Arctic 5 cities and COVID-19 – Return to workplaces


Summary of the report

National and regional recommendations of remote work have affected how people spent time at their workplaces. As the number of new COVID-19 cases changes, governments and regional authorities either tighten or loosen their recommendations regarding remote work. However, these recommendations are not the only factor affecting the behaviour of employers and employees. For example, in Oulu, people visited workplaces significantly less this autumn than the prior year even when the remote work recommendation did not hold. At the moment in Rovaniemi and Tromsø, number of visits to workplaces is at the same level as a year ago. In Luleå and Umeå people have returned to workplaces as the number of visits to workplaces is higher than in 2020.

The COVID-19 situation in the Arctic 5 cities has changed. During the first half of 2021 there were clearly more COVID-19 cases in Luleå and Umeå than in the other cities. However, currently the number of new cases is the highest in Tromsø and Oulu, where the COVID-19 situation is the worst it has been during the whole pandemic. In Tromsø, the cases are spreading among school-age children and also the first Omicron variant cases have been confirmed. In Oulu, intensive care units are filling up quickly, and some patients have already been transferred to other cities. The authorities are trying to increase the vaccination coverage and the COVID-19 passport has been taken into practice in Finland and Sweden, and Norwegian authorities are planning to do so as well. The EU’s drug regulator, European Medicines Agency, has approved vaccines for children aged 5–11.
Current COVID-19 situation and vaccination coverage in Arctic 5 cities

Arctic 5 cities

Figure 1. New COVID-19 cases, two-week trend per 100 000 inhabitants in Arctic 5 cities. Source: THL, FOHM, covid19data.no.

2020: The number of new COVID-19 cases per 100 000 inhabitants were highly similar among the Arctic 5 cities before September. After that, there was an increase in weekly cases in every city, but the most significant increases occurred in Luleå and Umeå. Elsewhere, the increase in the number of cases was relatively small.

2021: New weekly cases started to increase in Luleå and Umeå in February, and the highest peak occurred in Luleå in early March. During that time, the number of cases in Rovaniemi remained minimal and there were only occasional spikes in Oulu and Tromsø. The numbers of Luleå and Umeå have decreased since then, but there were clearly more cases in these cities than in the other Arctic 5 until July.

In August the number of new cases increased in every city, especially in Umeå and Rovaniemi. The situation worsened in Tromsø during the rest of the autumn. Currently cases in Luleå and Umeå are at the same level as in Rovaniemi, although the trend for Rovaniemi seems to be upwards. The number of new cases is the highest in Tromsø and Oulu. Tromsø seems to be past the highest peak and the number of cases is decreasing, whereas the trend for Oulu is alarmingly upwards. Authorities have reacted to these increases by recommending remote work and bringing back restrictions if the COVID-19 passport is not taken into use.
Vaccination coverage (Table 1) is defined for Oulu, Rovaniemi and Tromsø as the share of the total population who have received at least the first dose of the COVID-19 vaccine and for Luleå and Umeå as the share of the population born in 2005 or earlier who have received at least the first dose of the COVID-19 vaccine. Compared with the national level, vaccination coverage in Oulu and Rovaniemi is lower and in turn higher in Luleå, Umeå and Tromsø.

Comparing the numbers of May and September 2021, vaccination coverage has increased remarkably for both doses. From September to November, vaccination coverage increased mostly because coverage in the second dose increased. Finnish health authorities have decided on giving out third doses and the first citizens have already received it. Norway started to give a booster dose for those over 65 in October and has now started calling in people between the ages of 45–64 for the third dose. Sweden has also begun rolling out COVID-19 vaccine booster shots to all adults.

Attention has shifted away from COVID-19 cases more towards the reporting of vaccination coverage and the usage of the COVID-19 passport, as Finland and Sweden have taken the passport into practice, and Norwegian authorities are planning to do so in the near future. Another interesting topic is whether children should be vaccinated or not. Recently, EU’s drug regulator, European Medicines Agency, recommended giving the COVID-19 vaccine to children aged 5 to 11 years, prioritising risk groups.

### Table 1. Vaccination coverage in Arctic 5 cities, May 25, September 8, and November 30, 2021. Sources: THL, FHI, FOHM.

<table>
<thead>
<tr>
<th>City</th>
<th>First dose</th>
<th>Second dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May</td>
<td>September</td>
</tr>
<tr>
<td>Luleå</td>
<td>40.4</td>
<td>87.6</td>
</tr>
<tr>
<td>Umeå</td>
<td>37.2</td>
<td>88.3</td>
</tr>
<tr>
<td>Oulu</td>
<td>33.6</td>
<td>71.9</td>
</tr>
<tr>
<td>Tromsø</td>
<td>27.6</td>
<td>71.1</td>
</tr>
<tr>
<td>Rovaniemi</td>
<td>35.1</td>
<td>70.0</td>
</tr>
</tbody>
</table>

* Vaccination coverage in Luleå and Umeå seems significantly higher because population under 16 years old is not taken into account in the calculations.
Peoples’ mobility - Workplaces

The following figures are based on Google Community Mobility Reports. They show how the number of visits to workplaces has changed in the Arctic 5 cities. Weekends have been removed from the data.

Google Community Mobility Reports

In many countries, including Finland, Sweden and Norway, governments have decreed various types of lockdown policies to prevent the spread of COVID-19. These restrictions have affected the way people work and what places they visit. Google Community Mobility Reports provide interesting data that can be used to evaluate the effect of these restrictions.

Google Community Mobility Reports show how visits and lengths of stay at different places have changed compared with the baseline. The baseline is the median value for the corresponding day of the week during the 5-week period from January 3 to February 6, 2020. This means that the baseline describes the average behaviour of people before the COVID-19 pandemic in January 2020.

The reports are created with aggregated, anonymized sets of data from users who have turned on the Location History setting on their mobile phone. Therefore, the reports are based only on a sample of users, and they might not reflect the exact behaviour of a wider population.
Arctic 5 cities

Figure 2. Change in visits to workplaces compared with the baseline in all Arctic 5 cities. The baseline (dashed line) is the median day value for the corresponding day of the week during the 5-week period from January 3 to February 6, 2020. Source: Google Community Mobility Reports.

2020: The long-term pattern of visits to workplaces was quite similar in all Arctic 5 cities in 2020. At the beginning of the COVID-19 pandemic, the number of visits fell sharply in all cities, with the decrease being most severe in Tromsø, Oulu and Rovaniemi. The lines fluctuated during 2020 indicating that employers and employees were finding balance between working at workplaces and remotely.

2021: The number of visits to workplaces increased in all Arctic 5 cities from January to June. Significant drops during June and July are due to summer holidays. Visiting workplaces increased again starting from August, but from September the lines separate and the current difference between the cities is the greatest during the whole pandemic.

The number of visits to workplaces is almost at the baseline level in Luleå and going upwards for Umeå too. For Oulu, Rovaniemi and Tromsø the trend seems to be downwards as remote work is recommended by the authorities or preferred by employees and employers. The line for Oulu is notably lower than the lines for Rovaniemi and Tromsø, even though until September the lines were quite the same. After September, people in Oulu have been visiting workplaces a lot less than people in other Arctic 5 cities, which can be due to the worsened COVID-19 situation in the city.
2020: At the beginning of the COVID-19 pandemic, the number of visits to workplaces fell significantly, although the first drop in March is most likely due to the winter holiday. From April to June visits to workplaces increased but then decreased again during the summer months. The number of visits began to increase starting from August. Significant drop in October is due to the autumn holiday.

2021: People visited workplaces around 20% less than the baseline from March to June. The drop in mid-March is due to the winter holiday. Almost identical to the development in 2020, people visited workplaces less during the summer months. The number of visits increased from August to early September but started to decrease again towards the end of the year. Major drop in October is due to the autumn holiday. Currently people in Oulu are visiting workplaces around 30% less compared with the baseline. Comparing the Arctic 5 cities, this is the largest difference to baseline.
The development in Oulu after September is highly different than in the other Arctic 5 cities. Before September people in Oulu followed the general trend of Arctic 5 cities, which indicates that people are returning to the workplaces. One possible explanation for the return to remote working is the worsened COVID-19 situation, as the number of cases started to increase in Oulu, and the current recommendations on remote work.

Rovaniemi

![Figure 4. Change in visits to workplaces compared with the baseline in Rovaniemi. The baseline (dashed line) is the median day value for the corresponding day of the week during the 5-week period from January 3 to February 6, 2020. Source: Google Community Mobility Reports.](image)

2020: At the beginning of the COVID-19 pandemic, the number of visits to workplaces fell significantly, although the first drop in March is most likely due to the winter holiday. From mid-April to June visiting workplaces increased but then decreased again during the summer months. The number of visits began to increase starting from mid-July. Significant drop in October is due to the autumn holiday.
2021: The number of visits fell in March due to the winter holiday but increased then until June. Starting from June, the graphs for 2020 and 2021 are almost identical. As in 2020, people visited workplaces less during the summer months. The number of visits increased from mid-July to early September but started to decrease slightly towards the end of the year. Major drop in October is due to the autumn holiday. Currently the level is below that of last year, and people visit workplaces around 20% less compared with the baseline.

![Tromsø](image)

Figure 5. Change in visits to workplaces compared with the baseline in Tromsø. The baseline (dashed line) is the median day value for the corresponding day of the week during the 5-week period from January 3 to February 6, 2020. Source: Google Community Mobility Reports.

2020: At the beginning of the COVID-19 pandemic, the number of visits to workplaces fell significantly. From April, the development was directed steadily upwards towards the baseline until mid-June. After the drop during the summer months the number of visits started to increase again until November and turned then to a decrease for a while.
2021: The number of visits fluctuated starting from March and began to decrease again during the summer months. Drop in the beginning of April is because of the Easter holiday. Starting from mid-June, the development looks almost identical to what it was a year ago. The trend is downwards since mid-October, which is also the time when the number of new COVID-19 cases started to increase rapidly. Currently people are visiting workplaces around 25% less compared with the baseline and the Norwegian government has introduced a national recommendation for increased use of home offices in workplaces where possible.

Figure 6. Change in visits to workplaces compared with the baseline in Luleå. The baseline (dashed line) is the median day value for the corresponding day of the week during the 5-week period from January 3 to February 6, 2020. Source: Google Community Mobility Reports.

2020: At the beginning of the COVID-19 pandemic, the number of visits to workplaces fell significantly, but not as rapidly as in Oulu, Rovaniemi and Tromsø. From mid-April to June visits to workplaces increased but then decreased again during the
summer months. Starting from August, visits to workplaces increased significantly with some fluctuation in November. Drop in the early part of the month is due to autumn holiday.

2021: The number of visits to workplaces fluctuated from March to June partly due to public holidays. As in 2020, people visited workplaces less during the summer months. Starting from August, visiting workplaces has increased. The number of visits has not crossed the baseline level yet but has come close to it. People have visited workplaces more in 2021 than in 2020 since mid-April. The COVID-19 situation in Luleå is under control with few new cases. This can be one reason why people have returned to workplaces.

Figure 7. Change in visits to workplaces compared with the baseline in Umeå. The baseline (dashed line) is the median day value for the corresponding day of the week during the 5-week period from January 3 to February 6, 2020. Source: Google Community Mobility Reports.
2020: At the beginning of the COVID-19 pandemic, the number of visits to workplaces fell significantly, but not as rapidly as in Oulu, Rovaniemi and Tromsø. From mid-April to June visiting workplaces increased but then decreased again during the summer months. Starting from August, the visits increased quite steadily with some fluctuation in November. Drop in the early part of the month is due to the autumn holiday.

2021: The number of visits to workplaces fluctuated from March to June, at least partly due to the winter holiday and other public holidays. As in 2020, people visited workplaces less during the summer months. Starting from August, the number of visits has increased and is at a higher level than a year ago. Currently people in Umeå are visiting workplaces around 10% less compared with the baseline and the trend seems to be upwards. There are few new COVID-19 cases in Umeå and the situation seems to be under control, which partly explains why people have been able to return to workplaces.
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