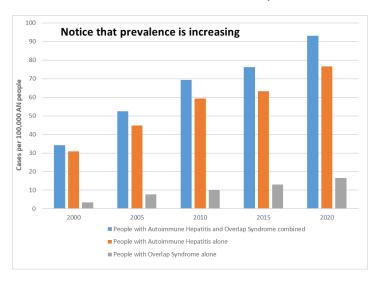
## Liver Disease and Hepatitis Program Spring 2024 Newsletter

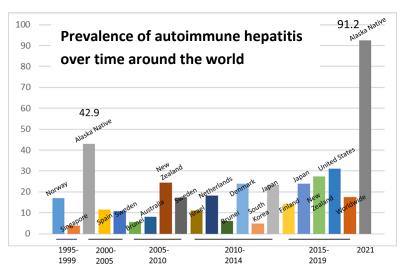
Thank you to everyone who has joined our natural history and treatment study of autoimmune liver disease. Last year we published an article in the medical journal <u>JGH</u> <u>Open</u> reporting on the *prevalence* and clinical characteristics of autoimmune hepatitis in

the Alaska Native population (*prevalence* = the number of people that have a disease in a specific population). Here is a summary of the article.

Autoimmune hepatitis (AIH) is a progressive chronic liver disease where the body's own immune system turns against the liver and causes inflammation. Another autoimmune condition called primary biliary cholangitis (PBC) causes chronic inflammation of the bile ducts in the liver. Overlap Syndrome (OS) occurs when a person has AIH and PBC at the same time.



There were 189 Alaska Native people diagnosed with AIH or OS between 1984 and 2021, 157 with AIH and 32 with OS. At diagnosis, the average age was 50 years old. At the end of 2021, 137 of these people were still living, 114 with AIH and 23 with OS.

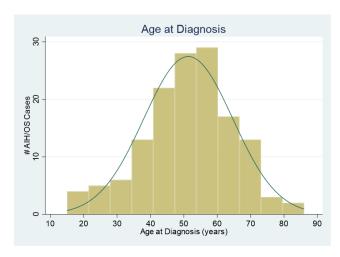


We calculated the prevalence of AIH/OS at the end of 2021 to be 91.2 per 100,000 Alaska Native people. The prevalence for AIH alone was 75.9 per 100,000. The prevalence for OS was 15.3 per 100,000. We also tracked AIH/OS prevalence over time and found a steady increase since 2000.

**Key Point**: Although we do not know why, the prevalence of AIH/OS

among Alaska Native people is the highest reported prevalence for autoimmune hepatitis in the world. This was true 20 years ago and is still true today.

People with AIH and OS usually have elevated liver enzymes (blood tests) showing inflammation or damage to liver cells. Treatment with medication for AIH/OS improves liver function, reduces symptoms, and prolongs survival. People with AIH/OS who are treated may achieve remission, which means their symptoms subside and their liver is functioning normally. Generally, people need to stay on meds to achieve remission. In this study, we defined remission as normal ALT liver enzymes. Normal ALT levels are less than 35 for men and less than 25 for women. More than half of study participants (62.7%) achieved remission.



Half the people who achieved remission did so in 1.9 years or less, and three quarters achieved remission within 5 years. Patients who have both fatty liver and AIH/OS were less likely to go into remission. However, patients with both AIH/OS and fatty liver who did achieve remission achieved normal ALT levels faster than other patients (0.5 years vs. 2.7 years). Neither sex nor age at diagnosis affected a patient's chances of entering remission.

Most AIH/OS patients (85.9%) were treated with a combination of two AIH drugs: either prednisone and azathioprine or methylprednisolone and azathioprine. About half could not tolerate at least one prescribed drug. Alternate medications were prescribed when needed.

Thirty percent of participants had either no or mild liver scarring when first diagnosed, while close to 45% had severe scarring or cirrhosis at diagnosis. Scarring may worsen or improve over time. In our study, more than half of participants with severe scarring or cirrhosis improved over time. A small percentage with no to moderate scarring got worse.

Close to a third of study participants also had another autoimmune condition. Thyroiditis (an autoimmune disease causing inflammation of the thyroid gland) and rheumatoid arthritis were most common. Some people also had Sjogren's syndrome (dry eyes and dry mouth) or lupus. The most common symptoms at diagnosis were fatigue, jaundice, and itching.

We are continuing to follow patients enrolled in this study. We still want to understand why so many Alaska Native people get AIH/OS and what treatments work best. If you would like to read the published article, go to: <a href="https://onlinelibrary.wiley.com/doi/10.1002/jgh3.12946">https://onlinelibrary.wiley.com/doi/10.1002/jgh3.12946</a>

Again, thank you to all study participants.

If you are not a participant, and would like to enroll in the study, please contact Margaret Wolfe at 907-729-1538

