



## FOREWORD

In this issue the increasing incidence of dengue virus infections in returning travellers to South Africa over the past five years is assessed. Most of these infections were acquired in South-East Asia and Central-West Africa, unlike five South African cases of Crimean-Congo haemorrhagic fever (CCHF) which were acquired locally this year (2013), almost certainly as a consequence of exposure to *Hyalomma* ticks. Thankfully, all five CCHF patients recovered even though the overall mortality rate due to CCHF in South Africa during the period 2000 to August 2013 was 35%.

Also in this issue is the Group for Enteric, Respiratory and Meningeal disease Surveillance in South Africa (GERMS-SA) report for 2012. This report contains summaries of national surveillance data by disease including data collected from the enhanced surveillance sites that cover all nine of South Africa's provinces. As usual the surveillance audits were conducted through the NHLS Central Data Warehouse (CDW). Importantly, the KwaZulu-Natal NHLS laboratories were included in these audits for the first time. Other notable changes in 2012 were the inclusion of candidaemia/bacteraemia surveillance as well as the initiation in September 2012 of *Staphylococcus aureus* enhanced surveillance and rifampicin-resistant tuberculosis surveillance. Of particular interest and importance in the 2012 report are the candidaemia data which showed very high in-hospital mortalities, a continued downward trend of invasive pneumococcal disease, stabilisation of *Haemophilus influenzae* type b disease in infants, an outbreak of non-typhoidal salmonellosis in the Eastern Cape and a change in gender profile for cryptococcosis. There is also concern over the ongoing increase in ciprofloxacin resistance in *Salmonella* Typhi.

All participating laboratories and contributors to these reports are thanked for their inputs, especially Vanessa Quan who supervised the compilation of the GERMS-SA report.

Basil Brooke, Editor

## CONTENTS

Dengue fever in South Africa: an imported disease	58
Update: Crimean-Congo haemorrhagic fever in South Africa	62
Group for Enteric, Respiratory, and Meningeal Disease Surveillance for South Africa (GERMS-SA) Report for 2012	65
• <i>Salmonella enterica</i> serotype Typhi and <i>S. enterica</i> serotypes Paratyphi A, Paratyphi B and Paratyphi C	67
• Non-typhoidal <i>Salmonella enterica</i> (NTS)	69
• <i>Shigella</i> species	72
• Diarrhoeagenic <i>Escherichia coli</i> (DEC)	74
• <i>Vibrio cholerae</i> O1	76
• <i>Cryptococcus</i> species	76
• <i>Candida</i> species	78
• <i>Neisseria meningitidis</i>	80
• <i>Haemophilus influenzae</i>	83
• <i>Streptococcus pneumoniae</i>	86
• Case-control study to estimate effectiveness of a pneumococcal conjugate vaccine (PCV) against invasive pneumococcal disease (IPD) in South Africa	90
• <i>Klebsiella pneumoniae</i>	90
• <i>Staphylococcus aureus</i>	92
• Rifampicin-resistant Tuberculosis	94
• Discussion – GERMS-SA 2012	94
Table 1: Provisional number of laboratory confirmed cases of diseases under surveillance reported to the NICD - South Africa, corresponding periods 1 January - 30 June 2012/2013	96
Table 2: Provisional laboratory indicators for NHLS and NICD, South Africa, corresponding periods 1 January - 31 March 2012/2013	97