

# Hepatitis C in Japan

This article which originally appeared in the [HCV Advocate](#), discusses hepatitis C in Japan.

April 20, 2015 By [Alan Franciscus](#)

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✘ Of all the industrialized countries of the world, Japan has the highest rate of hepatitis C (HCV). It also has one of the oldest and most varied histories of hepatitis C in the world among the industrialized modern nations. Approximately 1.5 to 2 million Japanese are infected with hepatitis C. Approximately 70% of the Japanese population infected with hepatitis C has HCV genotype 1b, and 30% are infected with genotype 2a/b.

## The History of HCV in Japan

Modern medicine and public health came early to Japan in the late 1800's. In the early 1900's, the discovery of the hypodermic needle and a drug to treat schistosomiasis would transmit hepatitis C throughout Japan.

### Schistosomiasis

Schistosomiasis is a disease caused by a worm that lives in water snails. When people waded in water to work on agriculture the worm enters the human body and lays eggs. The eggs hatch and travel to the liver. Schistosomiasis causes damage to the liver, the gastrointestinal system, kidneys, and genitals. It can, over time, cause death. In some parts of the world, it is considered as deadly as malaria. The first treatment developed to treat schistosomiasis consisted of multiple intravenous injections of antimony sodium tartrate. By the 1970's there were approximately 10 million intravenous injections given to people in Japan. The same type of eradication program was conducted in Egypt, and a similar epidemic of HCV is seen in Egypt. As in Egypt, treatment of schistosomiasis was the beginning of the HCV epidemic in Japan. The injections were given with used or unsterile hypodermic needles.

### Methamphetamine

Nagai Nagyoshi discovered methamphetamine in 1893. Dr. Akira was able to synthesize it into crystalline meth in 1919. Widespread use of methamphetamine use did not begin until World War I when it was used as an injectable treatment for asthma. The large scale use came later during World War II when it was prescribed as an oral and injectable stimulant for tired soldiers, pilots, and ammunition workers during the war. After the war methamphetamine was prescribed for general post-war trauma. In 1949, Japan banned the manufacture of methamphetamine, but illegal methamphetamine use continued as did the hepatitis C epidemic.

## Modern Japan and Hepatitis C

Hepatitis C and its complications are the leading cause of liver cancer in Japan. Japan has the highest rates of liver cancer in industrialized countries. HCV is the 4th leading cause of death among Japanese men and the 5th leading cause of mortality among Japanese women.

Japan has a multi-layered healthcare system. Many people can get healthcare insurance through their employer or the national healthcare system. The government system covers about 70%, and the patient covers the remaining 30%.

## Interferon-free Therapies

The first interferon and ribavirin free therapy that was approved to treat hepatitis C is the combination of Daklinza (daclatasvir) and Sunvepra (asunaprevir). In a clinical trial of Japanese patients with genotype 1b patients treated with the combination of Daklinza plus Sunvepra the cure rate was 84.7%.

On March 26, 2015, sofosbuvir (Sovaldi) plus ribavirin was approved to treat HCV genotype 2 in Japan. Sofosbuvir plus ribavirin for a treatment duration of 12 weeks to treat 153 HCV genotype 2a patients achieved a cure rate of 97%. The study was conducted in Japan. Gilead is conducting a phase 3 study of sofosbuvir plus ledipasvir to treat genotype 1 in Japan.

## Source:

Yellow Blood: Hepatitis C and the Modernist Settlement in Japan - Vivian Blaxell; [The Asia-Pacific Journal](#) Vol. 12, Issue 18, No. 1, May 5, 2014.

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