This fact sheet presents MBIE’s estimates on the size and characteristics of the workforce under COVID-19 Alert Levels Four and Three. This work combines our essential services categories with judgement about potential capacity of firms to operate. We have also added estimates of those able to undertake work from home.

This model was developed specifically for Alert Levels Four and Three. As such, MBIE will not be compiling workforce estimates under Alert Level Two.

Summary of essential service workers

### Level four

<table>
<thead>
<tr>
<th></th>
<th>Essential service</th>
<th>Non-essential service</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to work</td>
<td>529,000</td>
<td>NA</td>
<td>529,000</td>
</tr>
<tr>
<td>Working from home</td>
<td>139,000</td>
<td>501,000</td>
<td>640,000</td>
</tr>
<tr>
<td>Unable to work</td>
<td>457,000</td>
<td>1,019,000</td>
<td>1,476,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,125,000</td>
<td>1,520,000</td>
<td>2,645,000</td>
</tr>
</tbody>
</table>

### Level three

<table>
<thead>
<tr>
<th></th>
<th>Operational service</th>
<th>Non-operating service</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to work</td>
<td>1,172,000</td>
<td>NA</td>
<td>1,172,000</td>
</tr>
<tr>
<td>Working from home</td>
<td>507,000</td>
<td>NA</td>
<td>507,000</td>
</tr>
<tr>
<td>Unable to work</td>
<td>829,000</td>
<td>137,000</td>
<td>966,000</td>
</tr>
<tr>
<td>Total</td>
<td>2,508,000</td>
<td>137,000</td>
<td>2,645,000</td>
</tr>
</tbody>
</table>

Non-operating services are defined as those services which are specifically restricted from opening. See the Methodology section of this fact sheet for more details.

Essential service worker breakdowns

Breakdown by industry
Caveats and Methodology

Caveats

• No timely data was available on the activity of workers or industries under Alert Levels Four or Three. These estimates are based on assumptions that are detailed in the Methodology section.
• This data has been rounded to the nearest thousand. As a result, totals may not add up correctly.
• The ability for businesses to work remotely is based on pre-COVID-19 figures, and does not reflect any new remote working practices that might have evolved.
• Supply chain issues were reflected in the Activity Level estimates of industries, but were not modelled directly.

Methodology

Ability to work from home:

• Different occupations were assessed for their suitability to work remotely.
• The ability to work remotely for each industry at ANZSIC Level Four was then estimated based on the combination of occupations making up the industry.
• It was assumed that under both Alert Levels Four and Three, those able to work remotely would do so.

Activity under Alert Level Four

1. Essential Services were defined at ANZSIC Level Four based on the list published on the Government COVID-19 website1.
2. An initial reduction of 12 per cent was applied to account for Essential Service workers not leaving their homes due to age, serious health issues, or pregnancy.
3. Essential health and emergency services were assumed to be operating at 100 per cent capacity.
4. Other essential services were assumed to be operating at between 50 to 80 per cent capacity depending on industry.
5. Non-essential services were assumed to be working remotely if possible. This means that, depending on industry, firms were assumed to be either operating at a much-reduced capacity, or not operating at all.

Activity under Alert Level Three

1. All businesses were assumed to be open under Alert Level Three unless they constituted public venues in the COVID-19 guidance (eg. libraries, museums, cinemas, food courts, gyms, pools, amusement parks), or involved close personal contact or tourism related operations (eg. cafes, hairdressing, travel agents). MBIE estimates that only 25,000 firms (about 5 per cent of the total 550,000 firms) solely undertook activities that were prohibited under Alert Level Three.
2. Many businesses were assumed to be operating at a reduced capacity during Alert Level Three. We have estimated firms’ capacity as follows:
   • **Heavily customer-facing industries** such as Retail Trade, Accommodation, and Rental, Hiring and Real Estate Services: between 6 and 30 per cent.
   • **Industries that primarily provide resources to affected supply chains** such as Manufacturing and Wholesale Trade: 25 per cent.
   • **Industries with minimal customer-facing elements, but where space constraints will require a reduced workforce** such as Construction and Mining: 50 per cent.
   • **Industries with minimal customer-facing elements, where space constraints are less of a factor** such as Professional, Scientific and Technical Services: 75 per cent.

Datasets used

• Survey of Working Life data was used to estimate how well different occupations were suited to working remotely.
• Linked Employer-Employee Data was used as the base dataset to inform MBIE’s Detailed Regional Employment Estimates. This was used to find the number of employees by industry.
• Household Labour-Force Survey was used to determine demographic data (region, gender, ethnicity) for the workforce. Note that ethnicity is based on total counts.

Contact us

For further information on this data series, please email us: E&ICOVID-19EvidenceBase@mbie.govt.nz.