



**NATIONAL INSTITUTE FOR  
COMMUNICABLE DISEASES**

Division of the National Health Laboratory Service

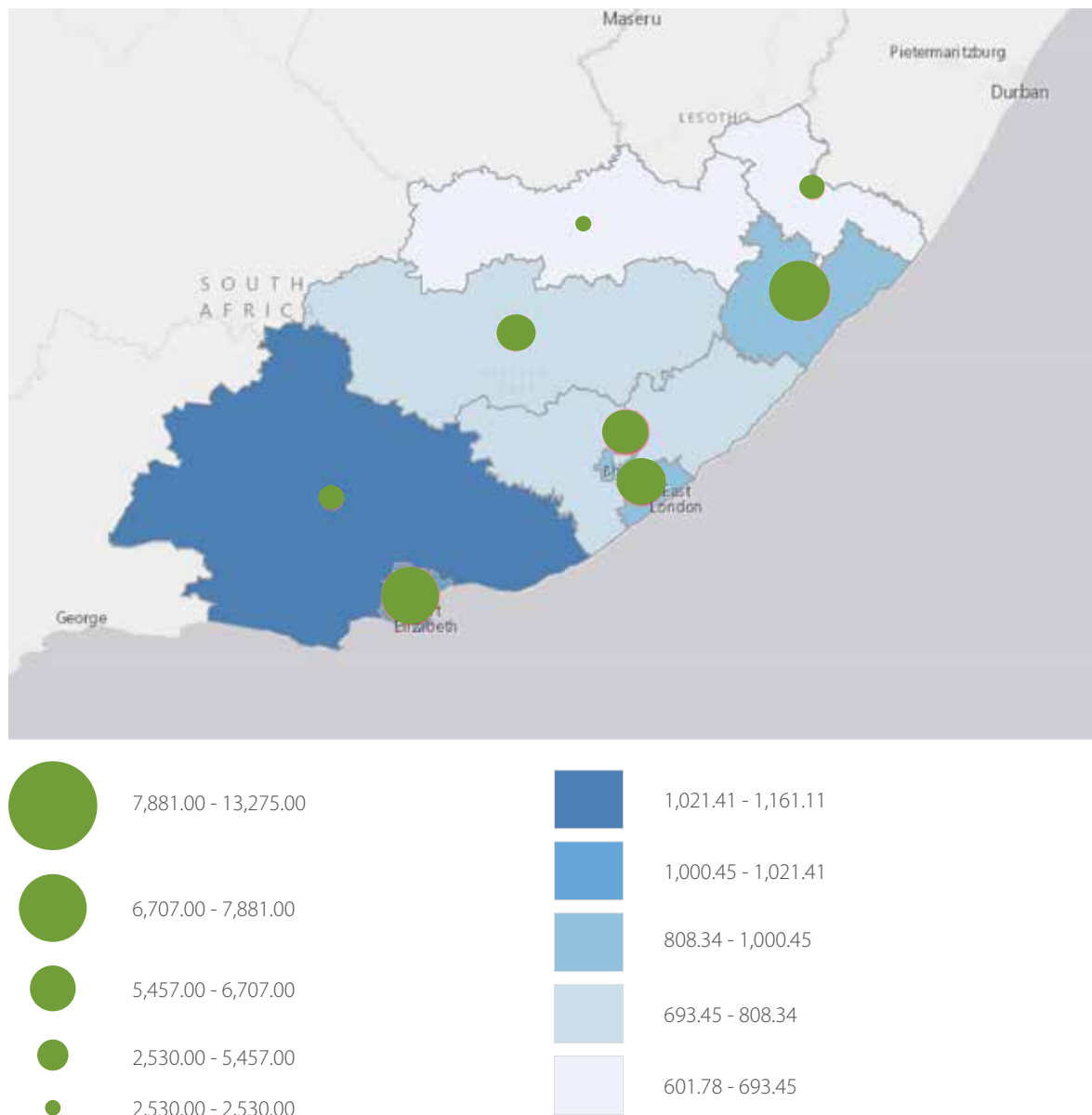
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Microbiologically confirmed  
tuberculosis 2004-15  
**South Africa**



# Eastern Cape

Between the period 2004 and 2015, a total of 707 128 incident microbiologically confirmed cases of pulmonary TB (mPTB) were diagnosed in Eastern Cape (Table 5). The peak number of incident mPTB cases was 64 336, occurring nationally in 2008 and in the most recent year (2015) the number of cases were 59 205. The highest burden of mPTB incident cases occurred in the following three districts (Figure 10): Nelson Mandela Bay Metro (12 275), OR Tambo (11881) and Buffalo City Metro (7881). Together they account for 54.1% of the total burden in 2015. This pattern has remained unchanged when compared with 2004, though lower absolute numbers of cases have been observed in the Nelson Mandela Metro when comparing 2015 to the 2004 data.



**Figure 10: mPTB incident case burden (circles) and rates (shading), Eastern Cape: spatial distribution, 2015**

The overall trend in TB over the period showed an increasing incidence, peaking in 2010 at 1063 (95% CI: 1055-1071) mPTB incident cases per 100 000 population and subsequently showing consistent declines down to 865 (95% CI: 858-872) in 2015 (Table 5). The cumulative total number of cases of TB averted between 2010 and 2015 were 9 235 cases. This downward trend is consistent with what was previously reported (ref). The annual change has been +2.0, -8.8 and -2.1% for the last three years as compared to the 10% required for the END TB strategy.

Year	n	Incidence*/100000 (95% CI)	Annual change in cases (n)	Annual change in incidence (%)
2004	42879	724(717-731)	-	-
2005	49511	825(818-832)	6632	14.0
2006	51828	852(845-859)	2317	3.3
2007	54455	883(876-890)	2627	3.6
2008	64336	1029(1021-1037)	9881	16.5
2009	62421	984(976-992)	-1915	-4.4
2010	68440	1063(1055-1071)	6019	8.0
2011	65236	998(991-1006)	-3204	-6.1
2012	63018	950(942-957)	-2218	-4.8
2013	65281	969(961-976)	2263	2.0
2014	60518	884(877-891)	-4763	-8.8
2015	59205	865(858-872)	-1313	-2.1

Incidence trends by district have been mixed in this province (Figure 11). The Nelson Mandela Metro region had the highest incidence rate in 2004, at 1 637 (95% CI:1613-1662) mPTB incident cases per 100 000 people and has declined to 1 021 (95% CI:1003-1040) in 2015 (Table 6). The Sarah Baartman District had the second highest incidence rate in 2004 at 1250 (95% CI: 1216-1285) and is now the district with the highest incidence rate in 2015 at 1161 (95%CI: 1131-1182) (reasons for this situation should be investigated). The most striking trend was encountered in the Alfred Nzo District, showing sharp changes in mPTB incidence trends, peaking in 2010 above 1442 (95%CI: 1415-1462) per 100 000 population, followed by sharp declines with an incidence rate of 602 (95%CI: 585-619) in 2015.

The increase in incidence is unlikely to have been driven by improved diagnostics as it pre-dated the introduction of the GenXpert (GXP), while the declines occurred when GXP was widely used. The declines are certainly encouraging and understanding the reason(s) for these shifts will be valuable for future planning. Fluctuating allocation of resources at sub-district level in this province may have led to such shifts; however, these would not impact greatly on the incidence as both the numerator and denominator of the allocation figures would have shifted. Secondly, if a shift in allocation at sub-district level had occurred, this would have impacted on adjacent district(s) and such major shifts in other districts had not been observed.

### Incident Trends

