

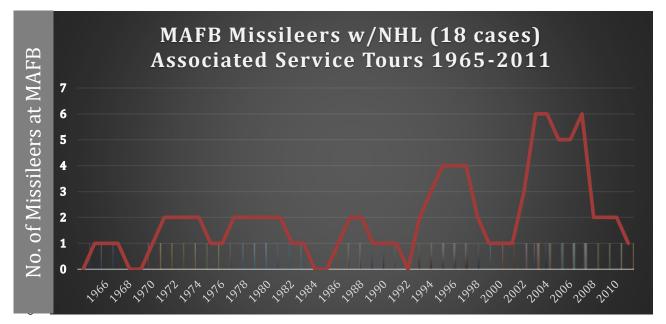
Missile Community Cancer Fact Sheet

CURRENT REPORTED CANCER CASES AND RELATED DISEASES (CAO 25 Sep 23)

The elevated numbers of toxic exposure, health-related issues present in the USAF missile community is cause for concern and further investigation.

Self-reporting of current and Veteran members of this demographic at <u>Torchlight Initiative</u> Registry includes 339 individual submissions/cases:

- Of these cases, 269 personnel have a cancer diagnosis; 41 of the 269 are Non-Hodgkin Lymphoma (NHL)
 - 21 of the 41 NHL cases were from individuals who served at Malmstrom AFB:
 - 18 of these were ICBM Operators (13N); two significant spikes occurred related to service periods 1995-1997 and 2003-2007



- Service years 1995-1997: 4 cases
- Service years: 2003-2007: 8 Cases
- Median age at diagnosis: 42 years
- 4 of these 12 individuals are deceased (1 death was not disease related)
- The remaining 3 of the 21 individuals with NHL who served at Malmstrom AFB worked in missile maintenance, logistics, and the third individual's career field is unknown
- 20 of the 41 NHL cases were from individuals who served at other ICBM bases (Note: some members served at more than one ICBM base):



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•	Grand Forks AFB, ND (Minuteman III)	1
•	Minot AFB, ND (Minuteman III)	4
•	FE Warren AFB, WY (Minuteman III)	3
•	Whiteman AFB, MO (Minuteman II)	4
•	Ellsworth AFB, SD (Minuteman II)	3
•	Little Rock AFB, AR (Titan II)	1
•	Davis Monthan AFB, AZ (Titan II)	4
•	McConnell AFB, KS (Titan II)	4
•	Vandenberg AFB/SFB, CA	3

NHL is not the only potentially disproportionate diagnosis among community members. Cancers and related diseases manifest differently in human immune systems and may initially present as disorders and other diagnoses. Other cases of note include thyroid disorders and cancers, lymph node disorders, various leukemias, myeloma/bone marrow cancers, carcinomas, melanomas, brain tumors, and prostate/colon/kidney cancers

LYMPHOMA BASELINE DATA

- Lymphomas are cancers of the lymphatic system that fight germs through the lymph nodes, spleen, thymus gland and bone marrow
- Main subtypes of lymphoma are Hodgkin's Lymphoma and Non-Hodgkin's Lymphoma
- Non-Hodgkin's Lymphoma (NHL) includes various subtypes to include:
 - Cutaneous B-cell lymphoma
 - Cutaneous T-cell lymphoma
 - Follicular lymphoma
 - Waldenstrom macroglobulinemia
 - Chronic lymphocytic leukemia (CLL)
 - Mantle Cell Lymphoma (MCL)
 - Diffused Large B-Cell Lymphoma (DLBCL)

Non-Hodgkin's lymphoma - Symptoms and causes - Mayo Clinic

Non-Hodgkin lymphoma Statistics | American Cancer Society - Cancer Facts

Non-Hodgkin lymphoma Subtypes – Leukemia & Lymphoma Society

- The US average incidence rate of NHL is 19/100,000 cases among all ages
- NY State Dep of Health Study finds that the avg NHL incidence rate amongst males between 35-44 years old is ~11/100,000



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- o 9.1/100,000 is the incidence rate for ages 35-39.
- o 12.9/100,000 is the incidence rate of ages 40-44.
- The average incidence rate of these two age groups is 11/100,000. This number was averaged because the 8 missileers diagnosed in this sample were between 36-42 years old. 11/100,000 is represented as 1/9,091

About non-Hodgkin lymphoma (ny.gov)

- The Montana average incidence rate of NHL is 17.8/100,000 among all ages.
- Counties where Minuteman missile facilities are located for the 10th, 12th, 490th and 564th Missile Squadrons include:

County NHL Rate (per 100,000)

Cascade 15.5 Fergus 18.9

Teton 3 or fewer Judith Basin 3 or fewer

State Cancer Profiles > Incidence Rates Table

Most patients are 65 or older when diagnosed with NHL