

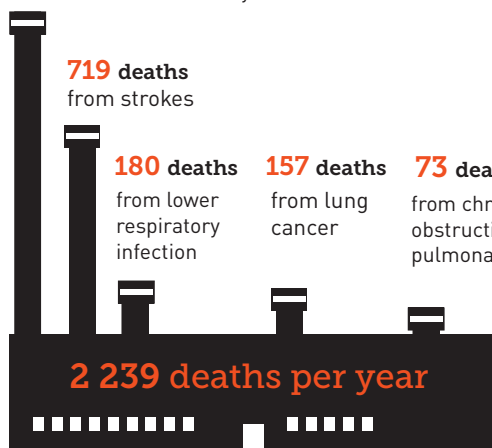


# Eskom's coal-fired power stations make us ill and kill thousands of South Africans every year

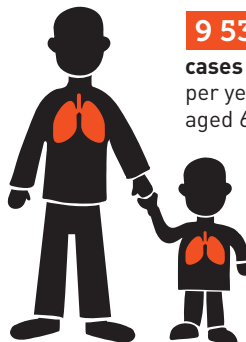
Source: Dr Mike Holland, Health impacts of coal fired power plants in South Africa, 2017

## Air pollution from Eskom's coal-fired power stations cause:

**1110 deaths**  
from ischaemic (coronary) heart disease



**2 781**  
cases of chronic bronchitis  
per year in adults

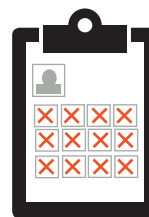


**9 533**  
cases of bronchitis  
per year in children  
aged 6 to 12



**94 680**  
days of asthma symptoms  
per year in children  
aged 5 to 19

**2 379**  
hospital admissions  
per year



**996 628**  
lost working  
days per year

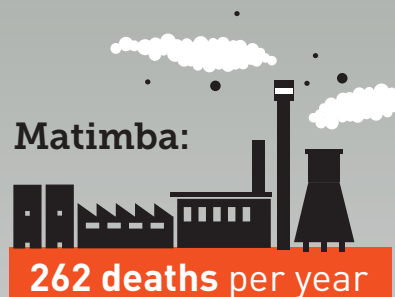
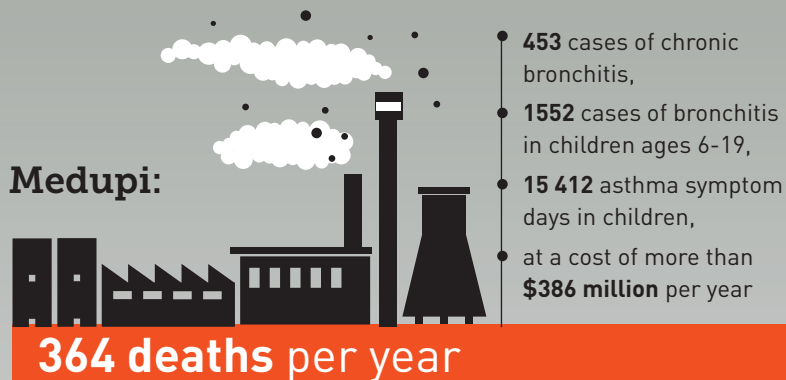
**3 972 902**  
days of restricted  
activity per year



The total costs associated with these impacts exceed

**USD2.3 billion per year**

## Based on the emissions from each Eskom power station, the most lethal Eskom power stations are:



These numbers exclude significant impacts of air pollution from mining (such as the effects of coal dust on workers and the public), the transportation of coal, and water contamination.

# Annual health impacts of emissions from Eskom's coal-fired power stations

## Annual health impacts linked to coal-fired generation in South Africa

|   | Cases, etc.  | Value, \$int, millions |
|---|--------------|------------------------|
| <b>Equivalent attributable deaths:</b>      |              |                        |
| • Lung cancer                               | 157          |                        |
| • Ischaemic heart disease                   | 1,110        |                        |
| • Chronic obstructive pulmonary disease     | 73           |                        |
| • Stroke                                    | 719          |                        |
| • Lower respiratory infections              | 180          |                        |
| <b>Total equivalent attributable deaths</b> | <b>2,239</b> | <b>2,121.94</b>        |
| Chronic bronchitis (adults, cases)          | 2,781        | 64.64                  |
| Bronchitis (children 6 to 12)               | 9,533        | 2.19                   |
| Equivalent hospital admissions (all ages)   | 2,379        | 2.79                   |
| Restricted activity days (all ages)         | 3,972,902    | 132.72                 |
| Asthma symptom days (children 5 to 19)      | 94,680       | 1.44                   |
| Lost working days (adults)                  | 996,628      | 47.05                  |
| <b>Total Costs</b>                          |              | <b>2,372.78</b>        |

## Health impacts and associated costs (\$int, millions) allocated to individual Eskom power stations

|                    | Total equivalent annual deaths | Chronic bronchitis (adult, cases) | Bronchitis (children 6 to 12 years) | Equivalent hospital admissions (all ages) | Restricted activity days (all ages) | Asthma symptom days (children 5 to 19 years) | Lost working days (adults) | Total costs, \$int, millions |
|--------------------|--------------------------------|-----------------------------------|-------------------------------------|---|-------------------------------------|--|----------------------------|------------------------------|
| <b>Arnot</b>       | 79                             | 98                                | 335                                 | 84  | 139,569                             | 3,326  | 35,012                     | 83.36                        |
| <b>Camden</b>      | 84                             | 104                               | 357                                 | 89  | 148,980                             | 3,550  | 37,373                     | 88.98                        |
| <b>Duvha U 1-3</b> | 143                            | 178                               | 609                                 | 152                                       | 253,845                             | 6,050  | 63,679                     | 151.61                       |
| <b>Grootvlei</b>   | 58                             | 72                                | 247                                 | 62  | 103,011                             | 2,455  | 25,841                     | 61.52                        |
| <b>Hendrina</b>    | 105                            | 130                               | 445                                 | 111                                       | 185,467                             | 4,420  | 46,525                     | 110.77                       |
| <b>Kendal</b>      | 210                            | 261                               | 894                                 | 223                                       | 372,400                             | 8,875  | 93,419                     | 222.41                       |
| <b>Kriel</b>       | 141                            | 176                               | 602                                 | 150                                       | 250,866                             | 5,979  | 62,931                     | 149.83                       |
| <b>Komati</b>      | 28                             | 35                                | 120                                 | 30  | 50,188                              | 1,196  | 12,590                     | 29.97                        |
| <b>Lethabo</b>     | 204                            | 253                               | 868                                 | 217                                       | 361,646                             | 8,619  | 90,721                     | 215.99                       |
| <b>Majuba</b>      | 177                            | 219                               | 752                                 | 188                                       | 313,579                             | 7,473  | 78,663                     | 187.28                       |
| <b>Matimba</b>     | 262                            | 326                               | 1,117                               | 279                                       | 465,404                             | 11,091                                       | 116,749                    | 277.96                       |
| <b>Matla</b>       | 192                            | 238                               | 817                                 | 204                                       | 340,278                             | 8,109  | 85,361                     | 203.23                       |
| <b>Medupi</b>      | 364                            | 453                               | 1,552                               | 387                                       | 646,706                             | 15,412                                       | 162,230                    | 386.24                       |
| <b>Tutuka</b>      | 192                            | 239                               | 818                                 | 204                                       | 340,963                             | 8,126  | 85,533                     | 203.64                       |
| <b>Totals</b>      | <b>2,239</b>                   | <b>2,781</b>                      | <b>9,533</b>                        | <b>2,379</b>                              | <b>3,972,902</b>                    | <b>94,680</b>                                | <b>996,628</b>             | <b>2,373</b>                 |

