



STATENS SERUM INSTITUTE 100 YEARS

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The Statens Serum Institute (SSI) was inaugurated on 9 September 1902 to ensure the production and supply of anti-diphtheria serum for Danish patients. Throughout its 100 years of existence, the Institute has continuously applied research-based knowledge towards the prevention and control of infectious diseases and congenital disorders.

Today, SSI performs epidemiological surveillance of infectious diseases and serves as a laboratory diagnostic reference and training centre. It also makes use of specially developed diagnostic facilities particularly in the field of microbiology and its achievements in the state-of-the-art development and production of vaccines as well as plasma-based medicines.

Combating epidemics

Although SSI was originally set up with the specific objective of producing anti-diphtheria serum, the Institute has from the start embraced other epidemic diseases. Through its diagnostic activities, SSI gained a better understanding of the prevalence and epidemiological characteristics of infectious diseases in Denmark.

A vision soon emerged whereby Denmark could have a major epidemiological laboratory with its basis in the national registration of infectious diseases combined with studies in infectious disease prevalence and causes of the epidemics. The idea quickly gained international acclaim, and in 1926 the Department of Epidemiology was established through a perennial grant from the Rockefeller Foundation. The first years were primarily devoted to combating the large milk-borne epidemics, particularly streptococcal sore throat and scarlet fever, but also typhoid and paratyphoid fever, and dysentery. At the same time, SSI was involved in fighting the tuberculosis epidemic. Its incidence was established, diagnostics improved and the association of milk-borne infection with bovine tuberculosis was clarified. The Second World War brought with it the task of controlling the numerous epidemics arising in association with German troops, returning prisoners of concentration camps and refugees from Eastern Europe. After the war, the Institute joined the

international campaign against tuberculosis. Tuberculin produced at SSI was used to test for tuberculosis in 57 million children and young people in Central Europe and 16 million were vaccinated with BCG that was mostly produced by SSI. Since 1980, the Dept. of Epidemiology has administered the notification system for infectious diseases for the National Board of Health. A vital part of this work is the publication of EPI-NEWS. The notification system is continually being revised.

Childhood vaccination programme

In the 1950s, a childhood vaccination programme was introduced in Denmark. SSI was given the task of producing and delivering the vaccines, which initially consisted of diphtheria-tetanus, BCG and smallpox vaccines. The poliomyelitis epidemic of 1952 shocked the whole country, and every effort was made to develop a vaccine. By April 1955, the Institute had produced enough vaccines for all children aged 7-12 years making Denmark the first country in Europe and the second country in the world - 13 days after the United States - to be able to provide this service.

Surveillance

The field of infectious diseases is constantly changing. New diseases are recognised and "old" ones gain new significance. The AIDS epidemic that started in the 1980s came at a time when many thought that infectious diseases were under control in our part of the world. An HIV safety laboratory at the SSI was established in record time, so that the health service could offer the necessary HIV-diagnostic investigations. An intensive effort has been made to shed light on the scale of the epidemic and to provide information on its prevention.

Apart from AIDS, the 1990s have also been characterised by problems with food-borne diseases, namely Salmonella and Campylobacter infections. Mad cow disease (bovine spongiform encephalopathy) has also been in focus. Measles outbreaks are still occurring, and the threat of an influenza pandemic still looms. The SSI has strengthened its defences in all these areas. Moreover, since September 2001, the Institute has established an emergency plan to coun-

ter the consequences of biological warfare and terrorism.

Future tasks

For a century, SSI has thus been a resource centre in its fields of activity and has had emergency facilities capable of dealing with a long series of urgent tasks.

The future will bring new challenges, the nature of which we obviously have only partial knowledge. New problems with infections will be recognised, antibiotic resistance will be a growing problem and a need for new vaccines will arise. SSI has taken on board new initiatives to deal with these challenges by mainly improving the surveillance of infectious diseases and the childhood vaccination programme as well as developing new and improved products.

The centenary

The centenary will be celebrated in various ways.

On the 9 September, the day of the centenary, representatives of the Institute's clients and business partners will attend a conference in which the Minister of the Interior and Health, Lars Løkke Rasmussen, and Chief Medical Officer Jens Christian Gøtrik will participate as speakers. In addition, the Associate Director of the US Centers for Disease Control and Prevention, Stephen Ostroff, will talk about "Emerging and Reemerging Diseases in the 21st Century". Several of the Institute's employees will also participate.

On 11-12 September, the Institute is hosting an international vaccine symposium titled "Vaccines for the 21st Century - Development and Strategies", followed by the Nordic Vaccine Meeting on 13 September. A new website will also be launched (www.ssi.dk).

Throughout its first 100 years, SSI has proven its professionalism and its capability to effectively deal with new and urgent assignments. In this respect, we rely heavily on the excellent collaboration with the Danish medical profession. I wish to take this opportunity to thank all our many colleagues both in the Danish health service and internationally for the fruitful cooperation.

(Nils Strandberg Pedersen,
Executive Director, CEO)

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