VIRGINIA Cancer REGISTRY

VCRVOICE

Sarcoma Month July 2018

VDH VIRGINIA DEPARTMENT OF HEALTH

What is Sarcoma?

Sarcoma is a rare form of cancer that originates in either bone (osteosarcoma) or soft tissue; including "fat, muscle, nerves, fibrous tissues, blood vessels, and deep skin tissue"[1]. Although rare, there are over 50 different types of Sarcomas.

Just the Facts:

- NCI thru SEER Explorer states[3]: 3.5/100,000 Incidence rate in US for 2015 for all soft tissue diagnosis (including heart)
- Incidence rate has remained steady for last three reported years. (per SEER)[3]
- Mortality rate has been consistent at 1.3/100,000 (per SEER)[3]
- Sarcomas are rare
- There is no universal screening process for Sarcomas
- Two main categories of Sarcoma: soft tissue and bone
- Over 50 different subtypes of Sarcoma

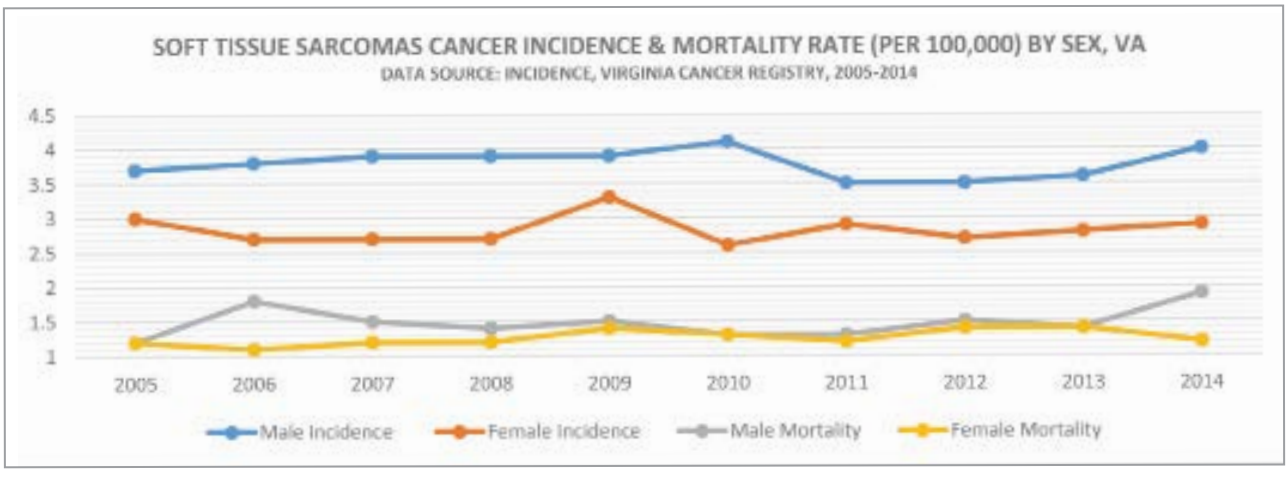
Soft Tissue Sarcoma (STS) most commonly found in the extremities, arms, legs, head and neck. It often appears as a painless lump. It is important to note that not all lumps are STS. Predominately most lumps are diagnosed as benign (not cancer) lipomas.[6]

Sarcoma in Virginia

In collaboration with the Virginia Division of Population Health Data Epidemiology, the Virginia Cancer Registry would like to increase cancer awareness. Through the collection and tracking of cancer data, we are able to see the results of research efforts and advances in early detection. In other words, Virginia can adjust their approach on cancer treatment based on the mortality and survival of various treatments/screenings and where we, as a state, compare with other states. All of this helps the Virginia Department of Health (VDH) to work towards one of our goals of "improving the health and well-being of all Virginians."[2]

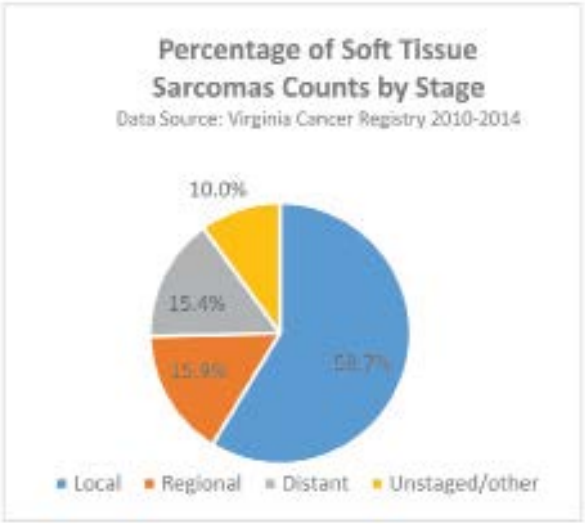
How does soft tissue sarcoma (STS) affect Virginia? Per the VDH Epidemiology department, charting very low occurrences/ incidences is very difficult to portray. Due to the rarity of this cancer, we have to graph back to 2005. As you can see in the first graph the overall incidence rates are extremely low, showing how rare this type of cancer is. The incidence rate in Virginia, for the most part, remains below 4 per 100,000 at risk people. The incidence of soft tissue sarcoma is slightly more common in males than females. However, women have a higher mortality rate. This trend is apparent in the national statistics as well.

Over half of the soft tissue sarcomas diagnosed in Virginia, are local/early stage. You can see the breakdown of stage at diagnosis in Graph 2. As you may already know, diagnosis at an early stage often leads to a better prognosis.

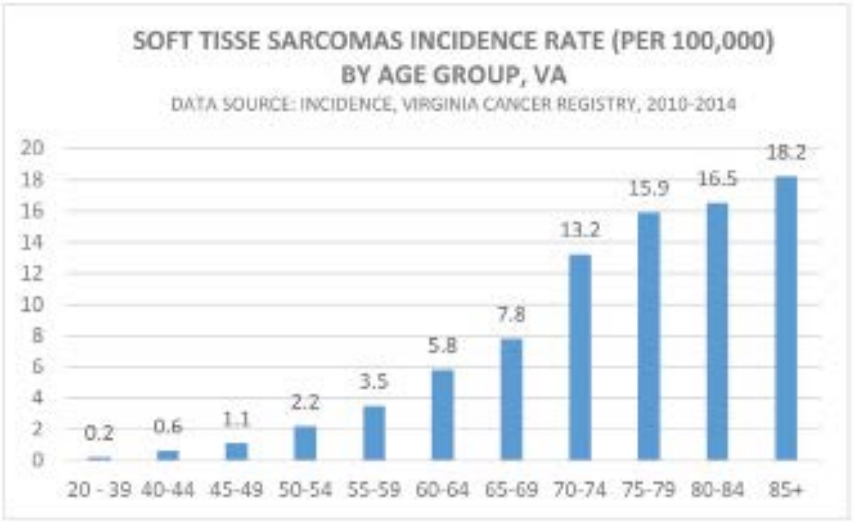


Graph 1

Graph 3 expresses the diagnosis incidence rate by age group. Based on the information collected by the Virginia Cancer Registry, it can be seen that Soft tissue sarcomas diagnoses increase with age. That said, the overall incidence rate over a 4 year period for Virginians over 85 years old, was still only 18.2 per 100,000 at risk people. At the same time in 20-39 year olds, it is hardly registerable for the same period.

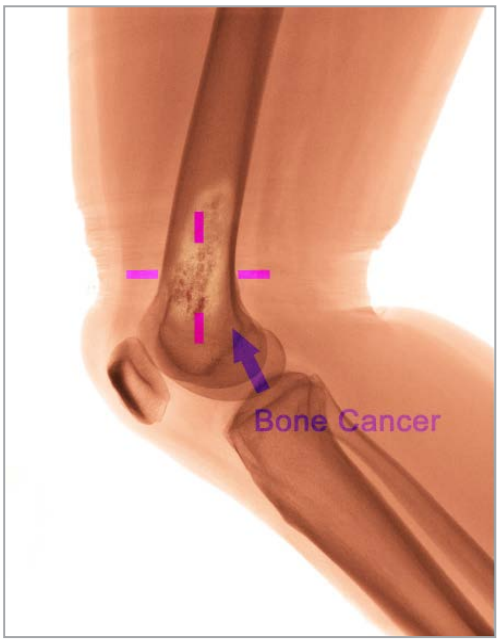


Graph 2



Graph 3

According to the American Cancer Society[5], in 2018 an estimated 13,040 new diagnosed cases of soft tissue sarcoma including pediatric and adults. In comparison, according to the American Cancer Society's annual Facts and Figures, it's estimated that over 266,000 new cases of breast cancer in women and nearly 165,000 prostate cases will be diagnosed in the US for 2018.[5]



Detection and Prevention

Many cancers can be linked to lifestyle choices; such as diet or smoking. Due to how rare and yet the vast number of subtypes of Sarcoma, it is difficult to attribute lifestyle nor is there a definitive link to heredity. Hence why currently, there is no universal population screening for STS. That said, UNM noted; as most STS are of the extremities (arms, legs, head, and neck), they tend to be palpable/felt by touch.[4] People, especially parents, need to be observant of painless growths and report them to a doctor as soon as possible.

References & Acknowledgements: Many sites provided duplicate information

1 https://www.cancer.org/cancer/soft-tissue-sarcoma/about/soft-tissue-sarcoma.html
https://www.cancer.gov/types/soft-tissue-sarcoma/patient/adult-soft-tissue-treatment-pdq
https://www.cancer.gov/types/soft-tissue-sarcoma National Cancer Institute
2 http://www.vdh.virginia.gov/commissioner/administration/board-of-health/mission-roles-priorities-and-functions/
3 https://seer.cancer.gov/ SEER* Explorer Soft Tissue (including heart)
4 http://cancer.unm.edu/cancer/cancer-info/types-of-cancer/sarcoma/ewings-sarcoma/overview-of-soft-tissue-sarcomas/soft-tissue-sarcoma-screening-and-prevention/ https://www.cancer.org/cancer/soft-tissue-sarcoma/about/key-statistics.html
5 https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2018/cancer-facts-and-figures-2018.pdf
6 https://www.cancer.net/cancer-types/sarcoma-soft-tissue/symptoms-and-signs
Virginia Cancer Registry and Epidemiology - Shuhui Wang epidemiology (provided graphs/charts)