

FOREWORD

I am pleased to present the Ministry of Health's "Communicable Diseases Surveillance in Singapore 2013" Annual Report.

2013 was an eventful year on both the global and local fronts for communicable diseases. At the end of March 2013, cases of human infection with avian influenza A(H7N9) virus were notified in China. This was the first time that this virus was found to have infected humans resulting in severe illness. As of 31 December 2013, 149 laboratory-confirmed cases including 48 deaths were reported from 13 provinces/municipalities in eastern mainland China, Hong Kong SAR, China, and the Taipei Centers for Disease Control. Around the same time, the Middle East Respiratory Syndrome coronavirus (MERS-CoV), which was first reported to cause severe pneumonia in humans in September 2012, resurged with a total of 176 laboratory-confirmed cases including 74 deaths as of 31 December 2013. The ever-changing situation underscores the importance of constant vigilance and preparedness for new and emerging infectious diseases, which the Ministry of Health (MOH) will continue to do.

On the home front, vector-borne diseases, namely dengue fever (DF)/dengue haemorrhagic fever (DHF) and chikungunya fever, contributed significantly to the burden of communicable diseases in 2013. A record high of 22,170 laboratory-confirmed DF/DHF cases was notified in 2013, which is more than four times of the 4,632 cases notified in 2012. Eight deaths due to dengue were reported in 2013. The majority of the cases were infected locally (98.6%). The upsurge in the number of cases was associated with the serotype switch from DENV-2, the predominant serotype circulating in Singapore from 2007 to 2012, to DENV-1, the predominant circulating serotype in 2013, as well as the greater fitness of the new DENV-1 strain.

The total number of laboratory-confirmed chikungunya fever cases rose from 22 cases in 2012 to 1,059 in 2013. Forty-eight of these cases were imported while 1,011 cases were acquired locally. As a self-limiting disease, no deaths due to chikungunya were reported. The majority of cases were detected in Kranji/Sungei Kadut and Bukit Timah. This unprecedented outbreak of chikungunya fever demonstrated Singapore's vulnerability towards the importation of infections such as chikungunya fever, especially when the vectors required for transmission are present locally. The control of vector-borne diseases emphasizes the need for a coordinated multi-agency response especially by MOH and the National Environmental Agency (NEA). This is in addition to community involvement, for intensive vector control has been the mainstay of prevention and control strategies for vector-borne diseases in Singapore.

In 2013, the incidence of tuberculosis (TB) among Singapore Citizens and Permanent Residents declined to 36.9 per 100,000 population from 40.9 per 100,000 population in 2012. Measures to strengthen case detection and treatment have been rolled out progressively to enhance the Singapore TB Elimination Programme (STEP) following a review in 2012, which addressed key challenges for TB control: the delayed diagnosis of infectious TB cases and the non-compliance with the complete treatment regimen until a full cure. Infection with human immunodeficiency virus (HIV) is known to increase a person's susceptibility to TB. The number of newly reported HIV infections also decreased from 469 in 2012 to 454 in 2013. The National HIV/AIDS Control Programme adopts a multi-pronged approach, which comprises education of the general public and high-risk groups, protection of the national blood supply through screening of blood and blood products, management of cases and contact tracing, epidemiological surveillance, scaling up the prevention and control of sexually-transmitted infections (STIs), and legislation.

This report was published from the compilation of epidemiological information on communicable diseases collated through our close working relationship with the community of health professionals and our partner agencies. We thank all healthcare professionals and our partner agencies for their unwavering support and dedication in combating and minimising the threats of communicable diseases, for the common goal of safeguarding public health.

I hope that you will find this report useful. I look forward to your continued support and cooperation in the national surveillance of communicable diseases.



A/PROF BENJAMIN ONG
DIRECTOR OF MEDICAL SERVICES
MINISTRY OF HEALTH, SINGAPORE