

COVID-19 VACCINATION AT A SWEDISH NEEDLE EXCHANGE PROGRAM

A MEANS OF FIGHTING THE PANDEMIC

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Background: Sweden was affected by the SARS-CoV-2 pandemic with regional variations. In Skåne region the highest rates of transmission were observed in Dec 2020 – Jan 2021 and via an even higher wave in Dec 2021 – Jan 2022. However, Vaccination against Covid-19 was orderly implemented in the end of December 2020, starting with the elderly. In May 2021 persons with expected difficulties to follow national covid-19 guidelines were offered vaccination. People who actively inject drugs were included in this definition.

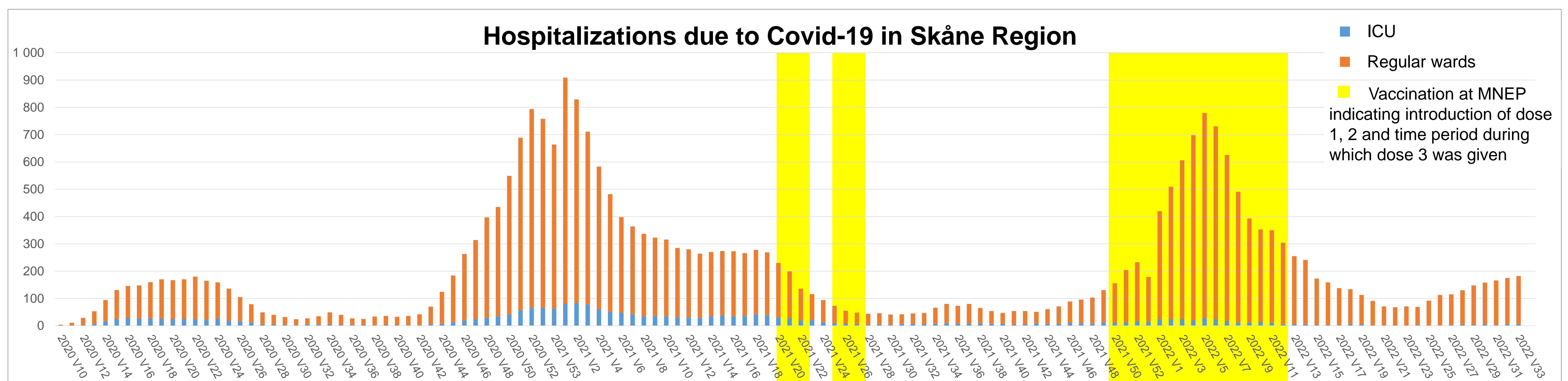
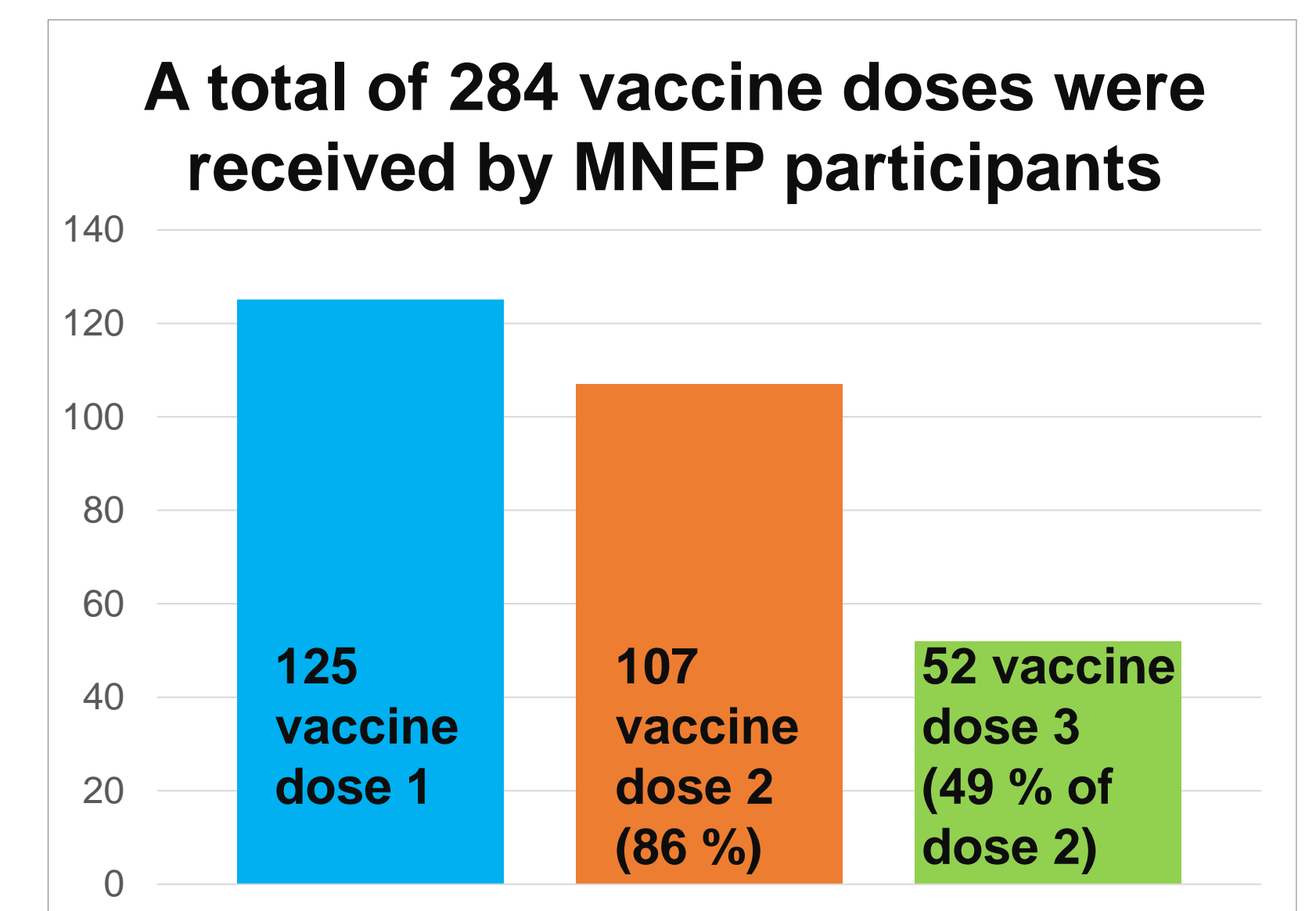
Description of model of care/intervention: The Malmö Needle Exchange Program (MNEP) offers vaccination against hepatitis B since 1994 and hepatitis A since 1999. No outbreaks of HAV nor HBV has occurred for the past 20 years among MNEP participants. Coverage and efficacy of HBV vaccination has been previously presented [1]. In 2021 the MNEP had 557 participants, 70 % male, mean age 38,5 years. From mid-May 2021 all participants were offered vaccination with Spikevax (Covid-19 Vaccine Moderna, mRNA-1273), given according to the schedule as per manufacturer specification, in 2 doses (100 µg, 0.5 ml each) intramuscularly into the deltoid muscle, 4 weeks apart.

Effectiveness: During the first month 112 first doses were given. A further 13 first doses were given later, corresponding to 125 first doses in total. Thus 20 % of the annual visitors were vaccinated in one month. Subsequently 107 second doses were given. When a third dose was recommended in national guidelines 52 third doses were given from Dec 2021 to March 2022. In total, 284 vaccine doses were given. Approximately 85 % of those having received a first dose came back for the second dose, 49 % of them received a third dose. No adverse reactions were observed. Reasons for not being vaccinated on site were medical/allergic reasons, participants' objections and having received vaccination elsewhere.

Conclusion and next steps: Persons with ongoing injection drug use may be hard to reach by Covid-19 vaccination programs. They may also be exposed to the virus without means to provide care for themselves or preventing forward transmission due to unstable housing. A needle exchange program can be used to provide vaccination and achieve adequate levels of adherence for follow-up doses. Also, the MNEP being part of the ID department with a solid knowledge of vaccination, enables for responses to overall questions and specific concerns from the participants. To achieve a higher coverage and reach the target group for subsequent doses, it is however important to avoid offering vaccination only over a limited time period.



Covid-19 vaccination at MNEP



Hospitalizations due to Covid-19 in Skåne Region. Courtesy of Skåne Region, adapted.

¹Alanko Blomé M, Björkman P, Flamholm L, Jacobsson H, Widell A. Vaccination against hepatitis B virus among people who inject drugs – A 20year experience from a Swedish needle exchange program. *Vaccine*. 2017 Jan 3;35(1):84-90.

The first NEPs in Sweden were initiated by the Departments of Infectious Diseases in Lund and Malmö in 1986 and 1987 and were the only NEPs allowed in Sweden until a change of legislation in 2006. People who inject drugs (PWID) with age ≥ 18 years and signs of venipuncture may enroll in the NEP and are registered with name and social security number. The NEPs provide sterile needles, syringes and paraphernalia, as well as risk reduction counselling, basic medical care and psychosocial support with the aim to prevent blood borne infections and to motivate to drug independency. A baseline interview with questions on demographic facts and substance use completed with testing for HIV, hepatitis B (HBV) and hepatitis C (HCV) is conducted at registration and vaccinations for hepatitis A and B are provided. Participants are offered barrier contraceptives, pregnancy screening and treatment for sexually transmitted infections. Referral to detoxification or methadone/buprenorphine maintenance clinics is also offered. Participants are regularly tested for HIV, HBV and HCV infection throughout their participation in the program. All services are free of charge. Swedish healthcare is regionally organised and tax-financed.

