Vandy Musgrove property is located northeast of the intersection of Oakridge Drive and Old Pretoria Road in southwest Albany (Figure 1). It is approximately one acre, currently vacant, and covered with grass, shrubs and trees. No fences or natural barriers, or 24-hour security were present during facility operations, but the site is surrounded by private property. Property owners have posted "Private Property" signs to discourage access.

Division of Public Health

M. Rony Francois, MD, MSPH, PhD, Director of Public Health and State Health Officer ♦ Phone: 404-657-2700 ♦ Fax: 404-657-2715

There is woodland to the north, west, and east, commercial property to the south, and commercial properties and residential communities within one mile. To the north, residential property is just north of a narrow woodland buffer. There is an elementary school within one mile of the site. There are no other schools, day care centers, nursing homes or any sensitive population centers within a one-mile radius of the property. The public is connected to the Albany municipal water supply. The closest municipal well is within one mile of the site.

Using 2000 U.S. Census data, population information was calculated for individuals living within a 1-mile radius of the Vandy Musgrove property site. The population within one mile of Vandy Musgrove is approximately 3,300 people (Figure 1).

The Vandy Musgrove property was originally a sand and gravel pit in a rural area. In the 1970's, Air Products and Chemicals, Inc. began using several pits on the Vandy Musgrove property for the unpermitted disposal of lime sludge (hydrated lime) generated during the manufacturing of acetylene gas. This gas is primarily used as a fuel, mostly for welding. Because of the high pH¹ of the lime sludge and the geologic conditions at the site, the Georgia Environmental Protection Division (GEPD) ordered the company to stop the disposal. Consequently, no waste disposal has occurred at the site since 1981.

In July 1994, the GEPD listed Vandy Musgrove on the state Hazardous Site Inventory (HSI) for a known release of calcium carbide in soil at levels exceeding the reportable quantity. (More information about the HSI can be found at www.gaepd.org/Documents/hazsiteinv). After extensive soil sampling and analyses described below, the site was removed from the HSI in January, 2001. There is no current risk to the public from exposure to soil, groundwater, or surface water the site.

Calcium carbide is a manufactured compound produced by mixing the mineral lime (calcium oxide) and coke (from coal) at high temperatures. It is very corrosive. Contact with skin causes irritation and burns, especially if the skin is wet or moist. It may cause eye, skin, digestive tract and respiratory tract irritation, burns and permanent damage to organs.

Lime or calcium oxide is a general term for calcium-containing, natural, inorganic materials. The rocks and minerals from which these materials are derived, typically limestone or chalk, are composed primarily of calcium carbonate. Hydrated lime is a by-product of the reaction of water and calcium oxide at room temperature, which produces acetylene gas and hydrated lime. Hydrated lime is highly alkaline and extremely corrosive and can cause respiratory tract, skin and eye irritation including severe pain, blistering, and irritation, chemical burns, and bronchitis and blindness. Ingestion can also cause severe pain, vomiting, and diarrhea.

Environmental Sampling

In 1994, GEPD required the property owners to obtain and analyze additional on-site soil samples for calcium carbide, and to evaluate the pH values of on-site groundwater samples to

¹ pH: a measure of acidity and alkalinity of a solution that is a number on a scale on which a value of 7 represents neutrality and lower numbers indicate increasing acidity and higher numbers increasing alkalinity. Both acid and alkaline conditions can pose health risks.

define the extent of lime sludge materials. The approximate location of historical lime sludge placement was identified using aerial photography, property maps, and on-site reconnaissance.

Soil

To determine if the public may have been exposed to contaminated soil from past operations on the Vandy Musgrove property, extensive soil sampling and analyses was conducted. Because there is no fence or 24-hour security for this property, members of the public may have accessed the site occasionally as visitors or by trespassing. However, Dougherty County officials indicate that it is unlikely that the public, including children, accessed the site in the past. The closest residential properties are separated from the site by woodland barriers, and no past or current exposure to airborne surface soil and dust at levels of health concern is suspected.

Between September 1998 and November 1999, surface and subsurface soil samples were collected: 25 soil samples were analyzed for calcium carbide² and pH; 87 soil boring samples from 28 soil boring locations were analyzed for pH, metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), and Toxicity Characteristic Leaching Procedure (TCLP) metals; and six discrete surface soil samples were analyzed for calcium carbide. Fifteen background soil samples from the site perimeter were collected (samples taken on-site in areas with no lime sludge materials) and analyzed for pH.

The analytical results for metals in soil show the site in compliance with regulatory requirements, and TCLP metals analyses results indicate no potential impact on groundwater from metals in soil at the site.

In addition, it was determined that calcium carbide is not present at the site. Because of the highly reactive nature of calcium carbide, results from both soil and lime sludge materials analyses were in accordance with expectations that calcium carbide would not be detected. Minimum detection limits for calcium carbide ranging from 10.4 parts per million (ppm) to 25.9 ppm were a function of moisture content of each particular sample. In addition, calcium carbide levels were consistent with the background sample results. Table 1 shows the highest levels of metals, calcium carbide and pH detected in soil, and respective regulatory criteria and the lowest health based comparison values³ for each contaminant. A comparison value (CV) is a calculated concentration of a substance in air, water, food, or soil that is unlikely to cause harmful (adverse) health effects in exposed people. CVs are established by ATSDR. The CV is used as a screening level used during the public health assessment process. Substances found in amounts greater than their CVs might be selected for further evaluation. No contamination was found exceeding health based comparison values.

² No established methodology for calcium carbide existed. Calcium carbide degrades quickly in water and does not bind easily with soil. A two-tiered technique was developed [CH2M Hill Corporation, *Compliance Status Report for the Vandy Musgrove Property, Albany, G; Appendix D*. 11/99].

³ Source: Agency for Toxic Substances and Disease Registry, *Soil Comparison Values (4/8/2010)*.

Table 1: Summary of Soil Sampling Results for the Vandy Musgrove Property*

Contaminant	Number of Samples	State Regulatory Criteria (ppm)	Highest Value Reported (ppm)	Lowest Health-Based Comparison Value* for Children/Adults (ppm)	Type of CV**
Arsenic	75	20	BRL (< 3.0)	20/200	EMEG _{c/a}
Barium	75	1000	18.0	10,000/100,000	EMEG _{c/a}
Cadmium	75	2	1.4	5/70	EMEG _{c/a}
Chromium	75	100	18.0	50/700 ¹	EMEG _{c/a}
Lead	75	75	17.0	400	PRG
Mercury	75	0/5	BRL (< 0.25)	5/70 ²	RMEG _{c/a}
Selenium	75	2	BRL (< 4.0)	300/4,000	EMEG _{c/a}
Silver	75	2	BRL (< 1.0)	300/4,000	RMEG _{c/a}
Calcium Carbide	31	100	BRL (< 25.9)	NA	
pH	15	6.2	12.5	NA	

ppm: parts per million

BRL: Below Reporting Limit (Reporting Limit)

EMEG_{c/a}: Environmental Media Evaluation Guide for Children/Adults

PRG: EPA Region 9 Preliminary Remedial Goals

RMEG_{c/a}: Reference Dose Media Evaluation Guide for Children/Adults

¹: For hexavalent chromium (most protective)

²: For methyl mercury (most protective)

* Source: CH2M Hill Corp., *Compliance Status Report for the Vandy Musgrove Property, Albany, GA, 11/99.*

** Source: ATSDR, *Soil Comparison Values (4/8/2010)*

The analytical results for metals in soil show that no contaminants were found exceeding health based CVs. Because the detection level for selenium (< 4 ppm) exceeds the regulatory criteria (2 ppm), it can not be determined whether soil sample results exceeded regulatory criteria for selenium. Selenium is a naturally occurring mineral found in most rocks and soils. Low doses of selenium are needed to maintain good health. However, exposure to high levels can cause adverse health effects. Selenium is not suspected to cause cancer.

At Vandy Musgrove, selenium levels in soil may have been below 2 ppm, and would not have exceeded 4 ppm. In addition, selenium did not exceed the lowest CV during any sampling event. Therefore, because there is no indication that the public was ever exposed to selenium or any contaminants in on-site soil, GDPH has determined that potentially slightly elevated selenium levels in soil did not pose a risk to public health.

GDPH concludes that the only human health risk associated with the Vandy Musgrove Property might result following direct dermal (skin) contact, soil/dust inhalation, or ingestion of on-site soil contaminated with caustic lime.

Groundwater

Between September 1998 and November 1999, eight on-site groundwater borings were sampled to provide groundwater data (flow direction and elevations beneath the site, gradient, and pH

values upgradient and downgradient of the lime sludge placement locations). Four boreholes were located where known lime sludge was placed and four boreholes were drilled at site corner perimeters. Based on the analytical results reported in documents reviewed [CH2M Hill Corporation, *Compliance Status Report for the Vandy Musgrove Property, Albany, GA. 11/99*], groundwater was not impacted at the time of analysis and no data exists to suggest that groundwater was affected prior to or following these sampling events. No historical information or analytical results suggest that groundwater has been or is being affected.

In addition, three surface water samples were collected from the holding/detention pond to the east of the site, and analyzed for pH. Results indicate no impact to surface water.

Community Concerns

In March 1998, the Southwest Health District in Albany reported environmental concerns of residents living near the site to GEPD. In September 1998, GEPD responded in a letter to the Health District [9/29/98]:

- The presence of hydrated lime in on-site soil may impact health and safety if direct dermal (skin) contact occurs. Direct dermal contact to the caustic lime may cause skin irritation and chemical burns. There are no known long term effects from dermal exposure.
- GEPD does not believe that the waste present at the site has impacted the school property located approximately one-third of a mile east of the site.
- GEPD recommends that the public not access the Vandy Musgrove site.
- GEPD and the company are assessing the site and will provide information about the nature and extent of hazardous chemicals present at the site.
- There are no other known sources of environmental contamination within one mile of the site that may impact the school or surrounding residential areas.

Cancer Concerns

In fall 2009, GDPH received a request from a community group, the Albany, Georgia Tools for Change, Inc., to evaluate cancer rates for the communities near the Vandy Musgrove property. After analysis of the available cancer data, it was determined that elevated rates of lung cancer (males) and prostate cancer (males) currently exist in Albany and Dougherty County. However, no cancer causing chemicals are associated with the Vandy Musgrove property.

The Albany, Georgia Tools for Change, Inc. received a Community Action for a Renewed Environment (CARE) grant from the U.S. Environmental Protection Agency to “empower the community with respect to health improvement, promoting environmental justice and enhancing health education among the residents of Southwest Georgia, especially those living in Albany, Georgia.” For more information about Tools for Change, visit www.agtfconline.org.

In August, 2010, GDPH evaluated the most recent five years of complete cancer data for Dougherty County and for Albany (Appendix A). These data include the site location zip code, 31707. Albany includes zip codes 31701, 31705, 31707, and 31721 combined. We could not analyze for separate zip codes because there have been some boundary changes since the 2000 census. Zip code 31721 was created in 2002 and contains part of what was formerly the 31707

zip code; therefore, we can not conduct analysis by zip code because we do not have accurate population data for these individual zip codes. Combined, the area has not changed, so these five zip codes were analyzed for the Albany area.

Investigating potential cancer clusters in Georgia is a responsibility of the GDCPH Comprehensive Cancer Registry (GCCR). GCCR is a population-based registry that collects, maintains, and analyzes cancer incidence data in Georgia. GCCR is responsible for determining how a cancer inquiry should proceed. After data collection and research into the inquiry, GCCR may

- Close the inquiry if a cluster is not identified.
- Request more information to conduct studies if a cluster is identified.
- Recommend education for residents, if necessary.
- Recommend a specific line of action to address identified environmental threats.

The GCCR routinely collects cancer data on all Georgia residents. Cancer data are submitted from different reporting facilities such as hospitals, independent laboratories, treatment facilities and physician offices. GCCR monitors data for completeness, quality and timeliness on a monthly basis. The National as well as Georgia standard is that reporting facilities are given 24 months to report all cancer cases diagnosed at their facility. Cancer data are released to the public when data meet the 95% completeness standard; that is, when 95% of all cancer diagnosed among Georgians for a calendar year are reported to the GCCR. At the time of this analysis, the GCCR had data from 1995 through 2007.

Because of the lag time for cancer data submission and entry into the state database, we can not determine the incidence rates for more recent cases of cancer diagnosed in the area. However, there is no exposure pathway to carcinogenic compounds in any environmental media resulting from operations at the Vandy Musgrove site.

Note: In statistics, a result is called statistically significant if it is unlikely to have occurred by chance. "A statistically significant difference" simply means there is statistical evidence that there is a difference; it does not mean the difference is necessarily large, important, or significant in the common meaning of the word. A common misconception is that a statistically significant result is always of practical significance, or demonstrates a large effect in the population. Given a sufficiently large sample, extremely small and non-notable differences can be found to be statistically significant, and statistical significance says nothing about the practical significance of a difference.

Cancer data analyses show that for:

Dougherty County

- The overall cancer incidence rate for males in Dougherty County is significantly higher than the rate for Georgia males.
- The prostate cancer incidence rate is significantly higher for males in Dougherty County than for Georgia males.
- The melanoma incidence rate is significantly lower for males in Dougherty County than for Georgia males.

- The breast cancer incidence rate is significantly lower for females in Dougherty County than for Georgia females.

Albany

- The overall cancer incidence rate in Albany is significantly higher than the rate for Georgia.
- The overall cancer incidence rate for males in Albany is significantly higher than the rate for Georgia males.
- The prostate cancer incidence rate is significantly higher for males in Albany than for Georgia males.
- The lung cancer incidence rate is significantly higher for males in Albany than for Georgia males.
- The melanoma incidence rate is significantly lower for males in Albany than for Georgia males.

Extensive environmental sampling indicates that no cancer-causing chemicals were or are currently present at the Vandy Musgrove property. No exposure to on-site contamination occurred at the site. There has been no indication that the public accessed the site repeatedly, for lengths of time considered a health risk for exposure to caustic chemicals in soil. In addition, lung and prostate cancer in males are not specific to any known environmental contaminants found at the Vandy Musgrove property.

Therefore, GDPH concludes that elevated rates of lung and prostate cancer in males in Albany and Dougherty County are not the result of exposure to contaminants once present on the Vandy Musgrove property.

Additional questions and concerns about cancer rates, causes of and prevention of lung and prostate cancer, and lung and prostate cancer screening can be obtained by contacting the GDPH Comprehensive Cancer Registry at (404) 657-6315. The GDPH will continue to monitor cancer rates in Dougherty County and Albany.

Cancer will affect 1 in 2 men and 1 in 3 women in the United States, according to statistics collected by the Surveillance Epidemiology and End Results program at the National Cancer Institute [www.seer.cancer.gov]. A common misconception arises from news stories suggesting we are experiencing a cancer "epidemic." This only *appears* to be the case because the **number** of new cancer cases reported is rising as the population is both expanding and aging. Older people are more likely to develop cancer; however, this trend is offset by new births, which are also increasing, and cancer is rare among the young. So as more members of a 75-million-strong "baby-boomer" cohort begin shifting to older, more cancer-prone ages, the **number** of new cancer cases is expected to increase in the next several decades. But since the birth rate is also expected to increase, the cancer **rate** may either stay the same or, perhaps, decline.

Conclusions

The only human health risk associated with the Vandy Musgrove Property might result following direct dermal (skin) contact, soil/dust inhalation, or ingestion of on-site soil contaminated with

caustic lime at the ground surface. GDPH concludes that contamination present in on-site soil at the Vandy Musgrove Property is not expected to harm people's health because the public has not been, is not currently, and is unlikely to be exposed to on-site soil. In addition, on-site soil contaminants did not affect groundwater or surface water on- or off-site.

There is no evidence of an excess numbers of cancer cases associated with exposure to past contamination at the Vandy Musgrove Property.

Recommendations

There are no recommendations at this time.

Please contact me at any time if you have questions.

Sincerely,

Jane M. Perry

Jane M. Perry, Director
Chemical Hazards Program
Environmental Health Branch

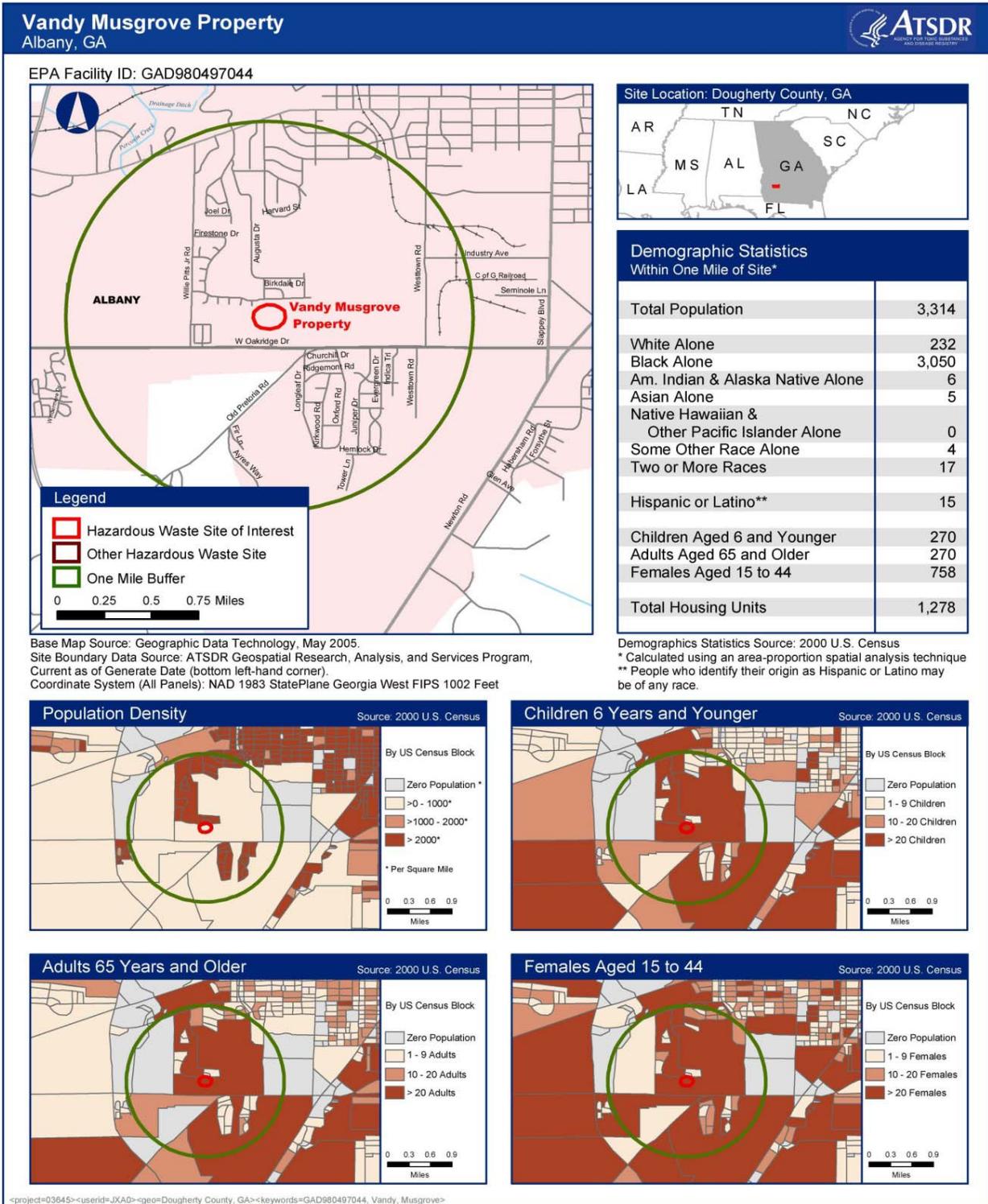
Contributor:

Onyinye Edeh

Onyinye Edeh, Intern
Chemical Hazards Program
Environmental Health Branch

Copy: U.S. Representative Sanford Bishop

FIGURE 1: SITE MAP AND DEMOGRAPHIC INFORMATION



APPENDIX A: CANCER DATA

Age-Adjusted Cancer Incidence Rates for the State of Georgia, 2003 - 2007

Site	Total		Males		Females	
	Cases	Rate	Cases	Rate	Cases	Rate
All Sites	187267	461.2	98092	562.5	89170	393.2
Oral Cavity	4669	11.1	3265	17.0	1404	6.2
Esophagus	1996	4.9	1519	8.6	477	2.1
Stomach	2511	6.3	1490	8.8	1021	4.5
Colon and Rectum	19084	47.9	9821	56.9	9263	41.3
Liver	1942	4.7	1443	7.7	499	2.2
Pancreas	4319	11.2	2169	13.0	2150	9.7
Larynx	1931	4.6	1569	8.5	362	1.6
Lung and Bronchus	28330	72.5	16414	98.8	11916	53.9
Bone and Joints	366	0.8	193	0.9	173	0.8
Melanoma	8540	20.3	4873	26.7	3667	15.9
Breast	--	--	--	--	27244	118.5
Uterine Cervix	--	--	--	--	1930	8.3
Uterine Corpus	--	--	--	--	3986	17.3
Ovary	--	--	--	--	2863	12.6
Prostate	--	--	28447	161.8	--	--
Testis	--	--	901	3.9	--	--
Kidney and Renal Pelvis	5631	13.7	3417	18.7	2214	9.8
Bladder (Incl in situ)	6875	18.0	5136	32.7	1739	7.9
Brain and Other Nervous System	2671	6.3	1396	7.0	1275	5.6
Thyroid	3758	8.4	847	4.1	2911	12.5
Hodgkin Lymphoma	1114	2.5	601	2.7	513	2.2
Non-Hodgkin Lymphoma	6985	17.3	3767	21.1	3218	14.3
Multiple Myeloma	2286	5.8	1217	7.3	1069	4.8
Leukemias	4654	11.6	2609	15.1	2045	9.1

Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

-- : Rates not calculated where the count is less than twenty

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health, 2010.

Age-Adjusted Cancer Incidence Rates for Dougherty County, Georgia, 2003 - 2007

Site	Total		Males		Females	
	Cases	Rate	Cases	Rate	Cases	Rate
All Sites	2284	478.8	1233	637.6	1051	378.7
Oral Cavity	69	14.3	46	22.4	23	8.0
Esophagus	28	5.7	21	10.7	7	~
Stomach	31	6.3	18	~	13	~
Colon and Rectum	231	48.7	102	54.3	129	46.0
Liver	24	4.9	18	~	6	~
Pancreas	54	11.1	30	15.4	24	8.2
Larynx	22	4.7	***	~	<5	~
Lung and Bronchus	349	73.2	205	107.4	144	50.8
Bone and Joints	<5	~	<5	~	<5	~
Melanoma	45	9.5	31	15.8	14	~
Breast	--	--	--	--	286	106.0
Uterine Cervix	--	--	--	--	19	~
Uterine Corpus	--	--	--	--	49	17.5
Ovary	--	--	--	--	32	11.5
Prostate	--	--	433	220.0	--	--
Testis	--	--	6	~	--	--
Kidney and Renal Pelvis	73	15.2	43	20.9	30	11.1
Bladder (Incl in situ)	73	15.5	51	26.8	22	7.7
Brain and Other Nervous System	19	~	8	~	11	~
Thyroid	21	4.4	5	~	16	~
Hodgkin Lymphoma	14	~	9	~	5	~
Non-Hodgkin Lymphoma	95	20.0	50	26.6	45	16.2
Multiple Myeloma	41	8.7	15	~	26	9.4
Leukemias	54	11.4	27	15.0	27	9.4

Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

Rates highlighted in yellow are significantly lower than the state rate (p<.05).

Rates highlighted in orange are significantly higher than the state rate (p<.05).

-- : Rates not calculated where the count is less than twenty

~ : Data suppressed for confidentiality purposes

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health, 2010.

Age-Adjusted Cancer Incidence Rates for Albany*, Georgia, 2003 - 2007

Site	Total		Males		Females	
	Cases	Rate	Cases	Rate	Cases	Rate
All Sites	2372	505.4	1291	686.6	1081	395.2
Oral Cavity	67	14.1	44	21.5	23	8.2
Esophagus	32	6.8	25	13.6	7	~
Stomach	30	6.4	17	~	13	~
Colon and Rectum	233	50.1	104	56.8	129	46.7
Liver	24	4.9	18	~	6	~
Pancreas	57	12.3	32	16.9	25	9.2
Larynx	23	4.8	***	~	<5	~
Lung and Bronchus	369	79.1	223	119.6	146	52.7
Bone and Joints	5	~	<5	~	<5	~
Melanoma	53	11.2	34	17.8	19	~
Breast	--	--	--	--	297	110.4
Uterine Cervix	--	--	--	--	20	7.8
Uterine Corpus	--	--	--	--	47	17.5
Ovary	--	--	--	--	33	11.9
Prostate	--	--	448	235.7	--	--
Testis	--	--	8	~	--	--
Kidney and Renal Pelvis	72	15.1	41	20.4	31	11.4
Bladder (Incl in situ)	80	17.1	57	30.3	23	8.2
Brain and Other Nervous System	21	4.3	9	~	12	~
Thyroid	21	4.3	5	~	16	~
Hodgkin Lymphoma	15	~	10	~	5	~
Non-Hodgkin Lymphoma	94	20.2	49	27.9	45	16.6
Multiple Myeloma	42	9.0	16	~	26	9.4
Leukemias	55	11.7	28	15.8	27	9.6

*Albany includes zip codes 31701, 31705, 31707, and 31721.

Average annual rate per 100,000, age-adjusted to the 2000 US standard population.

Rates highlighted in yellow are significantly lower than the state rate (p<.05).

Rates highlighted in orange are significantly higher than the state rate (p<.05).

-- : Rates not calculated where the count is less than twenty

~ : Data suppressed for confidentiality purposes

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health, 2010.

Dougherty County Cancer Incidence, 2003 - 2007

Data Summary

All Cancer Sites

- 2284 new cancer cases were diagnosed in Dougherty County from 2003 to 2007, an average of 457 new cases per year.
- It is expected that about 247 males and 210 females will be diagnosed with cancer every year in Dougherty County.
- The overall age-adjusted cancer incidence rate in Dougherty County is 478.8 per 100,000 population. This is higher than the rate for Georgia (461.2 per 100,000), but this difference is not statistically significant.
- Males are 68% more likely than females to be diagnosed with cancer in Dougherty County.

Males

- The overall age-adjusted cancer incidence rate for males in Dougherty County is 637.6 per 100,000 population. This is significantly higher than the rate for Georgia males (562.5 per 100,000).
- Prostate, lung, and colorectal are the top cancer sites among males in both Dougherty County and the State of Georgia.
- The age-adjusted prostate cancer incidence rate is significantly higher for males in Dougherty County (220.0 per 100,000) than for Georgia males (161.8 per 100,000).
- The age-adjusted lung cancer incidence rate is higher for males in Dougherty County (107.4 per 100,000) than for Georgia males (98.8 per 100,000), but this difference is not statistically significant.
- The age-adjusted colorectal cancer incidence rate is lower for males in Dougherty County (54.3 per 100,000) than for Georgia males (56.9 per 100,000), but this difference is not statistically significant.
- The age-adjusted melanoma incidence rate is significantly lower for males in Dougherty County (15.8 per 100,000) than for Georgia males (26.7 per 100,000).

Females

- The overall age-adjusted cancer incidence rate for females in Dougherty County is 378.7 per 100,000 population. This is lower than the rate for Georgia females (393.2 per 100,000), but this difference is not statistically significant.
- Breast, lung and colorectal are the top cancer sites among females in both Dougherty County and the State of Georgia.
- The age-adjusted breast cancer incidence rate is significantly lower for females in Dougherty County (106.0 per 100,000) than for Georgia females (118.5 per 100,000).
- The age-adjusted lung cancer incidence rate is lower for females in Dougherty County (50.8 per 100,000) than for Georgia females (53.9 per 100,000), but this difference is not statistically significant.
- The age-adjusted colorectal cancer incidence rate is higher for females in Dougherty County (46.0 per 100,000) than for Georgia females (41.3 per 100,000), but this difference is not statistically significant.

Albany* Cancer Incidence, 2003 - 2007

Data Summary

All Cancer Sites

- 2372 new cancer cases were diagnosed in Albany, GA from 2003 to 2007, an average of 474 new cases per year.
- It is expected that about 258 males and 216 females will be diagnosed with cancer every year in Albany.
- The overall age-adjusted cancer incidence rate in Albany is 505.4 per 100,000 population. This is significantly higher than the rate for Georgia (461.2 per 100,000).
- Males are 74% more likely than females to be diagnosed with cancer in Albany.

Males

- The overall age-adjusted cancer incidence rate for males in Albany is 686.6 per 100,000 population. This is significantly higher than the rate for Georgia males (562.5 per 100,000).
- Prostate, lung, and colorectal are the top cancer sites among males in both Albany and the State of Georgia.
- The age-adjusted prostate cancer incidence rate is significantly higher for males in Albany (235.7 per 100,000) than for Georgia males (161.8 per 100,000).
- The age-adjusted lung cancer incidence rate is significantly higher for males in Albany (119.6 per 100,000) than for Georgia males (98.8 per 100,000).
- The age-adjusted colorectal cancer incidence rate for males in Albany (56.8 per 100,000) is similar to that for Georgia males (56.9 per 100,000).
- The age-adjusted melanoma incidence rate is significantly lower for males in Albany (17.8 per 100,000) than for Georgia males (26.7 per 100,000).

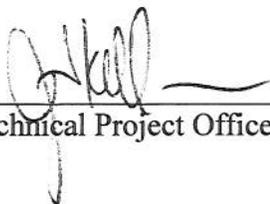
Females

- The overall age-adjusted cancer incidence rate for females in Albany is 395.2 per 100,000 population. This is similar to the rate for Georgia females (393.2 per 100,000).
- Breast, lung and colorectal are the top cancer sites among females in both Albany and the State of Georgia.
- The age-adjusted breast cancer incidence rate is lower for females in Albany (110.4 per 100,000) than for Georgia females (118.5 per 100,000), but this difference is not statistically significant.
- The age-adjusted lung cancer incidence rate is lower for females in Albany (52.7 per 100,000) than for Georgia females (53.9 per 100,000), but this difference is not statistically significant.
- The age-adjusted colorectal cancer incidence rate is higher for females in Albany (46.7 per 100,000) than for Georgia females (41.3 per 100,000), but this difference is not statistically significant.

* Albany includes zip codes 31701, 31705, 31707, and 31721.

CERTIFICATION

This letter health consultation was prepared by the Georgia Division of Public Health under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR). It was completed in accordance with approved methodologies and procedures existing at the time the health consultation was initiated. Editorial Review was completed by the Georgia Division of Public Health.



Technical Project Officer, CAT, CAPEB, DHAC

The Division of Health Assessment and Consultation (DHAC), ATSDR, has reviewed this health consultation and concurs with its findings.



Team Lead, CAT, CAPEB, DHAC, ATSDR