## Circumpolar Infectious Diseases: Free Papers

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Impact of Programs to Manage Alaska Native Patients with Chronic Hepatitis B and C in Urban and Remote Rural Areas using a Data Base Registry.

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**INTRODUCTION:** Over 600 million persons globally are estimated be infected with hepatitis B virus (HBV) or hepatitis C virus (HCV). Alaska Native Persons have high rates of both HCV and HBV; most with HBV infection live in isolated rural communities not connected to the road system making management of these infections challenging.

**METHODS:** We have developed Alaska Statewide Computerized Registries to aid management of hepatitis B since 1982 and hepatitis

C since 2000. All persons with HBV (1560) and HCV (1323) infections receive letters every six months reminding them to go to their village clinic or hospital for blood draw for liver function (LFT) and alpha-fetoprotein testing (AFP). Sera are sent to the Alaska Native Medical Center for testing and review. For HBV infection, persons with AFP > 10 mg/ml are referred to the nearest facility for liver ultrasound (US); persons with elevated LFT have HBV DNA testing performed and if both LFT and HBV DNA are elevated, they are evaluated for liver biopsy and potential treatment.

**RESULTS:** Since the year 1982–2013, 1367 persons with HBV infection have had 40,385 laboratory visits that yielded 53 cases of hepatocellular carcinoma. Sixty-eight percent of tumors were found at a resectable stage and 5-year survival was significantly better than historical controls (40% vs 0; P=.0.012). In addition, 102 patients with HBV infection were started on antiviral therapy. For patients with HCV infection, 176 received antiviral therapy and 92 experienced a sustained virologic response (SVR). The advent of new drugs for hepatitis C will make it easier to treat and cure persons living in rural areas.

CONCLUSIONS: This program demonstrates that care and treatment of hepatitis B and C as recommended by evidenced-based Practice Guidelines can be carried out for infected persons living in both urban and isolated communities via electronic based registries.