

5 ANTIMICROBIAL RESISTANCE

The Johannesburg and Cape Town Antimicrobial Resistance Reference Laboratories (AMRRL) of the Centre for Opportunistic, Tropical and Hospital Infections (COTHI) at NICD/NHLS have been testing referred isolates of suspected carbapenemase-producing Enterobacteriaceae (CPE) for the presence of selected carbapenemase genes. For August 2014, a total of 39 Enterobacteriaceae isolates was screened, 24 of which were carbapenemase-producing Enterobacteriaceae. Most isolates were *Klebsiella pneumoniae* (23) followed by *Enterobacter cloacae* (9) (Figure 3). Ten NDM positive isolates were identified (6 from private hospitals in KwaZulu-Natal and 4 from public hospitals from KwaZulu-Natal and Gauteng). Six OXA-48 positive isolates were identified (2 from private hospitals in Gauteng and KwaZulu-Natal and 4 from the public sector in the Eastern Cape and Gauteng). One KPC positive isolate and 1 GES positive isolate were identified from the private sector in KwaZulu-Natal. Five VIM positive isolates were identified (4 from public hospitals in Gauteng and 1 from a private hospital in KwaZulu-Natal).

It is important to note that these figures do not represent the current burden of CPEs in South Africa. Given that CPE infections are currently not reportable or notifiable in South Africa, there is no platform for appropriate surveillance reports and consequently no locally representative data is available. This is of major concern, since meaningful data can inform public health policy and highlight priorities for action. Controlling the spread and limiting the impact of CPEs in South Africa will require intensive efforts in both the public and private healthcare sectors going forward. NHLS and private laboratories are encouraged to submit suspected CPE isolates based on antimicrobial susceptibility testing (AST) criteria to the AMRRL, NICD/NHLS. Please telephone (011) 555 0342/44 or email ashikas@nicd.ac.za and olgap@nicd.ac.za for queries or further information. In the Western Cape area, please email colleen.bamford@nhls.ac.za.

Source: Centre for Opportunistic, Tropical and Hospital Infection, NICD-NHLS

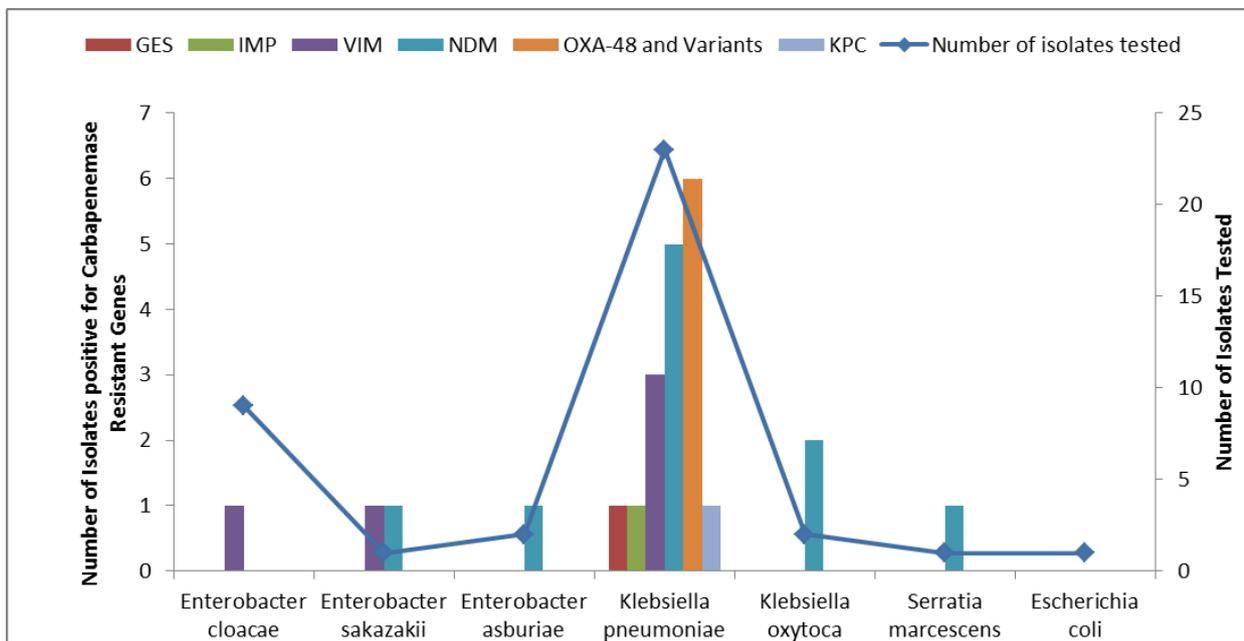


Figure 3. Enterobacteriaceae isolates screened (n=39) and confirmed CPE (n=24) during August 2014 at AMRRL (NICD-NHLS)

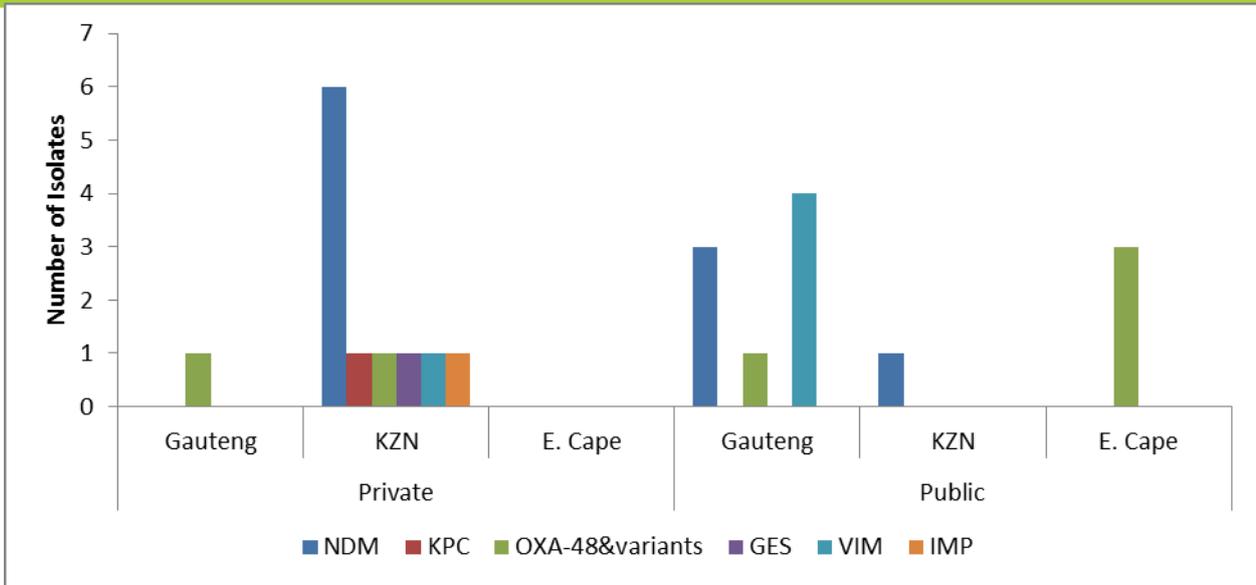


Figure 4. Distribution by province of CPEs (n=24), August 2014