DEATHS IN SOUTH AFRICA
NOVEMBER 2010

Wat maak dood?

74 863
mense sterf aan TB. Ander vigsverwante siektes soos longontsteking en maagaandoenings is die tweede en derde grootste oorsake van natuurlike sterftes.

5 785
mense sterf in padongelukke

5 467
mense sterf weens aanranding

734
sterftes was weers kompleksies na mediese of chirurgiese behandeling

91,3%
van alle sterftes was weens natuurlike oorsake soos siektes. Die res is onnatuurlik, waaronder moord en ongelukke.

Die oorsake van

40 000
onnatuurlike sterftes blyk nie duide-lik uit die doodsertifikate nie.
<table>
<thead>
<tr>
<th>Year</th>
<th>CULTURE</th>
<th>MICROSCOPY</th>
<th>DST LPA</th>
<th>DST MGIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>273,829</td>
<td>1,815,333</td>
<td>34,542</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>349,246</td>
<td>2,300,241</td>
<td></td>
<td>36,871</td>
</tr>
<tr>
<td>2006</td>
<td>481,757</td>
<td>2,720,813</td>
<td></td>
<td>48,049</td>
</tr>
<tr>
<td>2007</td>
<td>581,671</td>
<td>2,927,017</td>
<td>5,963</td>
<td>64,943</td>
</tr>
<tr>
<td>2008</td>
<td>729,424</td>
<td>3,373,134</td>
<td>23,126</td>
<td>58,887</td>
</tr>
<tr>
<td>2009</td>
<td>759,643</td>
<td>3,276,347</td>
<td>61,423</td>
<td>39,334</td>
</tr>
<tr>
<td>2010 (Proj)</td>
<td>844,212</td>
<td>4,449,532</td>
<td>90,266</td>
<td>31,408</td>
</tr>
<tr>
<td>2010 (Q1&amp;2)</td>
<td>422,106</td>
<td>2,224,766</td>
<td>45,133</td>
<td>15,704</td>
</tr>
</tbody>
</table>
Table 3: Number of MDR-TB patients diagnosed by the NHLS by province per year

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EASTERN CAPE</td>
<td>379</td>
<td>545</td>
<td>836</td>
<td>1,092</td>
<td>1,501</td>
<td>1,858</td>
<td>6,211</td>
</tr>
<tr>
<td>FREE STATE</td>
<td>116</td>
<td>151</td>
<td>198</td>
<td>179</td>
<td>381</td>
<td>253</td>
<td>1,278</td>
</tr>
<tr>
<td>GAUTENG</td>
<td>537</td>
<td>676</td>
<td>732</td>
<td>986</td>
<td>1,028</td>
<td>1,307</td>
<td>5,266</td>
</tr>
<tr>
<td>KWAZULU-NATAL</td>
<td>583</td>
<td>1,024</td>
<td>2,200</td>
<td>2,208</td>
<td>1,573</td>
<td>1,773</td>
<td>9,361</td>
</tr>
<tr>
<td>LIMPOPO</td>
<td>59</td>
<td>40</td>
<td>77</td>
<td>91</td>
<td></td>
<td>185</td>
<td>204</td>
</tr>
<tr>
<td>MPUMALANGA</td>
<td>162</td>
<td>134</td>
<td>139</td>
<td>506</td>
<td>657</td>
<td>446</td>
<td>2,044</td>
</tr>
<tr>
<td>NORTH WEST</td>
<td>130</td>
<td>203</td>
<td>225</td>
<td>397</td>
<td>363</td>
<td>520</td>
<td>1,838</td>
</tr>
<tr>
<td>NORTHERN CAPE</td>
<td>168</td>
<td>155</td>
<td>188</td>
<td>199</td>
<td>290</td>
<td>631</td>
<td>1,641</td>
</tr>
<tr>
<td>WESTERN CAPE</td>
<td>1,085</td>
<td>1,192</td>
<td>1,179</td>
<td>1,771</td>
<td>2,220</td>
<td>2,078</td>
<td>9,525</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3,219</td>
<td>4,120</td>
<td>5,774</td>
<td>7,429</td>
<td>8,198</td>
<td>9,070</td>
<td>37,810</td>
</tr>
</tbody>
</table>

Only 104 patients registered at MDR centre.
Xpert MTB-RIF rather than conventional microscopy, culture and DST should be used to test individuals suspected of having MDR-TB or HIV associated TB

- Strong recommendation; high (moderate) quality evidence
- Remark: This recommendation also applies to children

GXP may be considered as a follow-on test to microscopy in settings where MDR-TB or HIV is of lesser concern

- Conditional recommendation acknowledging major resource implications; high (moderate) quality evidence.
Consensus on the following:

- Do we implement GXP for NTP use in SA
- Where in the existing NTP diagnostic algorithm
  - Add-on vs replacement test
- Is GXP affordable in SA
- How are we going to interpret results
- Clinical guidelines
- Do we wait for the next generation tests
- Do we need to pilot GXP to evaluate positioning
Sites (provisional)

Klerkdorp/Thepong (with 4 satelites)
Welkom
Tugela Ferry
Polokwane
Bombela (satelite)
TAH
Umtata
Upington
Khayelitsha
Malmesbury ID
DILEMMAS IN THE LABORATORY

- Testing cascade
- Turn around time
- Labour intensive
- Medical waste
- Contamination risk
- Storage space intensive
- No EQA
- How does one validate
- Using up the whole sputum specimen
DROPPING THE SMEAR

2 FRONTLOADED SPUTUM SPECIMENS

SPUTUM 1
- TB +
- GXP
- TB -

SPUTUM 2
- TB + Rif®
- MGIT
- DST
- LPA
- (? OR 2nd GXP)

STOP
Healthcare Worker Home

Welcome Jane Doe (PETV09000028)

Petruville Clinic - Appointment Summary

<table>
<thead>
<tr>
<th>Last Week</th>
<th>Today</th>
<th>This Week</th>
<th>Next Week</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Patient Login

Place patient's finger on the fingerprint scanning device

Enter a patient identifier and press the login button

Patient Code

or

SA ID Number / Passport Number

LOGIN
- Interface written and delivered
  - v16.04

- Label printers
QC
+ Quantified by flow cytometry to $10^4$/ml
+ Inactivated and spotted on filter paper

Sites (provisional)
- Klerkdorp/Thsepong (with 4 satelites)
- Welkom
- Tugela Ferry
- Polokwane
- Bombela (satelite)
- TAH
- Umtata
- Upington
- Khayelitsha
- Malmesbury ID
- CHBaragwanath with Soweto satelites
THANK YOU