Aim: To compare the epidemiological profile of HIV and HCV infections and to develop prevention means by documenting risk factors. Patients and Methods: Two prospective studies were conducted in Bamako (Malian capital) in 2009 among 1000 pregnant women in six health centers and in 2010 among 231 women > 50 y.o seen in two hospitals for general practice. Antibody tests and PCR (only for HCV) were used to quantify the infections frequencies. Infections transmission risk factors were identified from the univariate analysis (Chi2 and logistic regression) of data collected in patients recruited after informed consent. Results: The prevalences anti-HCV (0.2%) and HCV-RNA (0.1%) were low in young women. However, these prevalences were significantly greater (6.49% and 5.63%) among older women. Risk factors analysis highlighted an obvious association between HCV infection and hospitalization in older women (P < 0.01). Overall, HIV infection was not associated with following variables hospitalization, transfusion, tattooing or scarification/piercing, dental care and endoscopy. However, a significant decrease of HIV seroprevalence was detected in young women who used condoms more for contraception than any other reason (P = 0.002). By contrast, HIV seroprevalence was significantly increased in young women who used condoms more to prevent sexual infections than any other reason (P = 0.008). These young women are unfortunately better informed about prevention and transmission modes after contagion. No co-infection HCV/HIV found. Conclusion: An epidemiological dissimilarity of both infections seems obvious in Mali; a blood transmission of HCV seems to coexist with a predominantly HIV sexual transmission.