Hepatitis A and E in Israel

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Hepatitis A and E viruses (HAV and HEV, respectively) are two of the five viral agents causing hepatitis in humans. Both are hepatotropic, positive-strand RNA viruses transmitted by the fecal-oral route, that usually cause acute, self-limited inflammatory disease of the liver and are related to regional outbreaks mainly in developed countries.

While six genotypes are recognized in HAV, all considered to infect human directly, eight genotypes are currently known in HEV, some of which infect humans directly (HEV-1) and others are zoonotic (e.g. HEV-3) and also related to chronic disease. Both HEV-1 and HEV-3 are emerging in Europe and in other developed regions. HEV genotype 7 (HEV-G7) was recently identified in Dromedary camels and in a chronic hepatitis patient. Universal vaccination program that was started in Israel in 1999 led to the dramatic decrease in HAV incidence in the country. A vaccine for HEV was approved in China only and is not in use in other countries.

In the last few years we have followed HAV and HEV in Israel. Our approach which involves clinical and environmental surveillance to both enteric viruses will be presented. Our main findings regarding HAV outbreaks will be discussed. Seroprevalence data on HEV in the general and in specific human population groups and circulation of the virus in pigs and camels will also be discussed.