

Utah Health Status Update: Disparities in Cancer Incidence

July 2018

Like other preventable diseases such as diabetes and hypertension, disparities in cancer rates exist between different racial groups. The Centers for Disease Control and Prevention (CDC) defines health disparities as "...preventable differences in the burden of disease, injury, violence, or in opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other population groups, and communities."¹

In Utah, certain racial groups experience higher incidence rates of some cancers including breast, lung, colon, and prostate cancer. These differences may be due to inequities in access to healthcare, physical activity, healthy foods, and many other environmental factors that can negatively impact health.

This report looks specifically at disparities in incidence rates of breast cancer and colon cancer by racial groups in Utah.

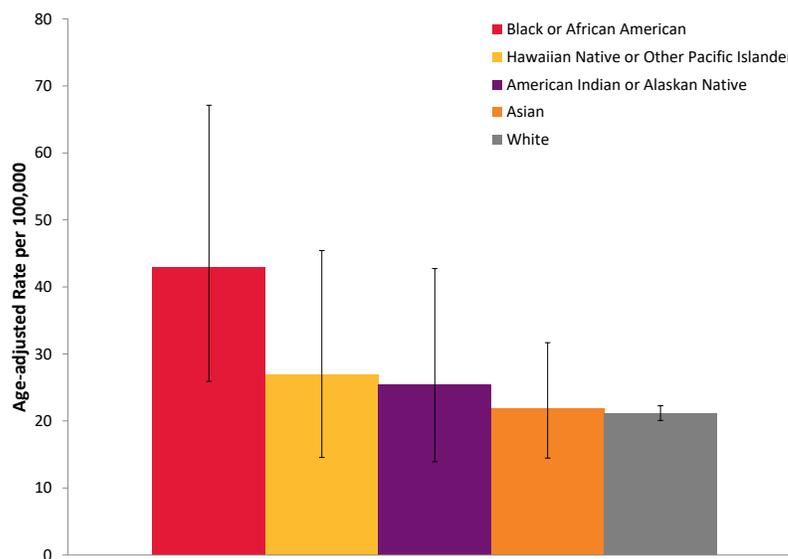
The Black or African American population in Utah experiences significantly higher rates of

KEY FINDINGS

- In Utah, certain racial groups experience higher incidence rates of some cancers.
- The Black or African American population in Utah had significantly higher rates of colon cancer incidence than other racial groups (43.0 per 100,000 vs. 21.2 for White during 2013–2015).
- Breast cancer incident rates were significantly higher for Hawaiian Native or Pacific Islander women in Utah (190.6 per 100,000) compared with other racial groups.
- Hawaiian Native or other Pacific Islander populations had the highest obesity rates in the state (46.3%) followed by Black or African American (33.6%) and American Indian or Alaskan Native (32.9%) populations.
- Decreasing disparities in cancer incidence can be complex and requires a multifaceted approach.

Colon Cancer

Figure 1. Colon (excluding rectum) cancer age-adjusted incident rate by race, Utah, 2013–2015



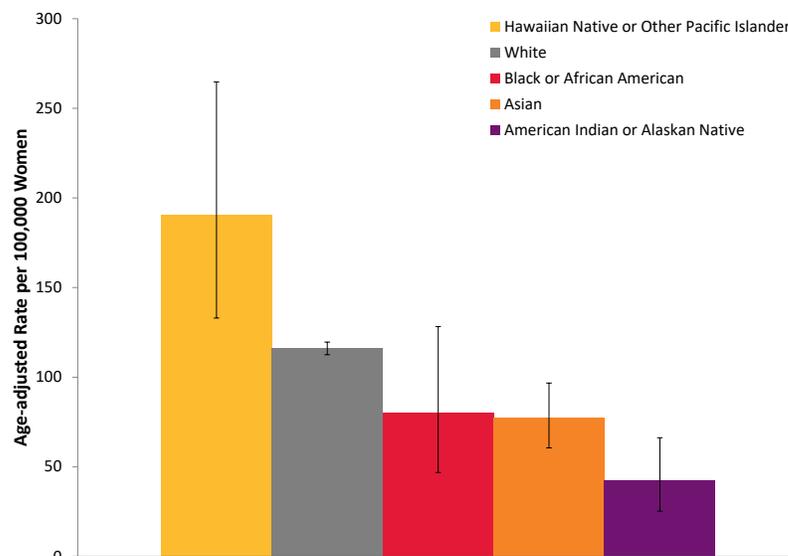
Source: Utah Cancer Registry

colon cancer incidence than other racial groups. Incidence rates from 2013–2015 were 43.0 per 100,000 for Black or African Americans, double the 21.2 per 100,000 incident rates for the White population (Figure 1).

Breast cancer incident rates were significantly higher for Hawaiian Native or Pacific Islander women in Utah (190.6 per 100,000) compared with

Breast Cancer

Figure 2. Female breast cancer age-adjusted incident rate by race, Utah, 2013–2015



Source: Utah Cancer Registry

White (116.0 per 100,000), Black or African American (80.3 per 100,000), Asian (77.1 per 100,000), and American Indian or Alaskan Native women (42.2 per 100,000) (Figure 2).

Obesity has been associated with higher risk for breast cancer (in post-menopausal women) and colon cancer, in addition to 11 other types of cancer.² Excess body fat may cause:

- immune system function and inflammation;
- high levels of certain hormones, such as insulin and estrogen;
- factors that regulate cell growth, such as insulin-like growth factor-1 (IGF-1); or
- proteins that influence how the body uses certain hormones, such as sex hormone-binding globulin.³

Obesity-related cancers make up nearly 40% of all cancer diagnoses in the U.S.² Between 2015–2014, obesity-related cancers increased while other types of cancers decreased. This increase in cancer diagnosis affects some populations more than others.

Hawaiian Native or other Pacific Islander populations had the highest obesity rates in the state (46.3%) followed by Black or African American (33.6%) and American Indian or Alaskan Native (32.9%) populations (Figure 3).

The high rates of obesity in the Hawaiian Native or other Pacific Islander and Black or African American populations may increase these populations' risk for breast cancer and colon cancer in addition to other obesity-related cancers.

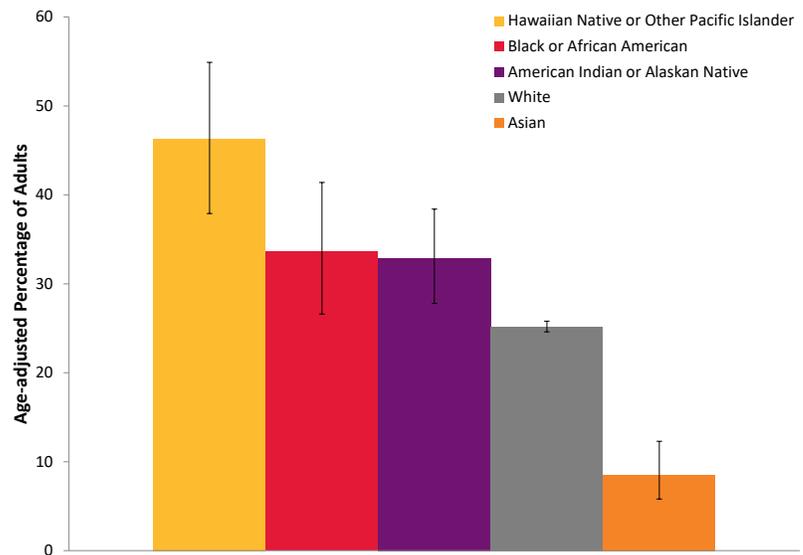
Obesity is a complex public health issue, but evidence shows lack of physical and economic access to healthy foods contributes to higher rates of obesity in certain populations.⁴ In Utah, 37.5% of food insecure adults are obese compared with 23.7% of non-food insecure adults.⁵ Racial disparities are present in food insecurity rates as well. While the U.S. average rate of household food insecurity is 12.3%, Black or African Americans experience a rate of 22.5%.⁶ Because of this, access to healthy foods in disparate populations needs to be considered when addressing rates of obesity-related cancers.

What can be done to address obesity-related cancers?

Decreasing disparities in cancer incidence can be complex and requires a multifaceted approach. Addressing the root causes of obe-

Obesity

Figure 3. Age-adjusted percentage of adults with a body mass index (BMI) of 30 or more (obese) by race, Utah, 2013–2015



Source: Utah Behavioral Risk Factor Surveillance System

sity is one component. Strategies to decrease obesity-related cancer risk include the following recommendations by the CDC:⁷

- Make it easier to choose healthy food options where people live, work, learn, and play.
- Build communities that make it safer and easier for people to be physically active.
- Partner with business and civic leaders to make community changes that increase healthy eating and active living.

1. Centers for Disease Control and Prevention. Health Disparities. May, 2018. <https://www.cdc.gov/aging/disparities/index.htm>.
2. Centers for Disease Control and Prevention. Cancer and Obesity. May, 2018. <https://www.cdc.gov/vitalsigns/obesity-cancer/index.html>.
3. American Cancer Society (2018). Does Body Weight Affect Cancer Risk? Retrieved from: <https://www.cancer.org/cancer/cancer-causes/diet-physical-activity/body-weight-and-cancer-risk/effects.html>.
4. Pan, L., Sherry, B., Njai, R., & Blanck, H. M. (2012). Food insecurity is associated with obesity among US adults in 12 states. *Journal of the Academy of Nutrition and Dietetics*, 112(9), 1403-1409.
5. Utah Behavioral Risk Factor Surveillance System (2018). Utah Department of Health.
6. U.S. Department of Agriculture (2018) Food Insecurity in the U.S. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics/#foodsecure>.
7. National Cancer Institute. Cancers Associated with Overweight and Obesity. May, 2018. <https://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/overweight-cancers-infographic>.

For additional information about this topic, contact Natalie Loots, 801-538-6332, nloots@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, (801) 538-9191, chdata@utah.gov.

UDOH ANNOUNCEMENT:

The Study of Associated Risks of Stillbirth (SOARS), a project of the UDOH Maternal and Infant Health Program, will begin collecting stillbirth data in the fall of 2018. Information collected can fill data gaps and inform efforts to conduct stillbirth surveillance in other states. For more information visit <https://www.cdc.gov/ncbddd/stillbirth/activities-nccdphp.html>.

Breaking News, July 2018

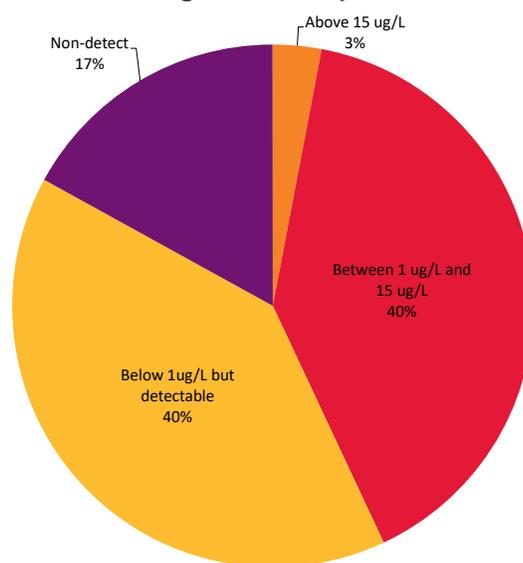
Sampling for Lead in School Drinking Water

Concerns over lead in drinking water led the U.S. Environmental Protection Agency (EPA), the Utah Department of Health, and the Utah Department of Environmental Quality (UDEQ) to provide Utah school superintendents encouragement and guidance to test their school district facility drinking water systems for lead. The threshold for action for lead in drinking water, set by the EPA in the Lead and Copper Rule, is 15 ug/l (micrograms of lead per liter of water).

In 2017 the UDEQ conducted a statewide project to test lead in school drinking water systems. Most school districts collect samples themselves. The Rural Water Association of Utah and local health departments helped some schools collect samples. Schools that had test results which were above the threshold for action required only minimal corrective actions, typically implementing a flushing schedule and/or replacing a faucet, to reduce the lead levels. To date, no schools have been found needing a complete refit of their plumbing infrastructures. The distribution of findings is provided in the accompanying figure.

- 1,700 samples taken from 700 schools
- 22 schools (3% of participating schools) had at least one sample result above the EPA action level of 15 ug/L
- 40% of the samples received were between 1 ug/L and 15 ug/L
- 40% of the samples received were below 1 ug/L but detectable
- 17% of the samples were non-detect; which equates to just 10% of participating schools

School Drinking Water Sample Results

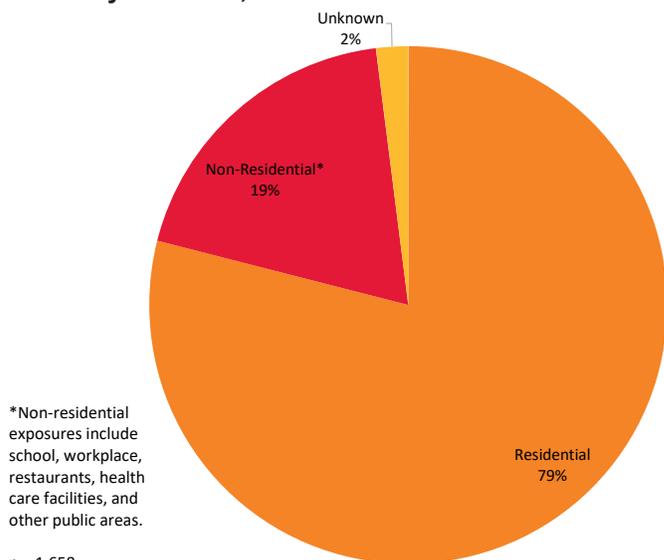


Community Health Spotlight, July 2018

Carbon Monoxide Poisoning Awareness

The Utah Department of Health Environmental Public Health Tracking Network (UEPHTN) is working with the Utah Poison Control Center (UPCC) to identify unintentional carbon monoxide (CO) exposures. Traditionally, the UEPHTN has reported only CO poisoning emergency department visits and hospitalizations. However, UPCC data improves public health surveillance by providing a broader perspective of CO exposures, and not only those cases that are treated and reported through a healthcare facility. A recent analysis of unintentional CO exposures reported to the UPCC showed almost one in five (19%) reported CO exposures occur outside of the home. This includes locations such as schools, workplaces, and other public areas. CO exposures that occur in these types of areas have the potential to affect a larger number of people. Because CO is colorless and odorless, and CO poisoning symptoms mimic flu-like symptoms (e.g. dizziness, confusion, upset stomach, and vomiting), people may be unaware they were exposed to CO. Ensuring that fuel-burning appliances are properly functioning is essential to preventing CO poisoning. If you suspect CO poisoning, the Utah Department of Health advises Utah residents to get to fresh air and call the UPCC at 800-222-1222. For more information, visit <http://epht.health.utah.gov/epht-view/indicator/view/CarMonExp.Year.html>.

Percentage of Unintentional Carbon Monoxide Exposures Reported to the Utah Poison Control Center by Location, 2013–2017



*Non-residential exposures include school, workplace, restaurants, health care facilities, and other public areas.

n = 1,658

Monthly Health Indicators Report

(Data Through May 2018)

Monthly Report of Notifiable Diseases, May 2018	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (<i>Campylobacter</i>)	30	57	186	182	1.0
Shiga toxin-producing <i>Escherichia coli</i> (<i>E. coli</i>)	8	5	31	21	1.5
Hepatitis A (infectious hepatitis)	8	1	107	4	24.3
Hepatitis B, acute infections (serum hepatitis)	0	0	5	2	2.1
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/influenza				
Meningococcal Disease	0	0	0	0	0.0
Pertussis (Whooping Cough)	4	66	129	333	0.4
Salmonellosis (<i>Salmonella</i>)	13	34	117	139	0.8
Shigellosis (<i>Shigella</i>)	0	3	11	17	0.6
Varicella (Chickenpox)	13	20	67	121	0.6
Quarterly Report of Notifiable Diseases, 1st Qtr 2018	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV/AIDS†	33	32	33	32	1.0
Chlamydia	2,605	2,257	2,605	2,257	1.2
Gonorrhea	667	383	667	383	1.7
Syphilis	27	20	27	20	1.4
Tuberculosis	8	7	8	6	1.3
Medicaid Expenditures (in Millions) for the Month of May 2018‡	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Mental Health Services§	\$ 12.6	\$ 12.7	\$ 155.9	\$ 157.0	\$ (1.1)
Inpatient Hospital Services	\$ 20.2	\$ 20.2	\$ 210.5	\$ 212.1	\$ (1.6)
Outpatient Hospital Services	\$ 4.3	\$ 4.5	\$ 41.6	\$ 43.9	\$ (2.3)
Nursing Home Services	\$ 34.9	\$ 35.6	\$ 220.8	\$ 223.9	\$ (3.1)
Pharmacy Services	\$ 9.9	\$ 10.0	\$ 111.4	\$ 113.0	\$ (1.6)
Physician/Osteo Services	\$ 8.1	\$ 8.3	\$ 63.2	\$ 64.9	\$ (1.8)
Medicaid Expansion Services	\$ 7.4	\$ 10.6	\$ 38.1	\$ 42.9	\$ (4.8)
TOTAL MEDICAID#	\$ 222.9	\$ 220.9	\$ 2,399.3	\$ 2,400.1	\$ (0.9)

Program Enrollment for the Month of May 2018	Current Month	Previous Month	% Change** From Previous Month	1 Year Ago	% Change** From 1 Year Ago
Medicaid	276,801	278,017	-0.4%	285,526	-3.1%
PCN (Primary Care Network)	14,433	15,145	-4.7%	13,608	+6.1%
CHIP (Children's Health Ins. Plan)	19,405	19,487	-0.4%	19,333	+0.4%
Health Care System Measures (Year)	Annual Visits			Annual Charges	
	Number of Events	Visits per 1,000 Utahns	% Change** From Previous Year	Total Charges in Millions	% Change** From Previous Year
Overall Hospitalizations (2016)	297,106	97.4	+3.0%	\$ 8,638.0	+8.4%
Non-maternity Hospitalizations (2016)	198,257	65.0	+2.0%	\$ 7,466.1	+9.2%
Emergency Department Encounters** (2016)	756,376	247.9	+7.6%	\$ 2,286.3	+21.7%
Outpatient Surgery (2016)	491,566	161.1	+4.9%	\$ 3,000.6	-0.3%
Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change** From Previous Year	State Rank** (1 is best)
Obesity (Adults 18+)	2016	538,700	25.3%	+3.3%	10 (2016)
Cigarette Smoking (Adults 18+)	2016	187,400	8.8%	-3.3%	1 (2016)
Influenza Immunization (Adults 65+)	2016	176,300	54.9%	-6.9%	41 (2016)
Health Insurance Coverage (Uninsured)	2016	265,500	8.7%	-1.1%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2016	257	8.4 / 100,000	+2.0%	16 (2016)
Poisoning Deaths	2016	703	23.0 / 100,000	-1.1%	33 (2016)
Suicide Deaths	2016	612	20.1 / 100,000	-1.5%	47 (2016)
Diabetes Prevalence (Adults 18+)	2016	153,300	7.2%	+2.9%	8 (2016)
Poor Mental Health (Adults 18+)	2016	362,000	17.0%	+6.3%	21 (2016)
Coronary Heart Disease Deaths	2016	1,631	53.5 / 100,000	-1.3%	4 (2016)
All Cancer Deaths	2016	3,114	102.1 / 100,000	-1.3%	1 (2016)
Stroke Deaths	2016	927	30.4 / 100,000	+2.4%	32 (2016)
Births to Adolescents (Ages 15-17)	2016	447	6.2 / 1,000	-11.1%	11 (2016)
Early Prenatal Care	2016	38,003	75.3%	-1.5%	n/a
Infant Mortality	2016	274	5.4 / 1,000	+7.2%	12 (2015)
Childhood Immunization (4:3:1:3:3:1)	2016	37,100	73.6%	0.0%	26 (2016)

* Influenza activity was minimal in May 2018. A season total of 2,169 influenza-associated hospitalizations have been confirmed from October 1, 2017 to May 19, 2018. Active influenza surveillance has ended for 2017/18 and will resume in October for the 2018-19 season. More information can be found at <http://health.utah.gov/epi/diseases/influenza/surveillance/index.html>.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

‡ This state fiscal year (SFY) 2018 report includes supplemental payments to better match the SFY 2018 Medicaid Forecast Budget which costs have not been included in previous years.

§ The SFY 2018 Medicaid Forecast Budget includes Mental Health and Substance Abuse services together while this report only accounts for Mental Health services. This is to stay consistent with the previous years reports.

Medicaid Expansion Services was added to the Medicaid program in SFY 2018. Total Medicaid costs exclude the Prism Project.

** Relative percent change. Percent change could be due to random variation.

†† Treat and release only.

‡‡ State rank based on age-adjusted rates where applicable.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile Virus will start in June for the 2018 season.