

Idaho Falls Post Register, Friday, Aug. 7, 2009 – by Sven Berg

EIRMC studying West Nile treatment

A team of doctors is trying to determine the safety and effectiveness of a drug that is designed to combat the mosquito-borne illness.

Most people who are infected with the West Nile virus never know they have it. Only about one in five suffer what's known as West Nile fever -- an array of symptoms typically associated with a common flu. Most of those patients recover fully.

But occasionally, a West Nile infection takes a very severe turn, invading the brain and causing muscle weakness, seizures and even partial or total paralysis. In those cases, recovery can take more than a year. Sometimes, patients die from infection.

In an effort to combat severe West Nile infections, a team of doctors in eastern Idaho is participating in a study of a drug designed to neutralize the disease's most harmful symptoms. The hospital is looking for local residents suffering from West Nile's most severe form who are willing to try the drug, which hasn't yet been released commercially.

The drug, known as MGAWN1, is a single antibody produced in the ovary cells of hamsters. Its job is to single out the West Nile virus and destroy it. The idea behind the study is to determine, first of all, whether the drug is safe, said Richard Nathan, an infectious disease specialist at Eastern Idaho Regional Medical Center. Because MGAWN1 is so new, no one knows how effective it is, though there's reason to be optimistic, Nathan said.

"It might work and it might not work," he said. "It's been shown to reduce disease significantly in mice and hamsters."

In a best-case scenario, MGAWN1 would completely cure West Nile. But even if the drug only partially relieves symptoms of the disease, that would be a success, Nathan said.

In the study's first phase conducted on humans, healthy subjects were given either a dose of the drug or a saline placebo. The most common side effects subjects reported included headaches, chest discomfort, dizziness and irregular heartbeat. Nathan said subjects who were administered the placebo reported similar side effects to those reported by takers of the drug.

Participants in the second phase of the study, which kicked off about a month ago, will be monitored for four months in an effort to determine the risks and effectiveness of the drug.