LONGITUDINAL COHORTS OF ALASKA NATIVE AND AMERICAN INDIAN PERSONS IN ALASKA WITH CHRONIC HEPATITIS B, HEPATITIS C

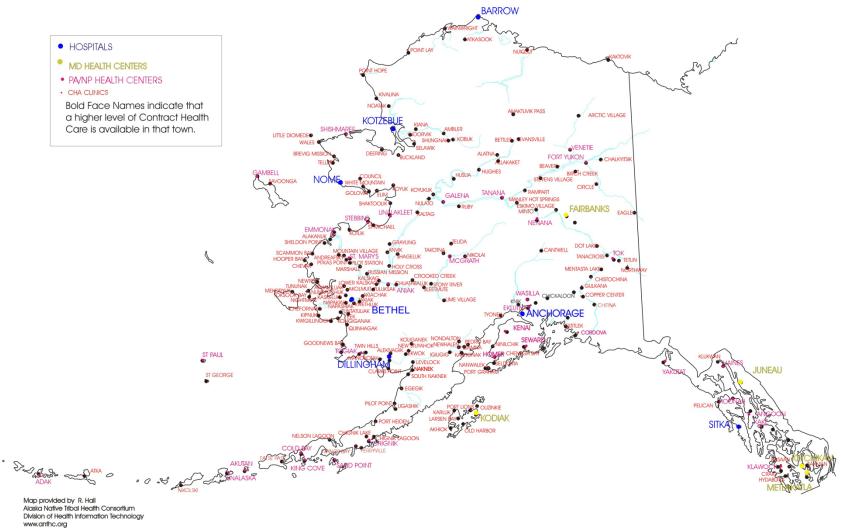
> Lisa Townshend-Bulson, ANP CDR, USPHS Liver Disease & Hepatitis Program, Division of Community Health Services Alaska Native Tribal Health Consortium Anchorage, AK

ANTHC Liver Disease & Hepatitis Program



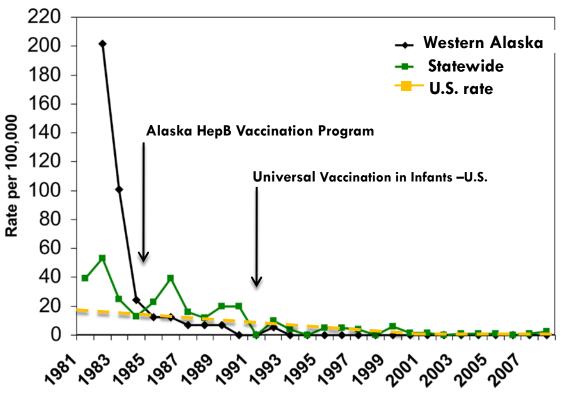
THE ALASKA TRIBAL HEALTH SYSTEM

Location Names and Service Level

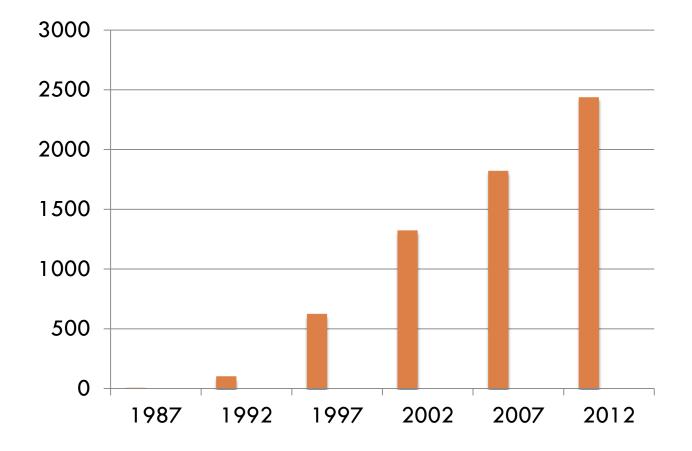


Hepatitis B in Alaska

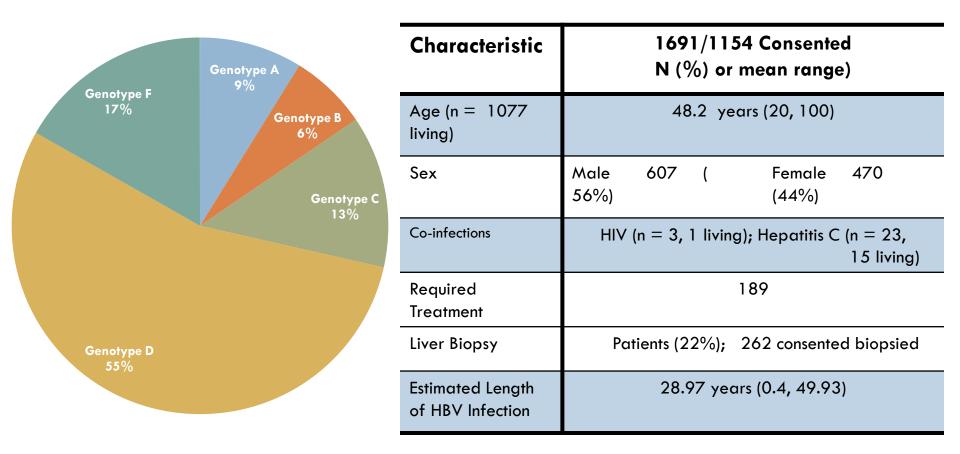
Incidence of Symptomatic Hepatitis B in Alaska Native Persons 1981- 2008



Increasing Rates of Hepatitis C



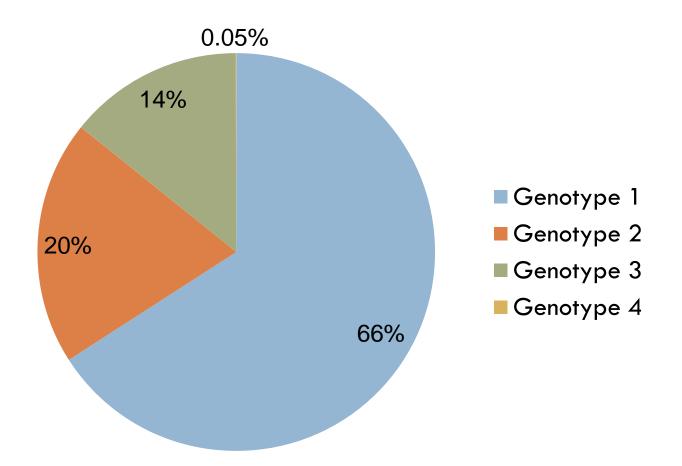
Alaska HBV Cohort Characteristics



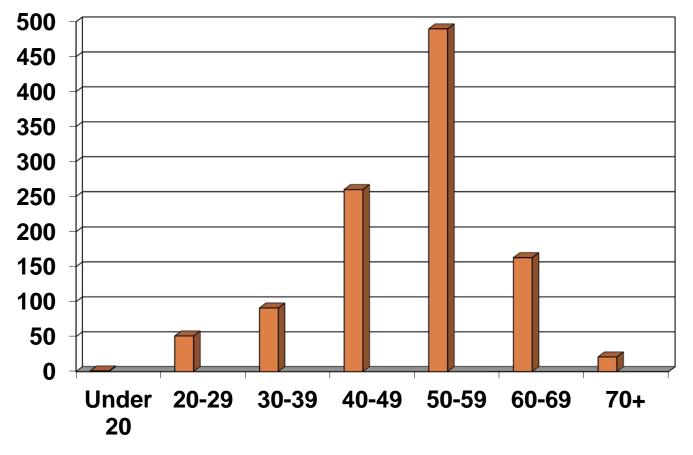
Alaska HCV Cohort Characteristics

| Characteristic | 2525/1170 Consented | d N (%) or mean (range) | | | | |
|--------------------------------------|--|-------------------------|--|--|--|--|
| Age (n =1481 living) | 50.9 years (16, 85) | | | | | |
| Sex | Male 725 (49%) | Female 756 (51%) | | | | |
| HCV Genotype 1112 genotyped | 1 (65.6%); 2 (19.8%); 3 (14.1%); 4 (0.05%) | | | | | |
| Co-infections | HIV ($n = 41$; 19 living); Hepatitis B ($n = 23$, 15 living) | | | | | |
| Risk Behaviors | History of IVDU (57%) | Blood Transfusion (20%) | | | | |
| % BMI \geq 30 | 429/1213 (35%) | | | | | |
| Treated for HCV | 186 (14% of HCV RNA+) | | | | | |
| Liver Biopsy | 473 patients (35%); 762 biopsies (incl. multiple) | | | | | |
| Estimated Length of HCV Infection | 24.4 Ye | ears (1, 61) | | | | |

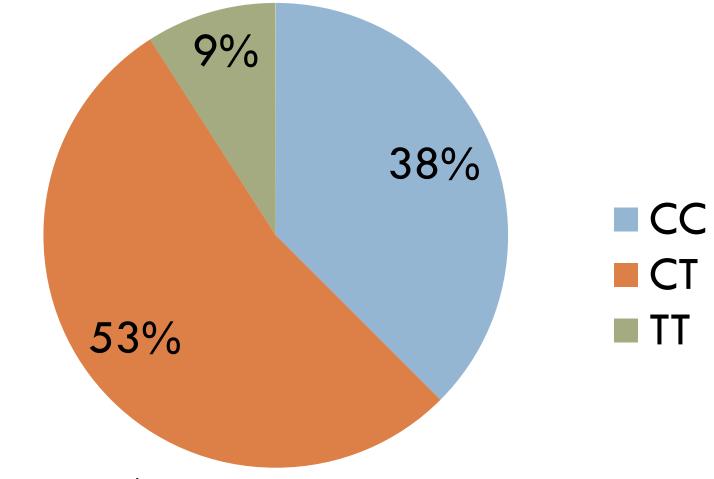
Genotypes in HCV Cohort



Age Breakdown of HCV Cohort



IL28B Genotypes in HCV Cohort



95 participants tested

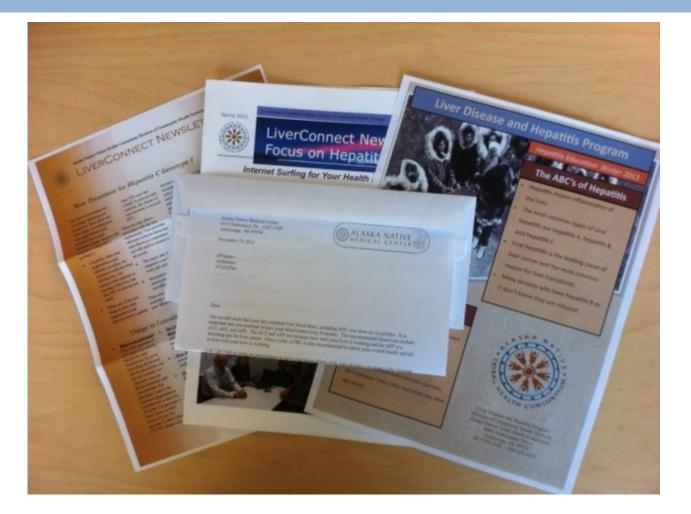
Peginterferon/Ribavirin Treatment Results through 2011

| | | | | # Completed | | | | % SVR | SVR in those able |
|--|-----|-------|---------|----------------|-------------|-----------|-----|---------|-------------------|
| Genotype | n | D/C'd | % D/C'd | Тх | Tx Failures | Relapsers | SVR | (I-T-T) | to finish tx |
| 1 | 43 | 20 | 47% | 23 | 10 | 3 | 10 | 23% | 43% |
| 2 | 37 | 7 | 19% | 30 | 3 | 3 | 26 | 70% | 81% * |
| 3 | 20 | 7 | 35% | 13 | 1 | 2 | 10 | 50% | 77% |
| Total | 100 | 34 | 34% | 66 | 14 | 8 | 46 | 46% | 68% * |
| | | | | | | | | | |
| *Includes 2 genotype 2s who did not finish tx but achieved SVR | | | | | | | | | |

Managing Patients With Chronic Hepatitis B and C from Afar

- Reminder letters about labs, US sent every 6 months
- Download of all hepatitis B and C labs sent to ANMC for review by program hepatologists, nurse practitioner
- Patients seen in hub sites at field clinics throughout the year
- Collection of sera on consented participants every
 6-12 months for ongoing research
- LiverConnect for Provider Education, Case Studies

Letters, Newsletters To Encourage Follow-Up, Keep Cohort Up-to-Date



Hepatitis B & C Cohort Studies

- Natural History of Hepatitis B and C Infections
- Clearance of Hepatitis B Surface Antigen and Risk of HCC
- Hepatitis B Genotypes and Risk of HCC
- Adverse Outcomes of Persons Living With or Recovered from Hepatitis C
- Clinical Significance of AFP in Alaska Natives with Hepatitis C
- Hepatitis C Treatment Eligibility

Ongoing Projects

Website Update- IHS Grant

http://www.anthctoday.org/community/hep/index.html

- LiverConnect Expansion
- Hepatitis C Cohort
 - Update on Clinical Outcomes through 2012
 - Proteomic markers of liver fibrosis
 - Treatment outcomes in AN/AI persons
- Hepatitis B Clinical Outcomes Studies
 - ALT/HBV DNA correlation with active vs. inactive hepatitis B
 - Chronic hepatitis B and diabetes
 - Immune markers of active vs. inactive chronic hepatitis B

Thank You!



 $^{\ensuremath{\mathbb{C}}}\ensuremath{\mathsf{Ray}}$ Bulson