**HEPATITIS C VIRUS (HCV) PREVALENCE AMONG PEOPLE WHO INJECT DRUGS (PWIDS) IN SWITZERLAND**

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**Introduction:** In Switzerland, HCV among PWIDs has been decreasing due to active harm reduction efforts and an aging population. There are 8,000 – 12,000 active PWIDs in Switzerland, of whom, 42% (27%-58%) are HCV infected. Approximately 17,000 – 25,700 individuals were enrolled in opioid substitution therapy (OST) and 1,598 in heroin substitution therapy (HeGeBe) with 300,000 syringes distributed monthly in 2012. Nearly 27.4% of OST and 54% of HeGeBe participants injected while on treatment. Recent therapeutic advances promise greater convenience (oral therapies) with higher efficacy (>90% sustained viral response) and shorter duration of treatment.

**Methods:** HCV transmission was modeled using cohorts to track HCV incidence and prevalence among PWIDs in the general population, as well as PWIDs enrolled in OST and/or needle exchange programs (NEP). Model assumptions were derived from published literature and expert consensus. The relative impact of increasing treatment among PWIDs was considered.

**Results:** If the current transmission paradigm continues, there will be 3,150 HCV infected PWIDs in 2030. Annually treating 45 HCV-infected PWIDs (1% of HCV-infected PWID population in 2014) resulted in an 11% reduction in HCV-infected PWIDs by 2030, while annual treatment of 200 PWIDs (4.5% of 2014 population) resulted in a reduction of >50% by 2030. Treating 322 PWIDs annually (7.5% of 2014 population) resulted in a >90% reduction in HCV-infected PWIDs by 2030. To achieve a 1-person reduction in overall prevalence by 2030, it was necessary to treat 1.6 PWIDs in OST/NEP as compared with 3.4 PWIDs in the general population.

**Conclusion:** Treating a relatively small number of PWIDs results in substantial decreases in the HCV infected PWID population by 2030. Additionally, the impact of treatment is higher among PWIDs engaged in harm reduction programs. These data support implementation of a screening and treatment strategy among PWIDs, and particularly among PWIDs engaged in OST and NEP.

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