Veterans and Cancer (Part II)

Some veterans of the U.S. Armed Forces were exposed to substances that were later found to cause cancer. The U.S. Department of Veterans Affairs (VA) [1] has identified these substances, such as ionizing radiation and Agent Orange [2], and has created programs to help veterans receive health care related to exposure to these substances. As these veterans get older, they may develop cancer related to the exposure. This article discusses Agent Orange (used during the Vietnam War), cancer risks to veterans of recent conflicts, and questions to ask the doctor, while the first article [3] in the series discusses ionizing radiation and nasopharyngeal radium treatment.

During the Vietnam War, the United States sprayed approximately 20 million gallons of herbicides (chemicals used to kill plants) in Vietnam to expose enemy hiding places, destroy crops, and clear areas around U.S. military bases. One of the most commonly used herbicide mixtures was called ?Agent Orange? because it was stored in 55-gallon drums marked with an orange stripe. Agent Orange contained small traces of a toxic chemical compound called dioxin, which recent research studies suggest may be associated with long-term health conditions, including some cancers.

The U.S. military stopped using Agent Orange in 1971 after a scientific study suggested that the herbicide could cause birth defects in laboratory animals. Soon after, Vietnam veterans began reporting medical conditions they believed to be connected to the herbicide and expressed concerns about possible long-term health effects. In response, the VA developed a comprehensive program to address the needs of veterans who were exposed to Agent Orange.

Agent Orange and cancer

Researchers have conducted several studies to find out if Agent Orange causes cancer, including the Centers for Disease Control and Prevention's Vietnam Experience Study [4] and its Selected Cancers Study [5]. The VA has also conducted several studies since the 1980s, and has worked with organizations such as the National Academy of Sciences to determine links between Agent Orange and certain cancers.

Based on clinical research and federal law, the VA presumes that certain cancers and other diseases are a result of herbicide exposure. If a Vietnam veteran is diagnosed with one or more of the following cancers and can provide documentation of Agent Orange exposure, he or she is eligible for benefits, including free medical care:

- Hodgkin lymphoma [6] and non-Hodgkin lymphoma [7], cancers of the lymph system
- Lung cancer [8] (including cancers of the bronchus, larynx [9] [voice box], and trachea)
- Multiple myeloma [10], a cancer of the plasma cells in the bone marrow, the spongy tissue inside of bones
- Prostate cancer [11]
- Soft tissue sarcoma [12] (except osteosarcoma, chondrosarcoma, Kaposi's sarcoma or mesothelioma), cancer that develops in the tissues that support and connect the body
- Chronic lymphocytic leukemia [13], a cancer of white blood cells
- Amyloidosis [14], a serious condition related to cancer

Agent Orange and other diseases

In addition to the above cancers, if a veteran is diagnosed with one or more of the following diseases related to Agent Orange exposure, he or she is automatically eligible for VA benefits:

- Chloracne, an acne-like skin condition
- Peripheral neuropathy [15], a condition that affects the nervous system and causes numbness, pain, tingling and/or weakness in the hands, arms, legs or feet
- Porphyria cutanea tarda, a condition that causes blisters to develop on sun-exposed areas of the skin and that can affect the liver
- Type 2 diabetes (also called diabetes mellitus)â€"a condition in which either the body does not produce enough insulin (a hormone that controls the amount of sugar in the blood) or the cells ignore the insulin
- Ischemic heart disease
- Parkinson's disease

Agent Orange Registry examination

In 1978, the VA set up the Agent Orange Registry [16]. The registry provides all veterans exposed to the herbicide with a comprehensive health examination free of charge at nearly any VA medical center.

The examination includes:

- Questions about how the veteran was exposed to Agent Orange
- Questions about medical history
- A physical examination
- Basic laboratory tests, including urine and blood tests
- X-rays, if necessary
- Consultations with health specialists, if necessary

Depending on the examination results and proof of Agent Orange exposure, veterans may receive medical and financial benefits.

Contact the VA

To learn more about benefits and requirements related to Agent Orange exposure or to make an appointment for an Agent Orange Registry examination, contact your local VA medical center [17], or call 800-749-8387, the VA's toll-free helpline, for questions related to Agent Orange.

Cancer risks to veterans of recent conflicts

Some veterans of the 1991 Persian Gulf War have reported a wide range of symptoms including chronic headaches, memory and concentration problems, pain, gastrointestinal problems, and several other symptoms. The term ?Gulf War Syndrome? [18] has been used to describe this suspected illness. Whether Gulf War Syndrome is a real illness remains controversial, although researchers have found a link between Gulf War service and health problems.

For example, a 2010 report by the Institute of Medicine (IOM) [19] found that Gulf War veterans may be more likely to experience post-traumatic stress disorder (PTSD [20], an anxiety disorder that starts in response to physical injury and emotional distress caused by life-threatening events), irritable bowel syndrome, and other symptoms but found no consistent evidence of an increase in cancer among Gulf War veterans compared with veterans who were not deployed. This reverses the IOM's 2008 finding that there was no evidence of a syndrome unique to Gulf War veterans.

Also, a 2008 report by a group chartered by the U. S. Congress, the Research Advisory Committee on Gulf War Veterans' Illnesses, reported that Gulf War Syndrome is a real illness and that veterans potentially exposed to nerve agents have died from brain cancer at abnormally high rates. The report listed the drug pyridostigmine bromide (used to protect against nerve gas) and pesticides as agents associated with Gulf War Syndrome. Research on Gulf War Syndrome is ongoing.

Research also continues on the health effects of veterans returning from Afghanistan and Iraq. Some veterans who served in Iraq have reported similar symptoms to Gulf War Syndrome. To date, there is no conclusive evidence of any association between these symptoms and cancer. Some veterans of these conflicts and others have been diagnosed with PTSD.

The VA has begun a large, long-term study [21] to assess a broad range of health issues that may affect Operation Enduring Freedom/Operation Iraqi Freedom veterans and their counterparts who served during the same period. The study compares 30,000 deployed veterans with 30,000 non-deployed veterans. Women make up 20% of the study participants. The study looks at PTSD, pregnancy outcomes, reproductive health, functional status, and behavioral risk factors (smoking, drinking, seatbelt use, speeding, motorcycle helmet use, and sexual behavior) and VA disability compensation.

Contact the VA

Veterans of the Gulf War, including those who served in Operations Desert Shield, Desert Storm, and Iraqi Freedom are eligible for a free Gulf War Registry health examination by the VA. Veterans with health questions regarding their combat service can call 800-749-8387, the VA's toll-free helpline.

Questions to ask the doctor

Use this list of questions to talk with your doctor about the cancer risks of military service.

- Are there any health risks related to my military service?
- Might I have been exposed to any toxic agents during my service?
- Are any of these agents possibly linked to cancer?
- What services are included in my health examination?
- Do I need to prove that I was exposed to a toxic agent to receive an examination or other health benefits?
- What other health benefits are available to me?
- Where can I receive treatment for cancer or another health condition?
- Where can I receive treatment for PTSD or another mental health condition?
- Where can I get more information on my health benefits?
- What other benefits are available to me? To my family?
- What steps can I take to help reduce my risk of cancer?

- What research is ongoing?

More Information

Risk Factors and Prevention [22]

Understanding Cancer Risk [23]

Types of Cancer [24]

Additional Resources

United States Department- of Veterans Affairs: Agent Orange [25]

United States Department of Veterans Affairs: Gulf War Veterans' Illnesses [18]

United States Department of Veterans Affairs: War Related Illness and Injury Study Center [26]

United States Department of Veterans Affairs: Veterans ON-line APPlication (VONAPP) Website [27]

Vietnam Veterans of America: Agent Orange Related Health Issues (PDF) [28]

Links:
[1] http://www.va.gov/
[2] http://www.publichealth.va.gov/exposures/agentorange/diseases.asp
[3] http://www.cancer.net/node/24735
[4] http://www.cdc.gov/nceh/veterans/default1c.htm
[5] http://www.cdc.gov/nceh/veterans/default1d.htm
[6] http://www.cancer.net/node/19178
[7] http://www.cancer.net/node/19207
[8] http://www.cancer.net/node/19148
[9] http://www.cancer.net/node/18996
[10] http://www.cancer.net/node/19367
[11] http://www.cancer.net/node/19562
[12] http://www.cancer.net/node/19604
[13] http://www.cancer.net/node/19092
[14] http://www.cancer.net/cancer-types/amyloidosis
[15] http://www.cancer.net/node/24588
[16] http://www.publichealth.va.gov/exposures/agentorange/registry.asp
[17] http://www2.va.gov/directory/guide/home.asp?isFlash=1
[18] http://www.publichealth.va.gov/exposures/gulfwar/
[19] http://www.iom.edu/Reports/2010/Gulf-War-and-Health-Volume-8-Health-Effects-of-Serving-in-the-Gulf-War.aspx
[20] http://www.cancer.net/node/24650
[21] http://www.publichealth.va.gov/newgenerationstudy/index.asp
[22] http://www.cancer.net/node/24868
[23] http://www.cancer.net/node/25007
[24] http://www.cancer.net/cancer-types
[25] http://www.publichealth.va.gov/exposures/agentorange
[26] http://www.warrelatedillness.va.gov/
[27] https://www.ebenefits.va.gov/ebenefits-portal/ebenefits.portal?_nfpb=true&_portlet.async=false&_pageLabel=ebenefits_myeb_vonapp1
[28] http://vva.org/Committees/AgentOrange/AO_Brochure.pdf