



# HEPATITIS B AMONG AMAZON INDIGENOUS POPULATION

## HEPATITIS B AMONG THE MATIS AN INDIGENOUS ETHNIC GROUP FROM THE BRAZILIAN AMAZON RAIN FOREST

Otávio Primo de Alvarenga<sup>1</sup>, Maria Luana Cristiny Rodrigues Silva<sup>1</sup>, Márcia da Costa Castilho<sup>1</sup>,  
Baritsica Matis<sup>2</sup> and Wornei Silva Miranda Braga<sup>1</sup>

<sup>1</sup>Tropical Medicine Foundation Doutor Heitor Vieira Dourado, Manaus, Amazonas, Brazil. E-mail: [wornei.braga@hotmail.com](mailto:wornei.braga@hotmail.com)  
<sup>2</sup>Dsei Javari, Atalaia do Norte, Amazonas, Brazil

### BACKGROUND

Hepatitis B is highly endemic among the indigenous population of the Amazon region of Brazil, Venezuela, Colombia, Peru and Ecuador. The importance of HBV in the Amazon is related to the increased occurrence of fulminant hepatitis, severe forms of end-stage chronic liver disease and hepatocellular carcinoma. The Matis individuals live along the banks of Rio Branco, in the Javari Valley of the western Amazon. This is the second largest indigenous land in Brazil, with the greatest concentration of isolated indigenous populations in South America. They represent 8% of the valley population. The Matis came in contact with the Brazilian population in the late 70s and still maintain their traditions such as living in strawhouse, eating animals and fruits from the forest. They make handicrafts and use facial, body ornaments and tattoo. We aimed to evaluate the impact of HBV infection in this population in two different periods.

### MATERIAL AND METHODS

Population based cross-sectional study. The study population was screened In 2006 and 2014



Village



Meeting with the leaders of the Matis



Rapid test for HBV detection



The men population Matis

### RESULTS

Figure 1. HBsAg prevalence in the Matis per year of survey (2006 and 2014)

Year	Samples	Reactives	Prevalence
2006	352 indigenous	24 positives	6.8%
2014	263 indigenous	6 positives	2.3%

Table 1. Distribution of the study population by age, gender, year of test, HBsAg status and treatment

INDIGENUOS	AGE (YEARS)	GENDER	HBsAg 2006	TREATMENT	HBsAg 2014
2006					
1	1	M	1	UnT	A
2	5	F	1	UnT	2
3	5	F	1	UnT	A
4	6	F	1	UnT	2
5	6	F	1	UnT	2
6	7	F	1	UnT	2
7	9	M	1	UnT	A
8	11	F	1	UnT	2
9	16	M	1	UnT	1
10	22	F	1	UnT	2
11	26	F	1	UnT	A
12	27	M	1	UnT	A
13	27	F	1	UnT	A
14	29	M	1	UnT	2
15	34	F	1	UnT	2
16	42	F	1	UnT	2
17	42	F	1	UnT	A
18	53	M	1	UnT	A
19	21	M	1	T	A
20	23	M	1	T	A
21	23	M	1	T	2
22	23	F	1	T	1
23	25	M	1	T	A
24	55	M	1	T	2
2014					
25	27	F	2	UnT	1
26	43	F	A	UnT	1
27	52	M	A	UnT	1
28	68	F	A	UnT	1

M – male; F – female; 1 - positive; 2 – Negative; UnT – not accepted, T - accepted treatment ;  
A - absent

### CONCLUSION

Although the prevalence of HVB is reduced by three times from 2006 to 2014, it is still very high suggesting that vertical or horizontal transmission continues to be risk factors. Preventive policies focusing on health education, vaccination of newborns and surveillance of risk group is imperative to eliminate HBV circulation.