# Status update

**As at 3 September 2020**

- **Total number of employees**: 450,987
- **Number of employees back at work**: 338,264
- **Total number of tests**: 47,121
- **Total positive cases**: 15,149
- **Active cases**: 426
- **Recovered**: 14,562
- **Deaths**: 161

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## Testing rates by population

<table>
<thead>
<tr>
<th>Type</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global test rate</td>
<td>6.71%</td>
</tr>
<tr>
<td>RSA test rate</td>
<td>6.27%</td>
</tr>
<tr>
<td>Mining test rate</td>
<td>10.45%</td>
</tr>
</tbody>
</table>

## Status of cases

- **Active cases**: 3%
- **Recovered cases**: 97%
Status update

Cases and deaths per commodity

Cases and deaths per region to date

Deaths by province  Cases by province
Analysis of deaths

Age distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>1</td>
</tr>
<tr>
<td>30-39</td>
<td>21</td>
</tr>
<tr>
<td>40-49</td>
<td>37</td>
</tr>
<tr>
<td>50-59</td>
<td>76</td>
</tr>
<tr>
<td>60+</td>
<td>10</td>
</tr>
</tbody>
</table>

Comorbidities

<table>
<thead>
<tr>
<th>Comorbidities</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>20</td>
</tr>
<tr>
<td>One</td>
<td>43</td>
</tr>
<tr>
<td>Two</td>
<td>45</td>
</tr>
<tr>
<td>Three+</td>
<td>20</td>
</tr>
<tr>
<td>Unknown</td>
<td>17</td>
</tr>
</tbody>
</table>
Upscaling Testing Capacity
Forecasting demand

The key differences between the scenarios relates to the infection rate (i.e. the average number of people that each infected person infects) and the impact of the social distancing interventions – our modelling is closest to scenario 2 showing a peak in infections during September.
Collaborative venture in upscaling testing capacity

Map out existing capacity in mining companies
- Explore partnership with companies that already have labs set up
- Harness the real power of networks and explore partnerships

Define the objectives
- Set target to track the evolution of the initiatives

Support national efforts to address testing capacity
- Engage with local DOH at regional level to support community testing in specific high incidence areas

Ensure compliance with regulatory body & reporting requirements
- Licensing, reporting accreditation & compliance certification
Key considerations for laboratory

- Policy & planning
- Diagnostic network
- Infrastructure
- Personnel
- Lab-clinical interface
- Biosafety & quality assurance
- Supply chain
- Implementation monitoring
- Digital solutions
- Financing

Financial resources for laboratory
- Human resources – qualifications and...
  - Equipment adequacy
  - Equipment calibration and maintenance
  - Reagent and consumable quality
  - Reagent and consumable availability...
- Specimen collection standardization...
- Guidelines on laboratory practices
- Transportation of specimens
- Laboratory organization, service...
- Regulatory framework
- Data management
- Laboratory safety or security
- Waste management
- Quality assurance
- Political commitment (national...
- Other
## Seriti testing stats

<table>
<thead>
<tr>
<th>Mine</th>
<th>total headcount</th>
<th>Covid+ cases</th>
<th>% prevalence</th>
<th>+ve rate per 1 000</th>
<th>PCR Tests</th>
<th>testing percentage of total workforce</th>
<th>testing rate per 1’000</th>
<th>+ve rate per test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kriel Colliery</td>
<td>1500</td>
<td>129</td>
<td>9%</td>
<td>86</td>
<td>340</td>
<td>23%</td>
<td>227</td>
<td>38%</td>
</tr>
<tr>
<td>New Denmark Colliery</td>
<td>1991</td>
<td>150</td>
<td>8%</td>
<td>75</td>
<td>358</td>
<td>18%</td>
<td>180</td>
<td>42%</td>
</tr>
<tr>
<td>New Vaal Colliery</td>
<td>1756</td>
<td>181</td>
<td>10%</td>
<td>103</td>
<td>531</td>
<td>30%</td>
<td>302</td>
<td>34%</td>
</tr>
<tr>
<td>New Largo Coal</td>
<td>184</td>
<td>14</td>
<td>8%</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Office / Smokey Mountain</td>
<td>88</td>
<td>4</td>
<td>5%</td>
<td>45</td>
<td>13</td>
<td>15%</td>
<td>148</td>
<td>31%</td>
</tr>
<tr>
<td>Seriti Coal Total</td>
<td>5519</td>
<td>478</td>
<td>9%</td>
<td>87</td>
<td>1242</td>
<td>23%</td>
<td>225</td>
<td>38%</td>
</tr>
</tbody>
</table>
MANAGING THE PANDEMIC
COVID-19 TESTING

DR. JOSEPH MATJILA
GROUP MANAGER: HEALTH AND SAFETY

SEPTEMBER 2020
COVID-19 IS A COMMUNICABLE DISEASE that can affect anyone, for which there is currently no vaccine.

Therefore, early diagnosis is part of our response in the absence of a vaccine.
EXXARO’S HEALTH AND WELLNESS STRATEGY IS AN INTEGRATED APPROACH TO HEALTH AND WELLNESS

INTEGRATED HEALTH & WELLNESS MANAGEMENT

Understand Your Health status

Manage Your Health Status

Safeguard Your Health Status

Employer Responsibility

Comprehensive Diagnosis Programme

Integrated Healthcare Management

Preventative Healthcare and Wellness programme

Employee Responsibility
THE PREVENTATIVE & MANAGEMENT MEASURES FOR COVID-19 FIT WITHIN OUR HEALTH & WELLNESS STRATEGY

Based on the following pillars:

- Prevent
- Diagnose
- Manage
Exxaro established private testing capacity at two of its Business Units to diagnose COVID-19.

Grootegeluk mine’s Marapong occupational health facility in Lephalale, Limpopo.

Matla coal mine’s occupational health centre in Kriel, Mpumalanga.
ABOUT THE LABORATORIES

- For Exxaro group of companies;
- Shared with Seriti Resources in Mpumalanga;
- And Eskom in Limpopo to test their employees;
- Support the local public health departments.
ACCREDITATION OF THE LABORATORIES

- Currently Exxaro can only perform tests in-house (for staff members only).
- Exxaro has applied for a certification of the laboratories to the National Department of Health.
- Upon receipt of the certification, an MoU will be concluded with the National Health Laboratory Services for accreditation to test communities.
- The PCR laboratory equipment is certified by – ThermoFisher Scientific.
- The biological safety cabinet is certified by – Air Filter Maintenance Services RSA.
- All laboratory equipment is approved by the South African Health Products Regulatory Authority (SAHPRA).
- All laboratory personnel are registered with the Health Professional Council of South Africa (HPCSA).
- The laboratory procedures are validated by a professional pathologist.
THE PCR TESTING
AS APPROVED BY WHO

- PCR-Test is a COVID-19 specific Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) test
- The RT-PCR test is both specific and sensitive
- The PCR analyser executes a maximum of 96 tests on a run (a full run in 2.5 hours)
- Results can be available within 3 hours
LAB PERSONNEL STRUCTURE
AT GG & MATLA COAL MINES
UTILISATION OF THE LABORATORIES

SERITI RESOURCES

Kriel Colliery
New Denmark Colliery
New Vaal Colliery
New Largo Coal

Eskom

Matimba PowerStation
Matla PowerStation
Medupi Powerstation
Matla Powerstation

Exxaro

Grootegeluk
Matla
FerroAlloys
Cennergie
ECC

Leeuwpan
Belfast
The conneXXion
Mafube
THANK YOU
TESTING AS A MANAGEMENT TOOL
## Testing Categories

<table>
<thead>
<tr>
<th>At risk</th>
<th>Returning to work</th>
<th>Risk-based sampling</th>
<th>Persons under investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclical testing of employees potentially exposed to the virus, (such as health workers, ER24 and security teams)</td>
<td>All recalled employees tested as part of fitness to work assessments before resuming duties and before being allowed to enter mine</td>
<td>60 - 80 employees tested per day to pick up potential cases very quickly</td>
<td>Individuals tested on a case-by-case basis as a result of self declaration, screening or contact tracing.</td>
</tr>
</tbody>
</table>
Example of modelling applied (1) - Scenario planning

**SEIR profile**
- National trajectory (R₀ = 1.3)
- Provincial trajectory (R₀ = 1.7)
- Current trajectory (R₀ = 2.1)

**Absenteeism profile**
- National trajectory (R₀ = 1.3)
- Provincial trajectory (R₀ = 1.7)
- Current trajectory (R₀ = 2.1)

**Key assumptions**
- R₀ value for South Deep has been reversed using an epidemic calculator
- Planned absenteeism at 5% (exc. training and leave)
- All vulnerable at 159 employees
- SADC employees at 88 employees
- Disruption factor included in absenteeism

<table>
<thead>
<tr>
<th>Scenario</th>
<th>R₀ value</th>
<th>Test rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>1.3</td>
<td>3%</td>
</tr>
<tr>
<td>Gauteng</td>
<td>1.7</td>
<td>2%</td>
</tr>
<tr>
<td>Current</td>
<td>2.1</td>
<td>50%</td>
</tr>
</tbody>
</table>

4th evolution of modelling based on National, Gauteng, and Current trajectories (1st week - July 2020)
Example of modelling applied (2) - Progression profiling

South Deep COVID profile (Progressive profile)

- Tested per 10 employees
- Retested per 10 employees
- Positive
- Hospitalised
- Fatalities
- Recovered

Current $R_0 = 1.5$

Indicators
- At peak (3rd week Sept)
- Dec-2020

<table>
<thead>
<tr>
<th></th>
<th>Tests</th>
<th>Re-tests</th>
<th>Positive</th>
<th>Hospitalised</th>
<th>Fatalities</th>
<th>Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>+4 000</td>
<td>+4 000</td>
<td>454</td>
<td>128</td>
<td>2</td>
<td>795</td>
</tr>
<tr>
<td>Forecast</td>
<td>+6 800</td>
<td>+6 800</td>
<td>2</td>
<td>19</td>
<td>19</td>
<td>1 867</td>
</tr>
</tbody>
</table>

Current $R_0 = 1.5$

Testing profile per 10 employees

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Note: The diagram shows the progression of COVID-19 cases with actual and forecast data, including tests, re-tests, positive cases, hospitalisations, fatalities, and recoveries.
Portraying testing results

### POSITIVE CASES PER AGE CATEGORY

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Total Number Positive COVID-19 Cases in This Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between 20-35 Years Old</strong></td>
<td>99 (79%) 26 (21%)</td>
</tr>
<tr>
<td><strong>Between 36-50 Years Old</strong></td>
<td>146 (82%) 31 (18%)</td>
</tr>
<tr>
<td><strong>Between 51-65 Years Old</strong></td>
<td>50 (94%) 3 (6%)</td>
</tr>
</tbody>
</table>

### POSITIVE CASES PER TESTING CATEGORY

<table>
<thead>
<tr>
<th>Testing Category</th>
<th>At risk</th>
<th>Returning to Work</th>
<th>Risk-based Sampling</th>
<th>Persons Under Investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>3 (75%)</td>
<td>51 (88%)</td>
<td>5 (12%)</td>
<td>192 (31%)</td>
</tr>
<tr>
<td><strong>Recoveries</strong></td>
<td>4 (55%)</td>
<td>2 (22%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

### POSITIVE CASES PER EMPLOYMENT CATEGORY

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Permanent Employee</th>
<th>Contractor</th>
<th>Temporary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>166 (77%) 47 (23%)</td>
<td>126 (91%) 12 (9%)</td>
<td>3 (75%) 1 (25%)</td>
</tr>
</tbody>
</table>
Corporate Social Investment Initiatives
Real Time PCR Equipment Sponsorship – Ndlovu Care Group
Ndlovu Care Group:
Donation funded purchase of RT PCR Equipment
# COVID-19 DASHBOARD

Date: 31/08/2020 for information up to 30/08/2020

## Alloys Statistics

<table>
<thead>
<tr>
<th>Section</th>
<th>Referred for testing</th>
<th>Tested Positive</th>
<th>Tested Negative</th>
<th>Positive active cases</th>
<th>Recovered cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Alloys</td>
<td>1658</td>
<td>497</td>
<td>1168</td>
<td>39</td>
<td>455</td>
</tr>
<tr>
<td>Smelters</td>
<td>776</td>
<td>219</td>
<td>570</td>
<td>25</td>
<td>192</td>
</tr>
<tr>
<td>Mines</td>
<td>718</td>
<td>218</td>
<td>494</td>
<td>7</td>
<td>210</td>
</tr>
<tr>
<td>Bhovan</td>
<td>123</td>
<td>37</td>
<td>86</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>HO</td>
<td>26</td>
<td>16</td>
<td>10</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Carbon</td>
<td>15</td>
<td>7</td>
<td>8</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

## Alloys Statistics

New Cases reported 30 August 2020: Two (2)

## SA Statistics

<table>
<thead>
<tr>
<th></th>
<th>Cases</th>
<th>Deaths</th>
<th>Recoveries</th>
<th>Daily Increase</th>
<th>Active Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>625,055</td>
<td>14,023</td>
<td>538,604</td>
<td>2,505</td>
<td>72,424</td>
</tr>
<tr>
<td>Gauteng</td>
<td>209,648</td>
<td>3,572</td>
<td>179,827</td>
<td>525</td>
<td>25,249</td>
</tr>
<tr>
<td>Limpopo</td>
<td>13,167</td>
<td>179</td>
<td>11,939</td>
<td>128</td>
<td>1,049</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>24,132</td>
<td>341</td>
<td>22,017</td>
<td>188</td>
<td>1,774</td>
</tr>
<tr>
<td>North West</td>
<td>25,240</td>
<td>240</td>
<td>18,412</td>
<td>154</td>
<td>6,588</td>
</tr>
</tbody>
</table>

SA Daily changes 2 505↑ positive cases and 400 ↑ deaths
QUESTIONS?

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