

## b Meningococcal disease

### Invasive meningococcal disease in South Africa in 2015

A large scale meningococcal serogroup C outbreak has been reported from Niger earlier this year which is ongoing there and in other countries of the African meningitis belt. The link below includes an update on this outbreak.\* Currently in South Africa the picture is very different from our northern 'neighbours'. The GERMS-SA surveillance program has only had sporadic cases reported from eight of our nine provinces, and in relatively low numbers, indicating that the incidence of meningococcal disease is still at a low point following the last outbreak (due to serogroup W disease), which peaked in 2006.

From January through July 2015, 75 cases of laboratory-confirmed *Neisseria meningitidis* have been reported through the GERMS-SA surveillance network, which covers NHLS and private microbiology laboratories around South Africa. Most cases were reported from Western Cape Province (22), followed by Gauteng (19), Eastern Cape (16), Kwazulu-Natal (7) and Free State provinces (7). No cases have been reported from the Northern Cape Province. Cases are reported throughout the year with a peak during the winter to spring months. Case numbers rose considerably from May (11 cases) to June (20 cases). The median age of the cases was 10 years (range 19 days to 65 years). As is typical, 39 percent of cases occurred amongst the ≤5 year age category (29 cases) with another peak in the 25-44 year age band (10%, 19 cases). Sixty percent of cases were male.

Serogroup data was available for 56% of the cases. Four of the six most common serogroups were detected. Serogroup W was again the most predominant (15, 36%), followed by serogroup B

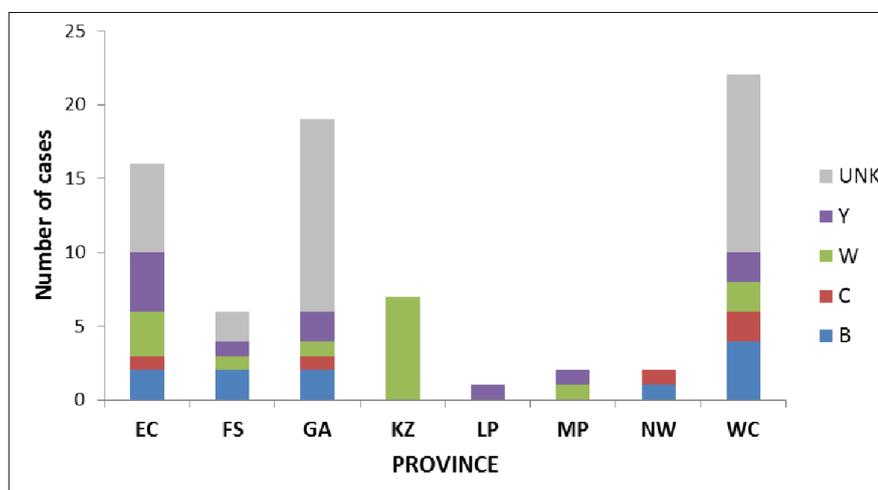
and Y (11 (26%) cases each) and then serogroup C (5 cases, 12%). Serogroup distribution differed somewhat by province (Figure 2). Ten percent (4/37) of the isolates tested were non-susceptible to penicillin (minimum inhibitory concentrations (MICs) >0.06µg/ml). The clinical relevance of increased MICs is unclear, and penicillin is, at present, still being recommended as the drug of choice for therapy for confirmed meningococcal disease.

GERMS-SA collects clinical data at selected enhanced surveillance sites (ESS) around South Africa: clinical data were available for 20% of the 75 cases. The majority of cases presented as meningitis (13/15), with only 2 cases having bacteraemia. One third of the case-patients were HIV infected. Mean hospital stay was 11 days. There were 2 deaths: both were in HIV-negative children <2 years of age, who presented with meningitis and died on the day of admission. This highlights the rapid progression of this devastating illness.

Winter and spring are traditionally the times of year when meningococcal cases increase. Over the next few months clinicians should be vigilant when confronted by a patient with symptoms suggestive of meningitis or bacteraemia, and not delay in providing appropriate antibiotic treatment.

\*<http://www.afro.who.int/en/clusters-a-programmes/dpc/epidemic-a-pandemic-alert-and-response/outbreak-news/4693-cerebrospinal-meningococcal-disease-outbreak-in-niger-update-8-july-2015.html>

**Source:** Centre for Respiratory Diseases and Meningitis, NICD-NHLS



**Figure 2 . Number of cases of laboratory-confirmed *Neisseria meningitidis* reported to GERMS-SA by province and serogroup, January-July 2015 (n=75)**