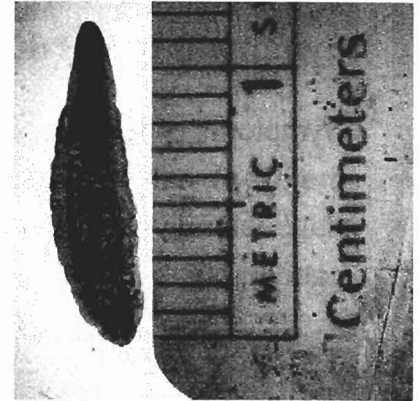




Public Health

Bile Duct Cancer (Cholangiocarcinoma) and Liver Fluke Infection



Liver Fluke Photo credit: CDC

Bile duct cancer (cholangiocarcinoma) is a cancer of the biliary duct system, which includes the gallbladder, bile ducts, and certain cells inside the liver. It is a rare cancer but becomes more common as people grow older.

One risk factor for bile duct cancer is past infection with tiny parasitic worms called liver flukes, which are found in the fresh waters of Southeast Asia. People can become infected by eating raw or under-cooked fish that have these parasites. Once eaten, the liver flukes grow to adulthood inside the human biliary duct system. The irritation and scarring caused by liver fluke infection can lead to bile duct cancer.

Two parasites are commonly involved. One is *Opisthorchis viverrini*, which is found in Southeast Asian countries, including Thailand, Lao People's Democratic Republic, Vietnam, and Cambodia. The other is *Clonorchis sinensis*, which is common in rural areas of Korea and China. The Centers for Disease Control and Prevention (CDC) has additional information on liver flukes.

Veterans who ate raw or undercooked freshwater fish during their service in Southeast Asia, such as Vietnam War Veterans, might have been infected. However, currently VA is not aware of any studies that show that bile duct cancer occurs more often in U.S. Vietnam War Veterans than in other groups of people.

Other risk factors for bile duct cancer are:

- Primary sclerosing cholangitis
- Chronic ulcerative colitis
- Cysts in the bile ducts

- Cirrhosis of the liver
- Hepatitis B or C virus
- Diabetes
- Obesity
- Genetic factors

Symptoms of bile duct cancer

Symptoms of bile duct cancer include jaundice (yellowing of the skin and the whites of the eyes), pain in the abdomen, dark urine, light or 'clay' colored stool, fever, itchy skin, nausea and vomiting, and unexplained weight loss. If you are concerned about bile duct cancer, please talk to your health care provider.

Tests for bile duct cancer

Your health care provider uses medical history, physical examination, and may employ a variety of blood tests and medical imaging (Xrays, CT, MRI scans, and/or ultrasound) and consultation with specialists to diagnose bile duct cancer.

Tests for liver fluke infection

Your health care provider can arrange for examination of your stool to check for ongoing liver fluke infection. If the infection occurred years ago, the test may not show the presence of liver flukes. Currently, there is no test of previous (resolved) liver fluke infection available for clinical use in the United States.

Health concerns?

If you have abdominal complaints and ate raw or undercooked fish in Southeast Asia, you should tell your health care provider.

Contact your health care provider at your local VA Medical Center to get more information about military exposures and health, or your VA Environmental Health Coordinator to connect you to a health care provider.