

Department of
Veterans Affairs

Memorandum

JUL 3 1 2018

Date:

From: Executive in Charge, Office of the Under Secretary for Health (10)

Subj: Liver Flukes and Vietnam Veterans (VIEWS 00079920)

To: VHA Facility Directors and VHA Network Directors

Thru: Acting Deputy Under Secretary for Health for Policy and Services (10P) 

1. Vietnam Veterans have concerns that they were exposed to infection from parasites carried by freshwater fish while deployed in Southeast Asia. Eating undercooked fish may have led to infection with these parasites. Known as liver flukes, and technically named *Clonorchis sinensis* and *Opisthorcis viverrini*, these parasites can live for 20-30 years in the ducts that carry bile from the liver. Usually this infection causes few or no symptoms and the parasites die off naturally without treatment.
2. Liver fluke infection can lead to inflammation of the bile ducts. Long-term inflammation is a risk factor for bile duct cancer, also known as *cholangiocarcinoma*. Other risk factors for bile duct cancer are having diabetes, hepatitis C, smoking, and using alcohol. Fortunately, bile duct cancer is very rare and getting bile duct cancer from liver flukes is also very rare.
3. Liver fluke infection can be diagnosed with an examination of stool for parasite eggs if the liver flukes are alive in bile ducts. After liver flukes die off, then the stool examination cannot detect them as there are no living flukes producing eggs. For Vietnam Veterans who were infected, the liver flukes would have died off years ago.
4. For some other parasitic infections, there are tests that detect antibodies or infection-fighting proteins that humans make in response to infection. Antibodies are specific for infections and finding specific antibodies in blood or other body fluids indicates the person once had the infection, even years ago. It would be ideal if we had such a test available for these liver flukes – then we could diagnose those with a previous infection. However, we do not have an antibody test that would tell us who had liver fluke infections, so we cannot determine now how many Vietnam Veterans may have been infected. A health care provider in or outside of the Department of Veterans Affairs (VA) cannot request such a test.
5. Recently, a VA researcher studied liver fluke infection in Vietnam Veterans and found that 12 of the 50 Veterans tested were positive for a test for antibodies. Unfortunately, the test used was not specific to the exact liver flukes that Vietnam Veterans may have encountered - it was a test for many types of fluke-type infections.

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In addition, the research did not include individuals who were not ever at risk of liver fluke infection (known negative controls) or people who were known to have had liver fluke infections (known positive controls) in the study. These controls would have helped ensure the test was detecting infection for any of the flukes it was designed to find. This study does not help us understand how many Vietnam Veterans had liver fluke infections and the test used cannot diagnose liver fluke infections reliably.

6. **What should you do if you are a Veteran or health care provider who is concerned about liver flukes and bile duct cancer?** First, you should be reassured the risk is **very** low. Veterans should speak with their health care providers about their concerns and tell them about health issues and symptoms. Also, it is wise to address other risks for bile duct cancer (getting tested for hepatitis C and treated if positive, stopping the use of tobacco and alcohol).

7. VA will partner with other agencies where there are experts in parasite test development to get the right tests developed and approved for use in military Veterans. Then we will be able find, monitor, and treat individual Veterans who have had infections and also be able to understand the patterns of parasitic infections in groups of Veterans.



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