

Xinavane visualizations

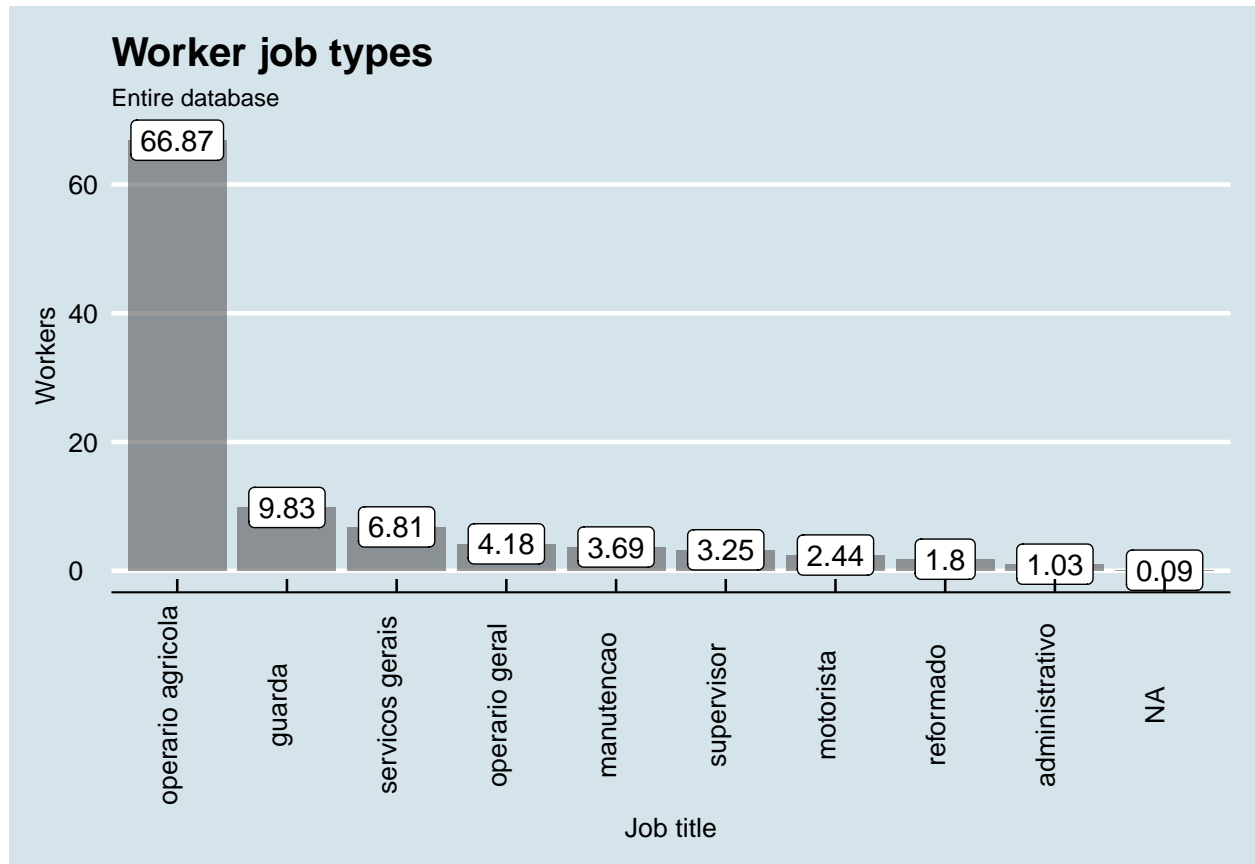
Joe Brew
Laia Cirera
Elisa Sicuri

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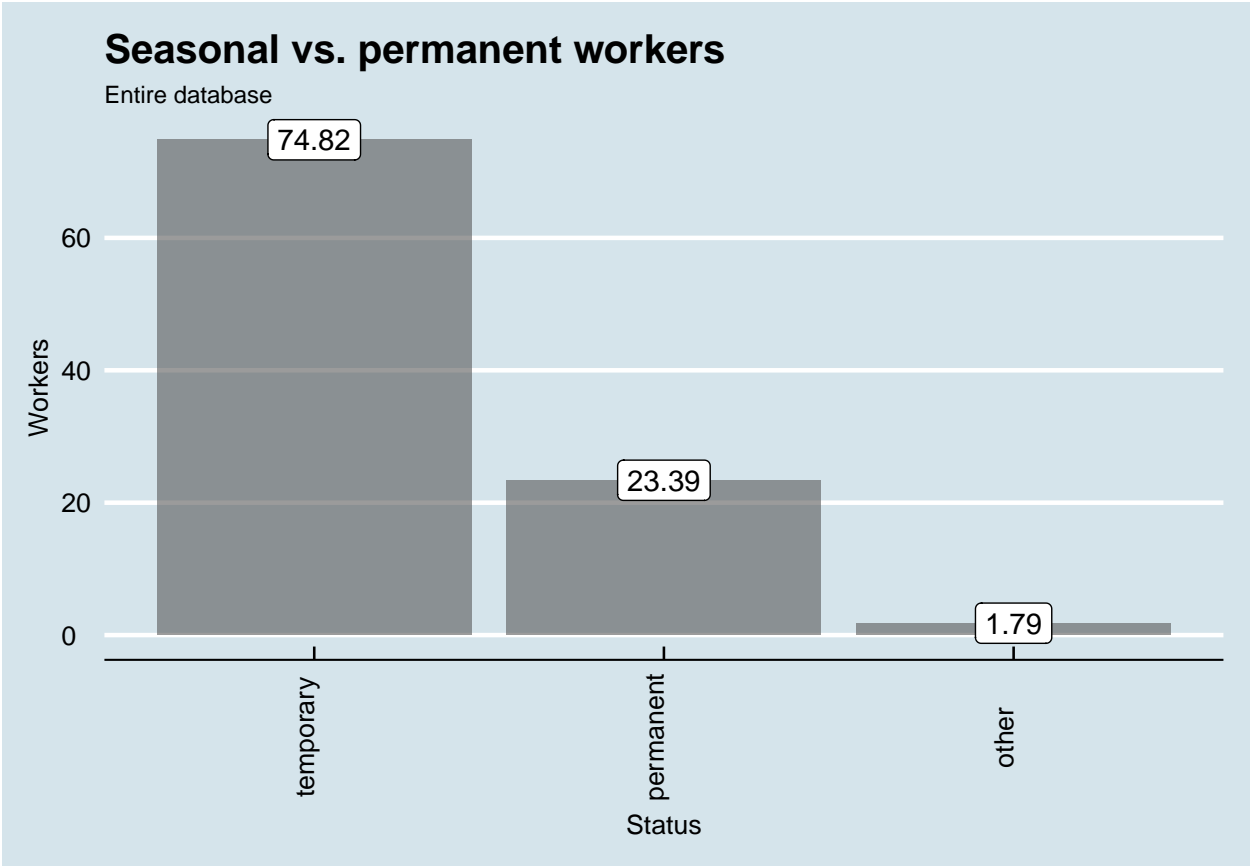
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Worker details

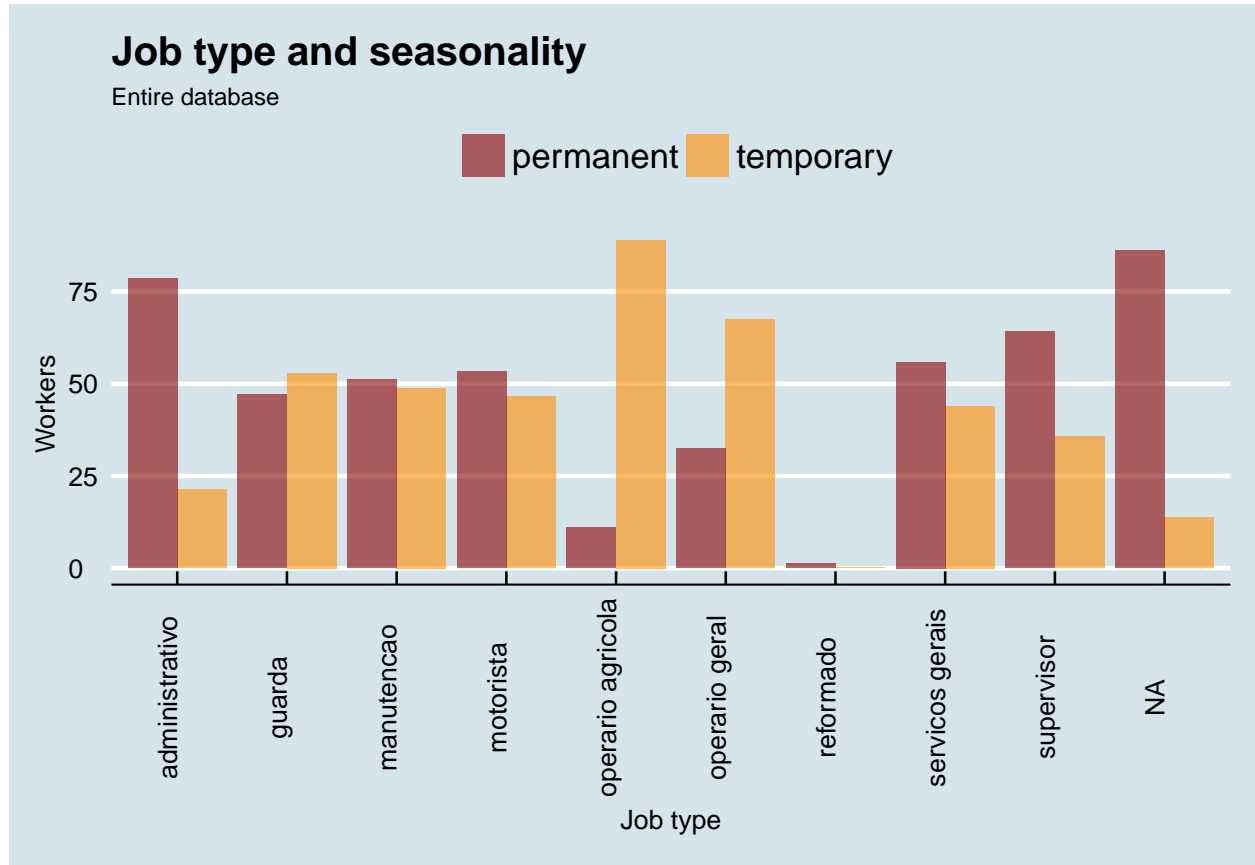
By job type



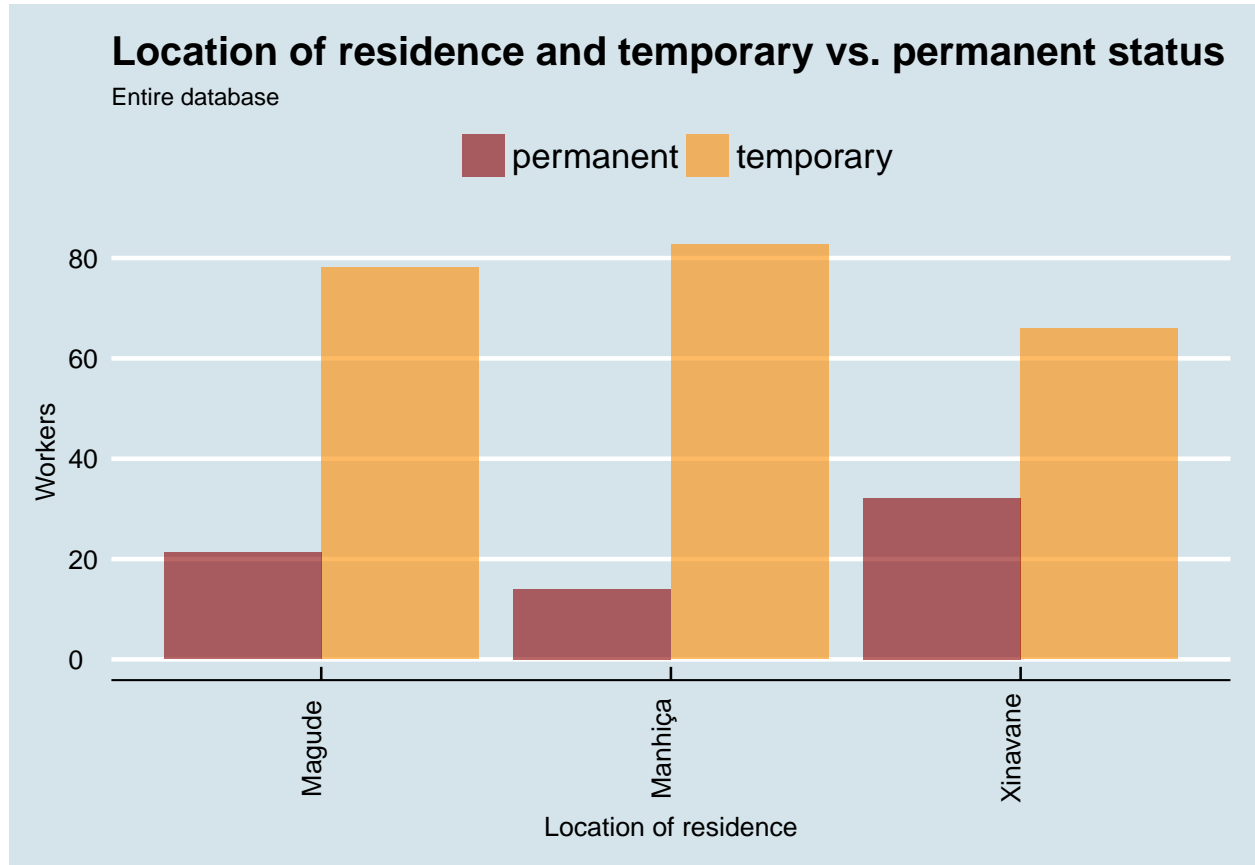
By temporary vs permanent status



By job type AND temporary vs. permanent status



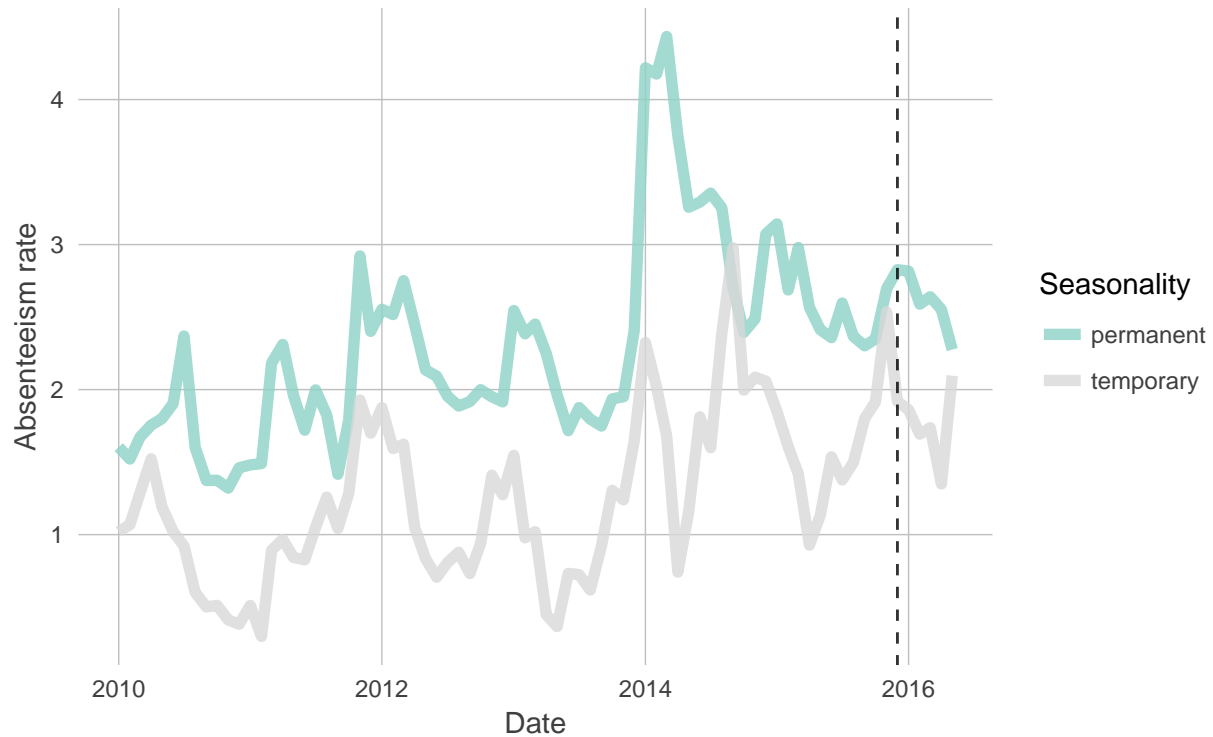
By seasonality and place of residence



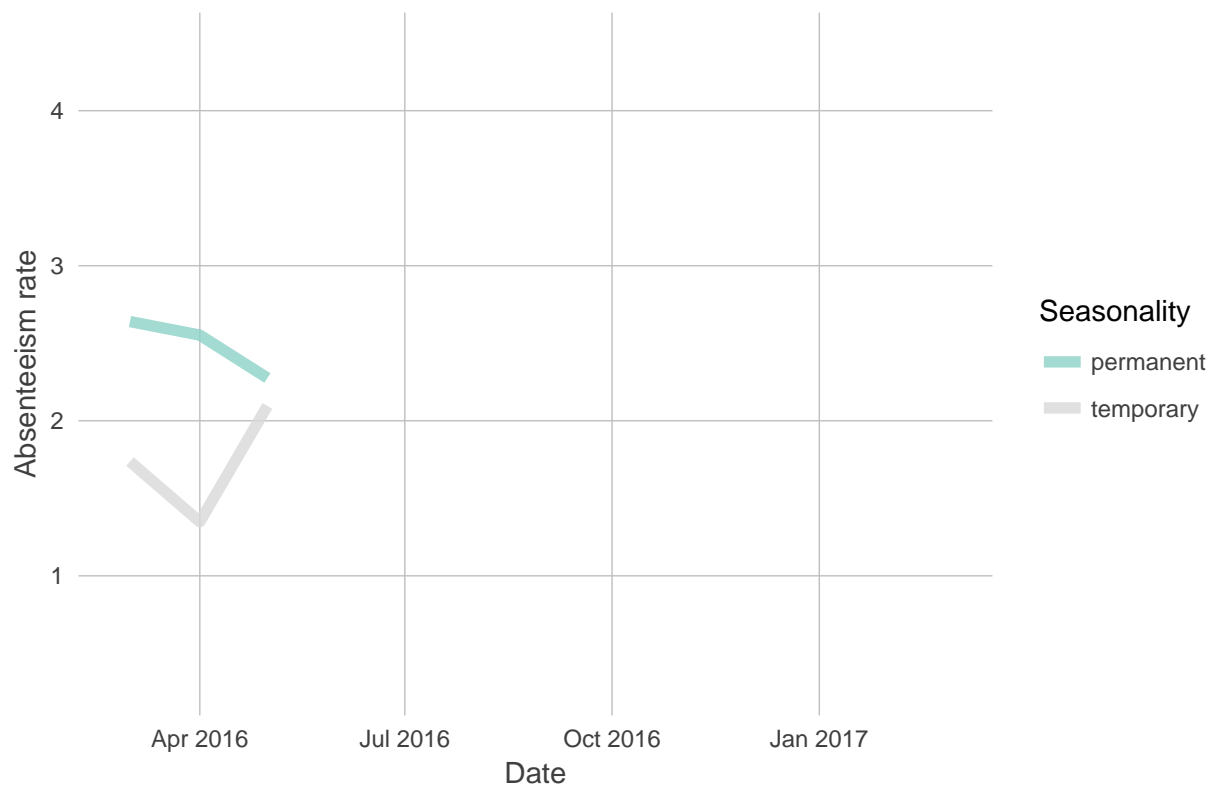
Absenteeism: permanent vs. temporary

Monthly crude absences

According to company records—based residential locations



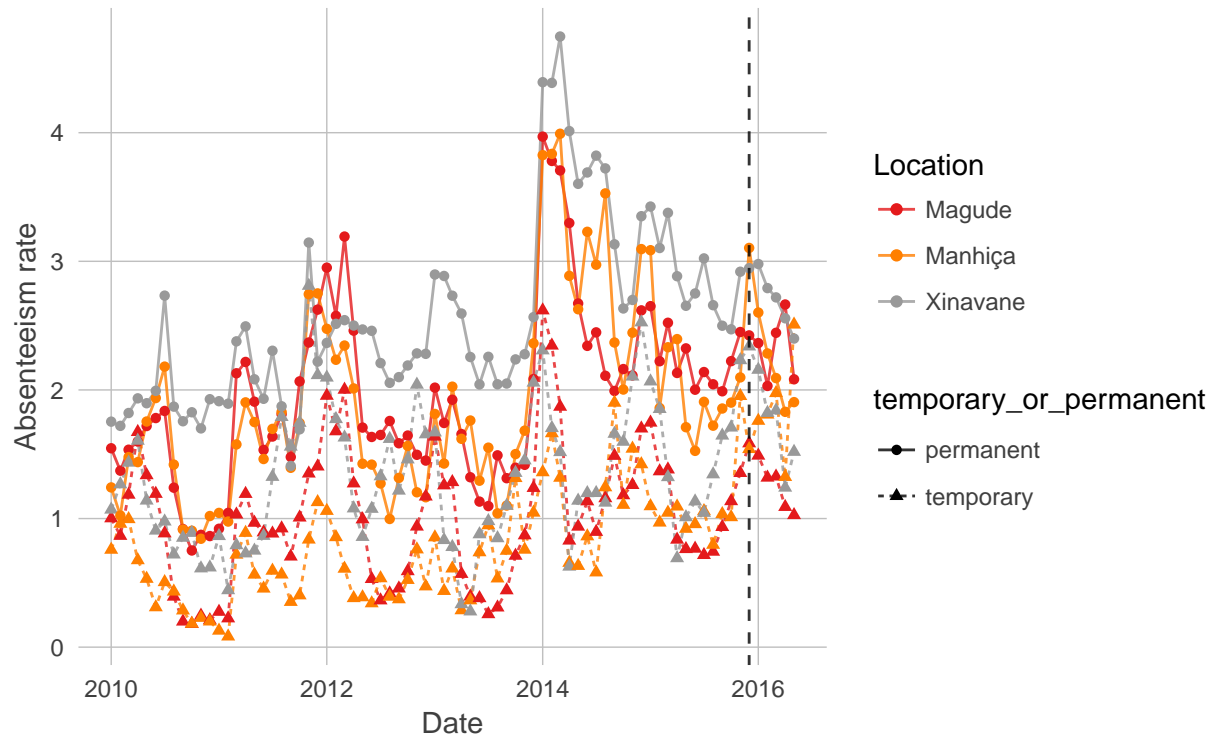
Zoom-in of above chart



Absenteeism: location and permanent vs. temporary

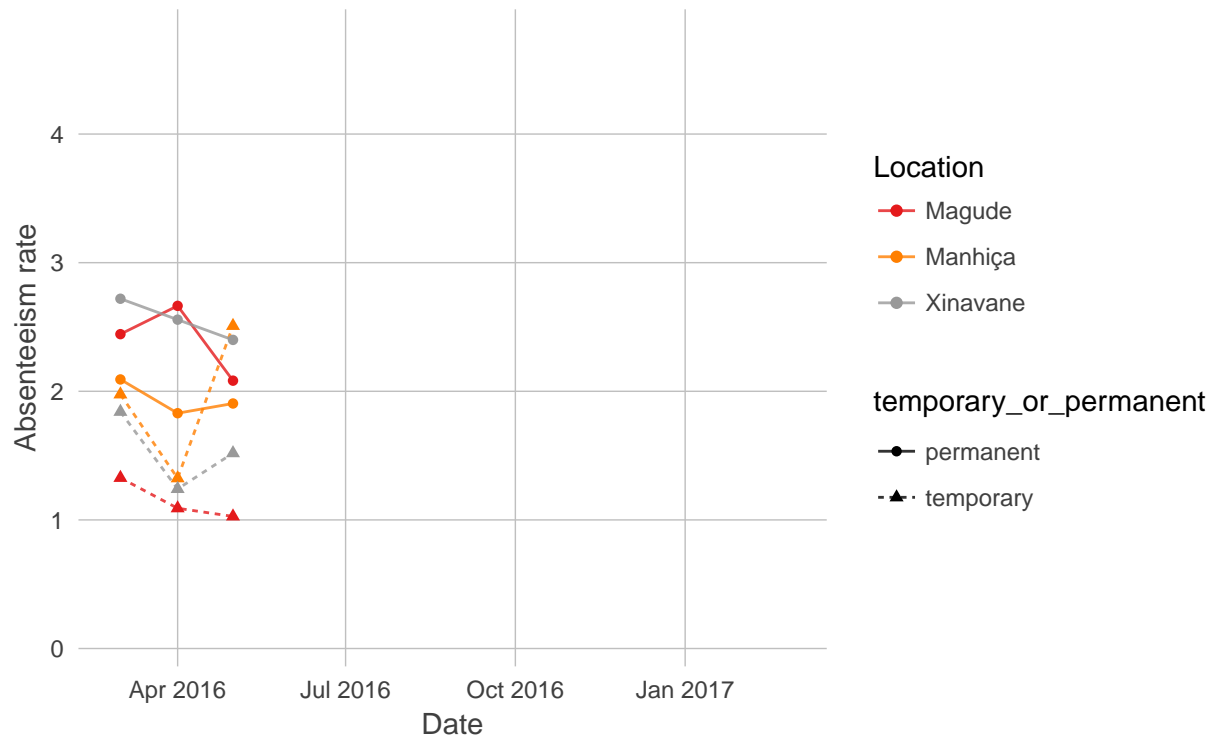
Monthly crude absences

According to company records–based residential locations



Monthly crude absences

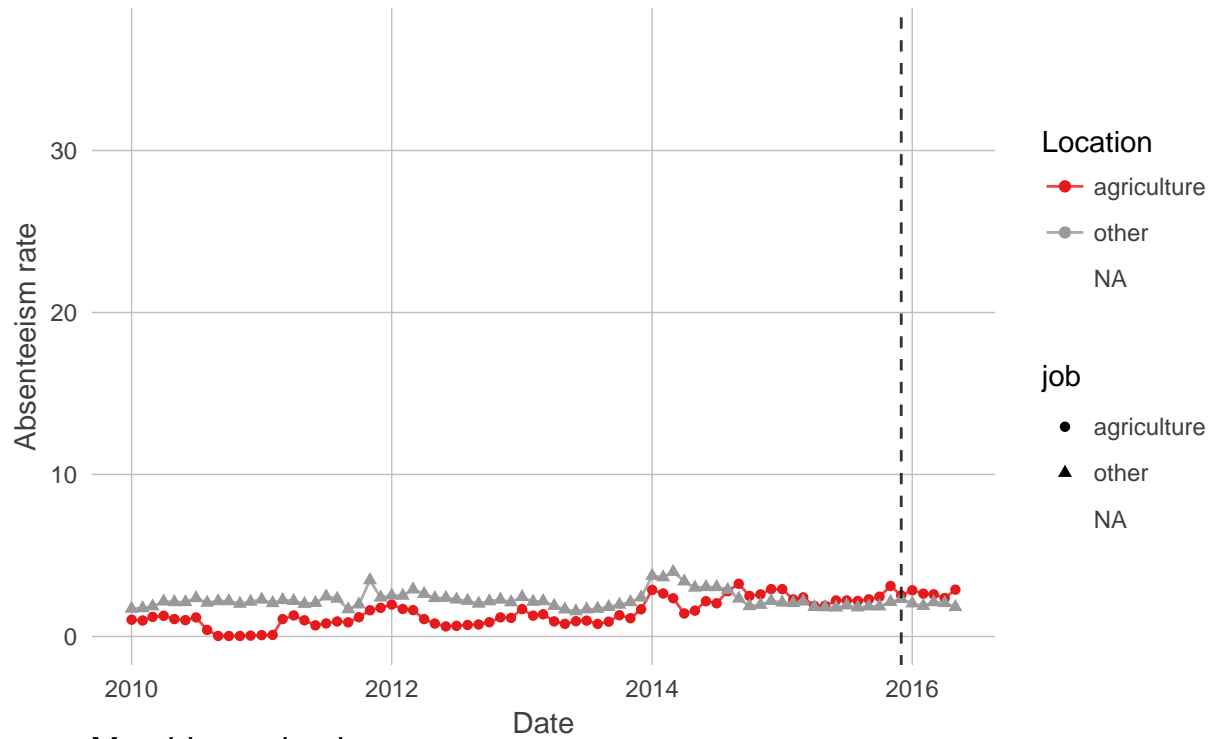
According to company records–based residential locations



Absenteeism:worker type

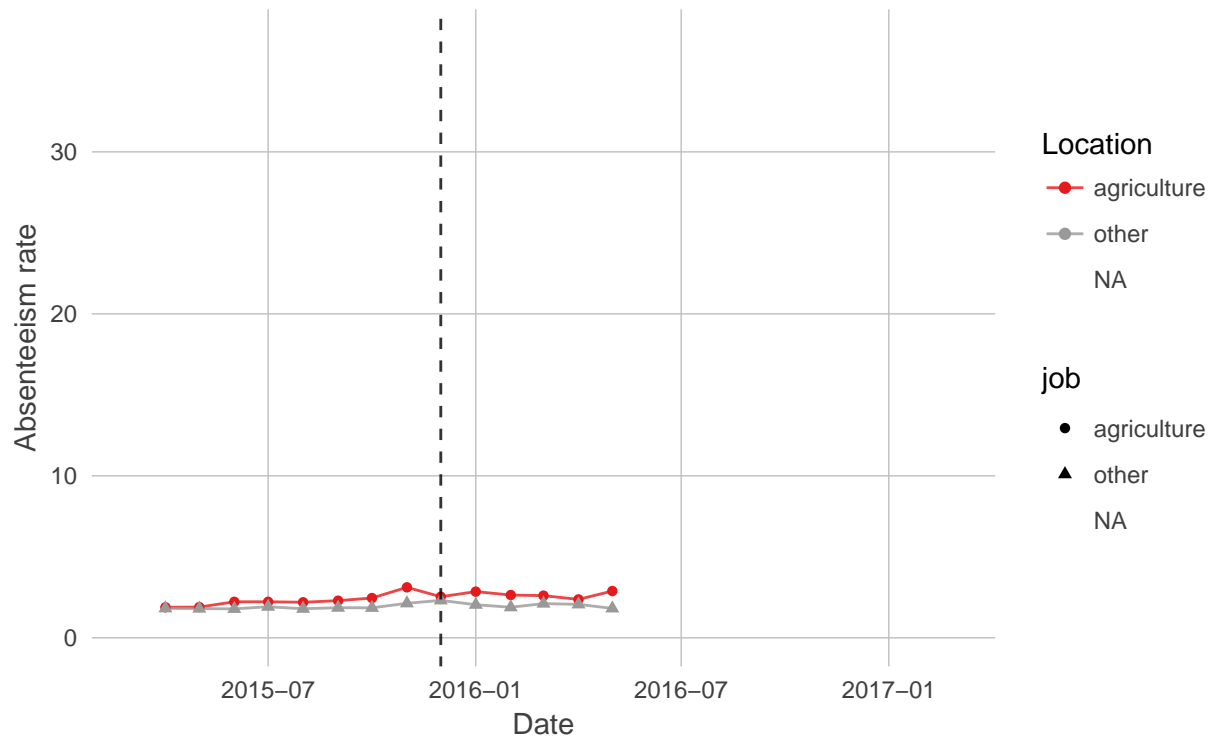
Monthly crude absences

According to company records–based residential locations



Monthly crude absences

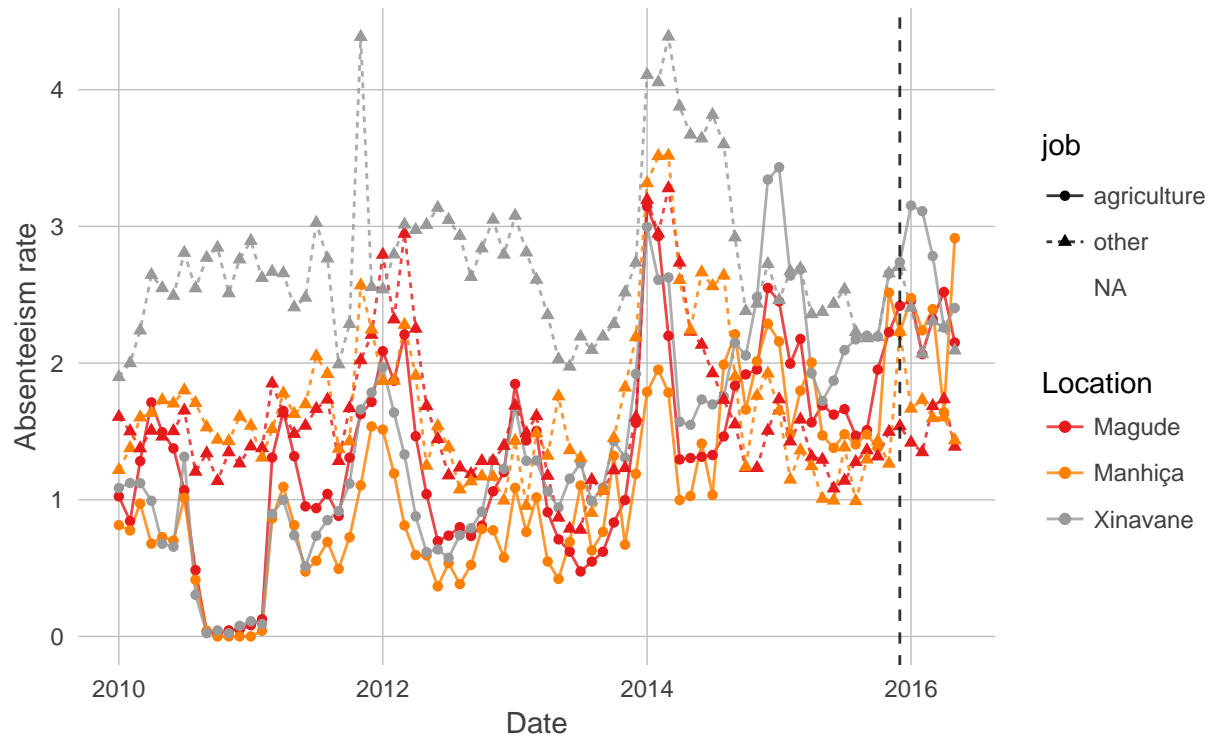
According to company records–based residential locations



Absenteeism: location and worker type

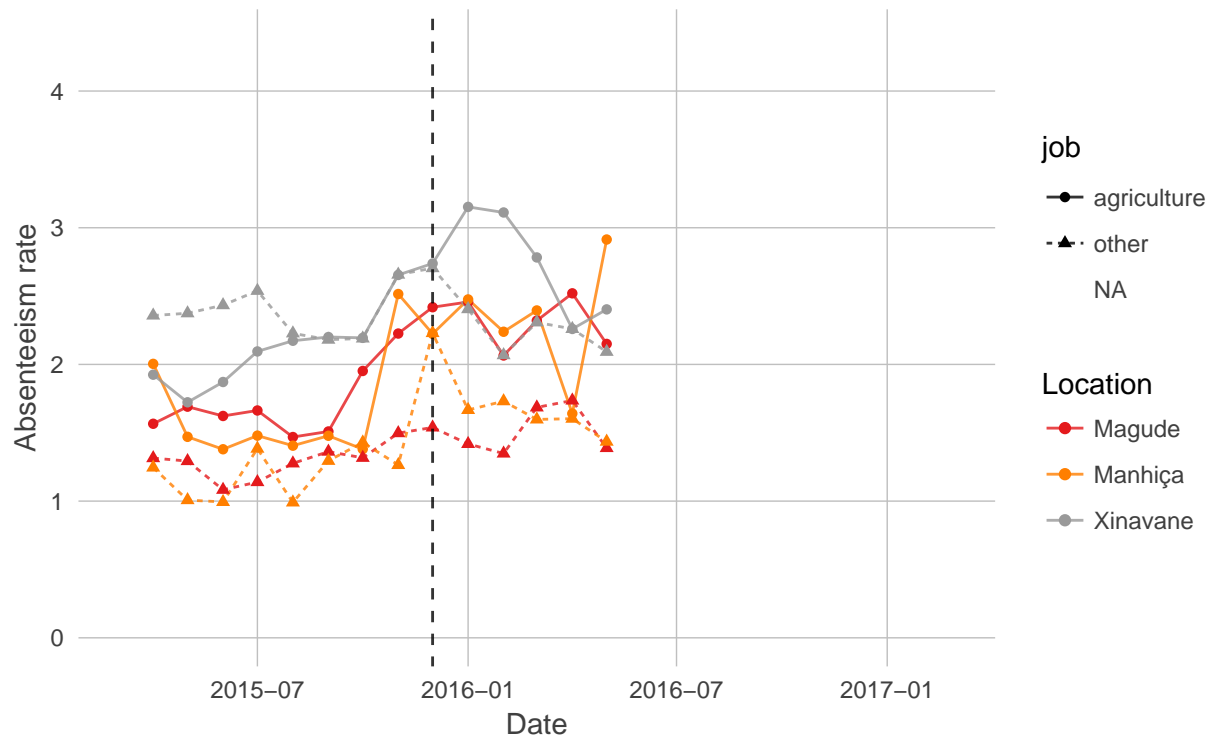
Monthly crude absences

According to company records—based residential locations



Monthly crude absences

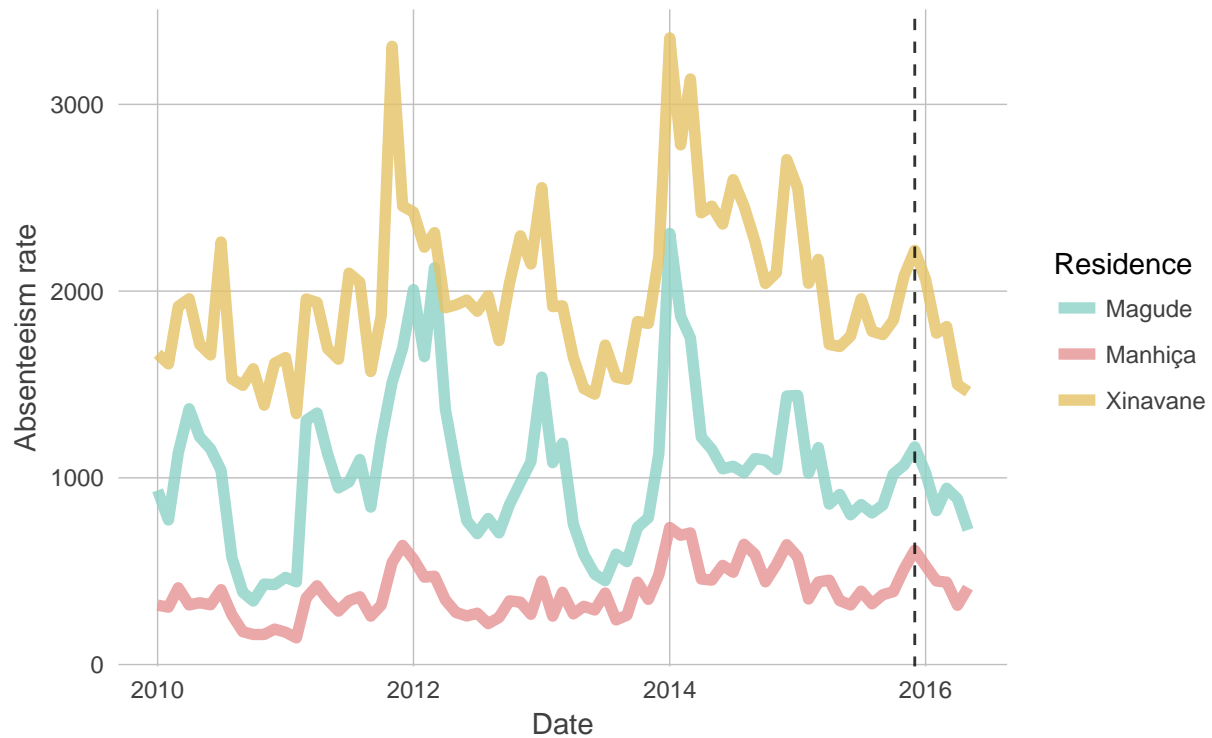
According to company records—based residential locations



Using days rather than rate

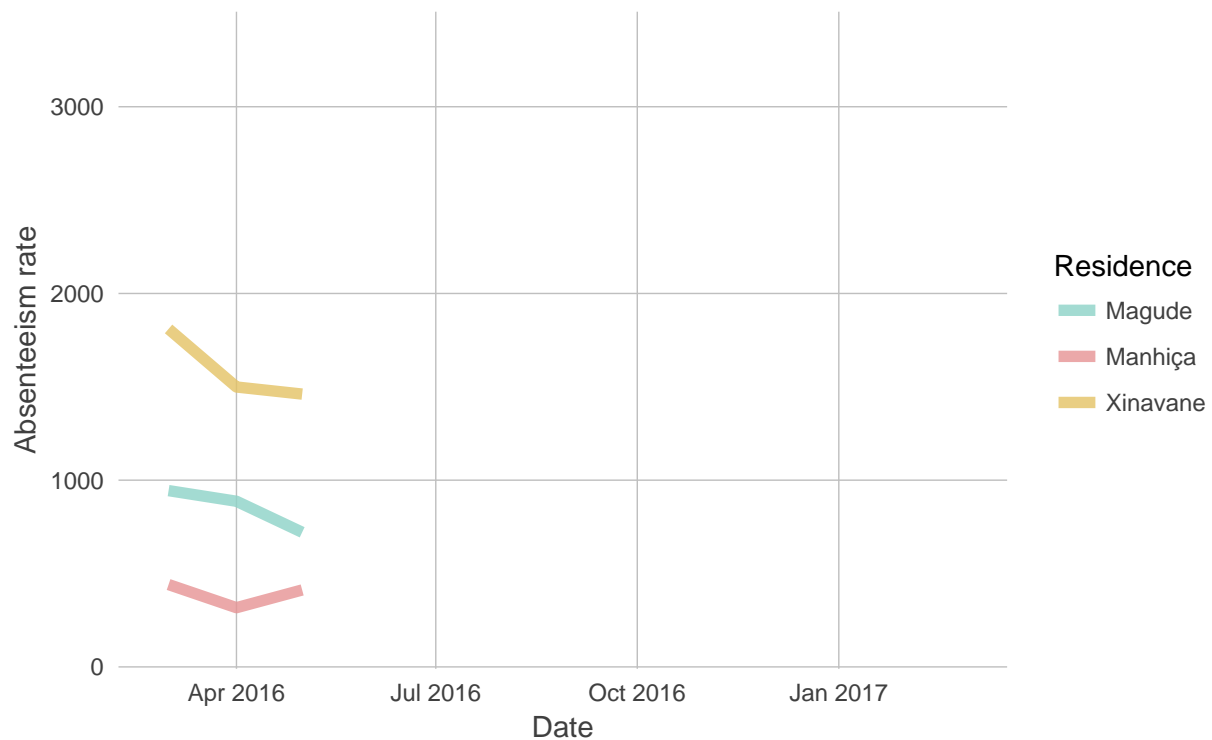
Monthly crude absences

According to company records–based residential locations



Monthly crude absences

According to company records–based residential locations



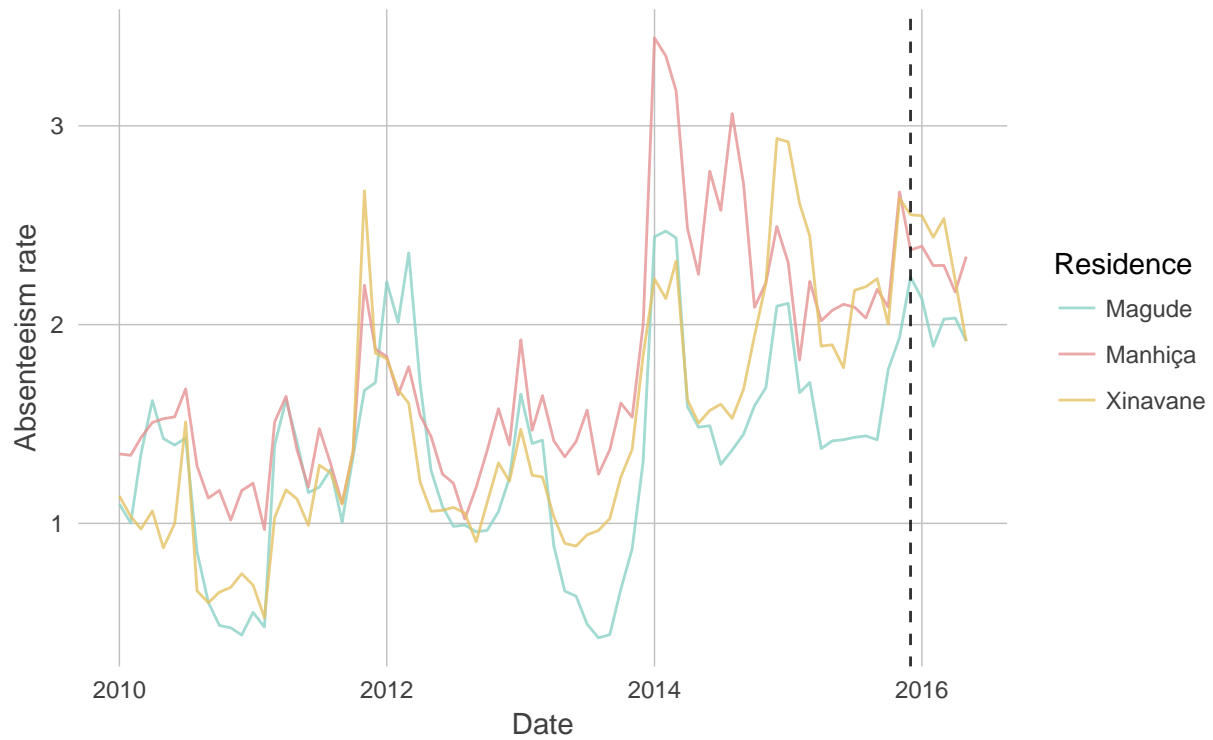
All absenteeism

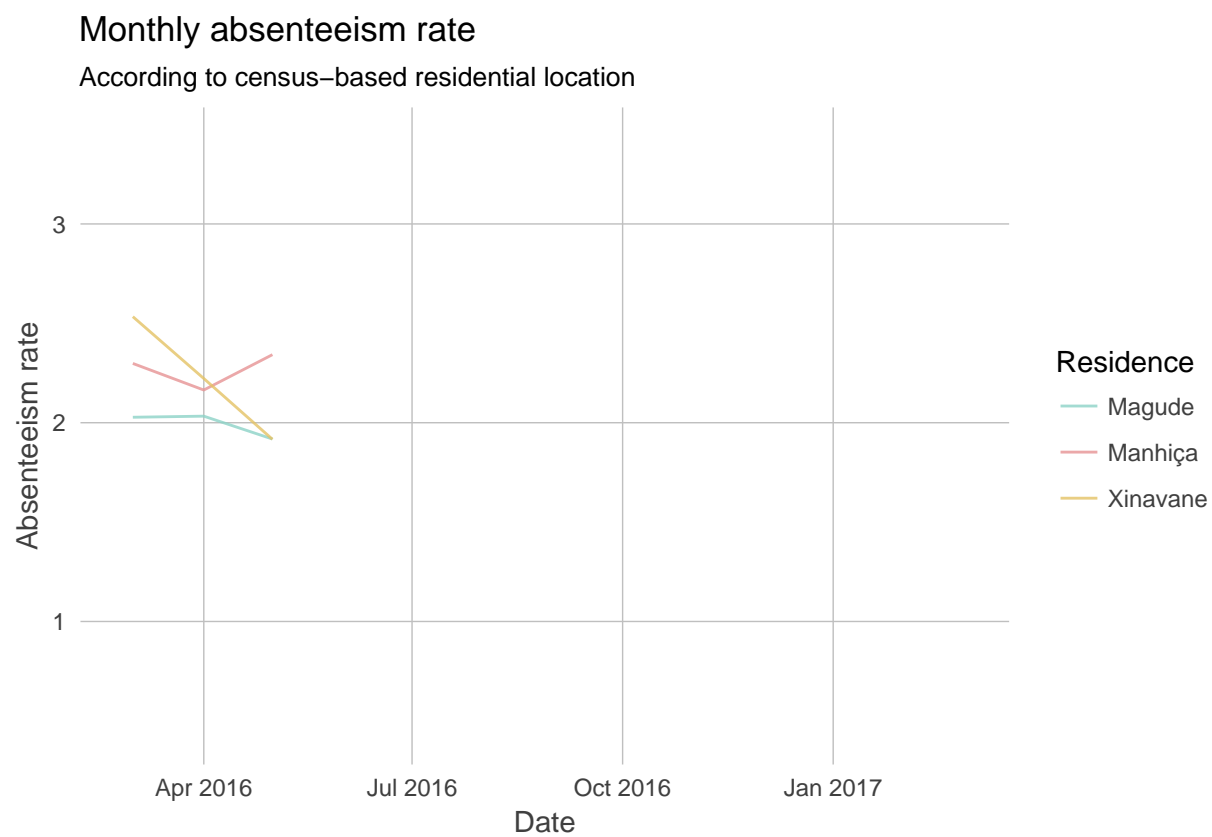
Absenteeism over time by place of residence

Using census-based locations

Monthly absenteeism rate

According to census-based residential location



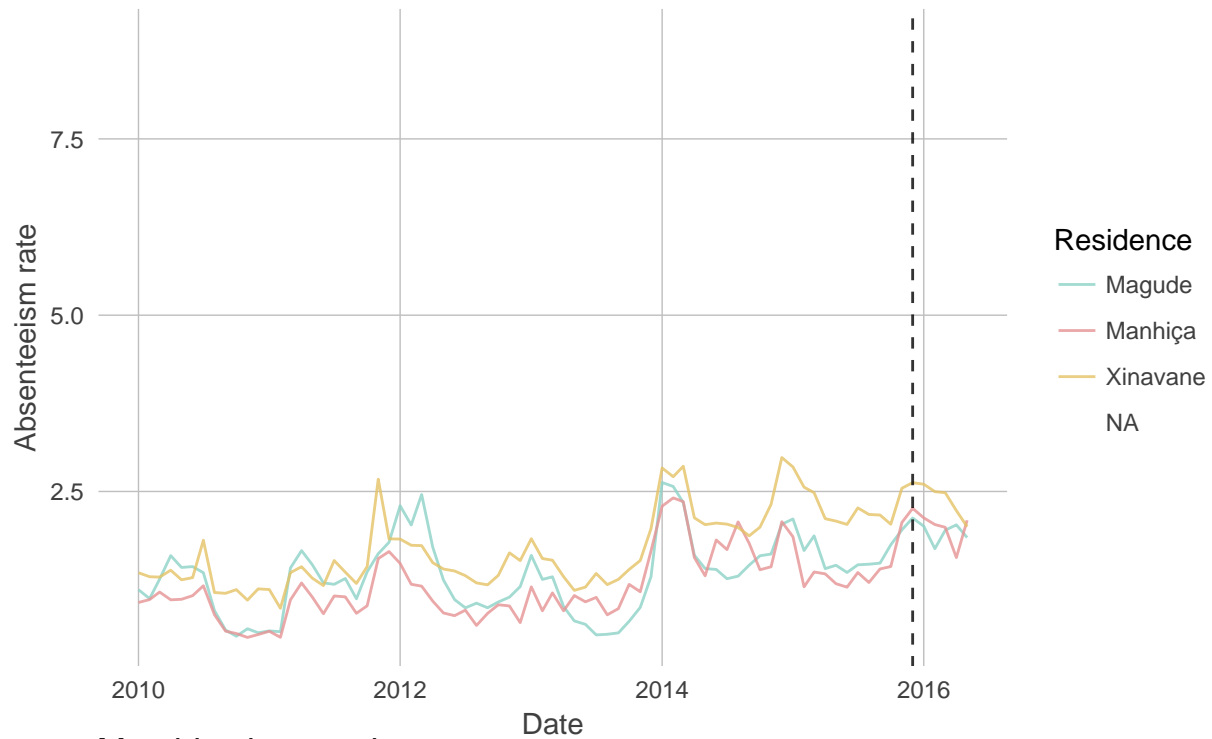


Below is a table of the same data.

Using company-based locations

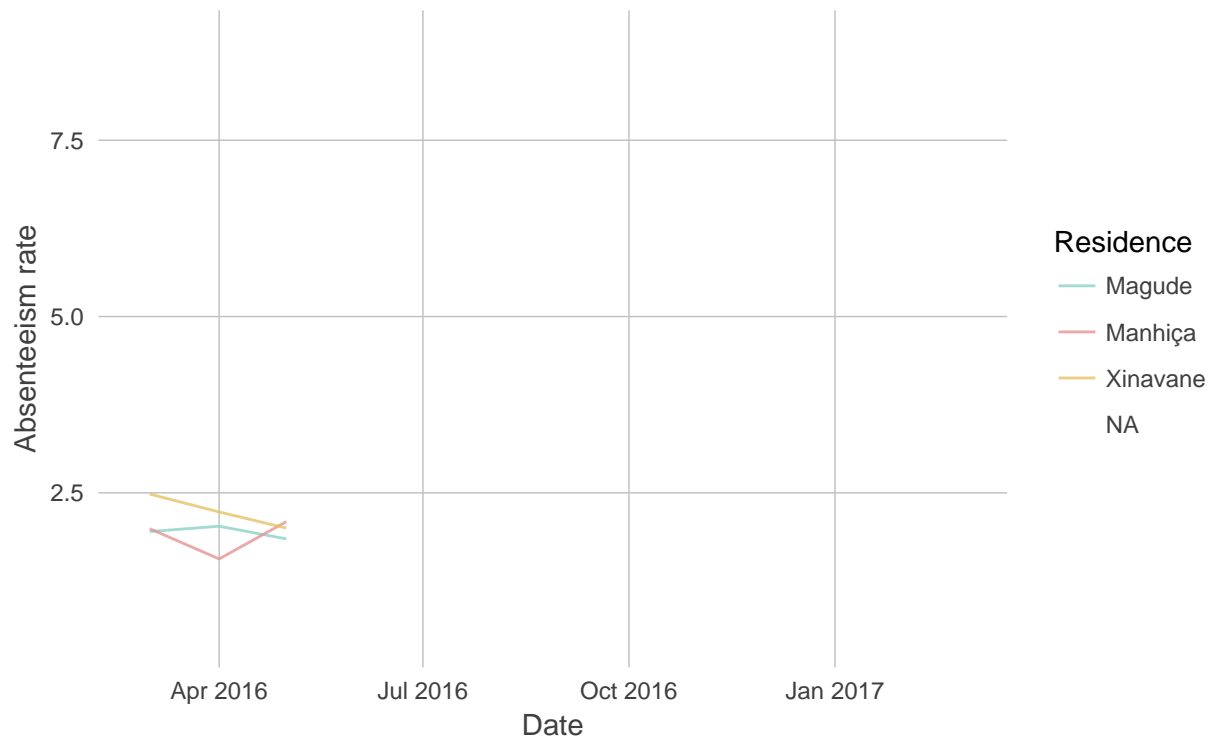
Monthly absenteeism rate

According to company records-based residential locations



Monthly absenteeism rate

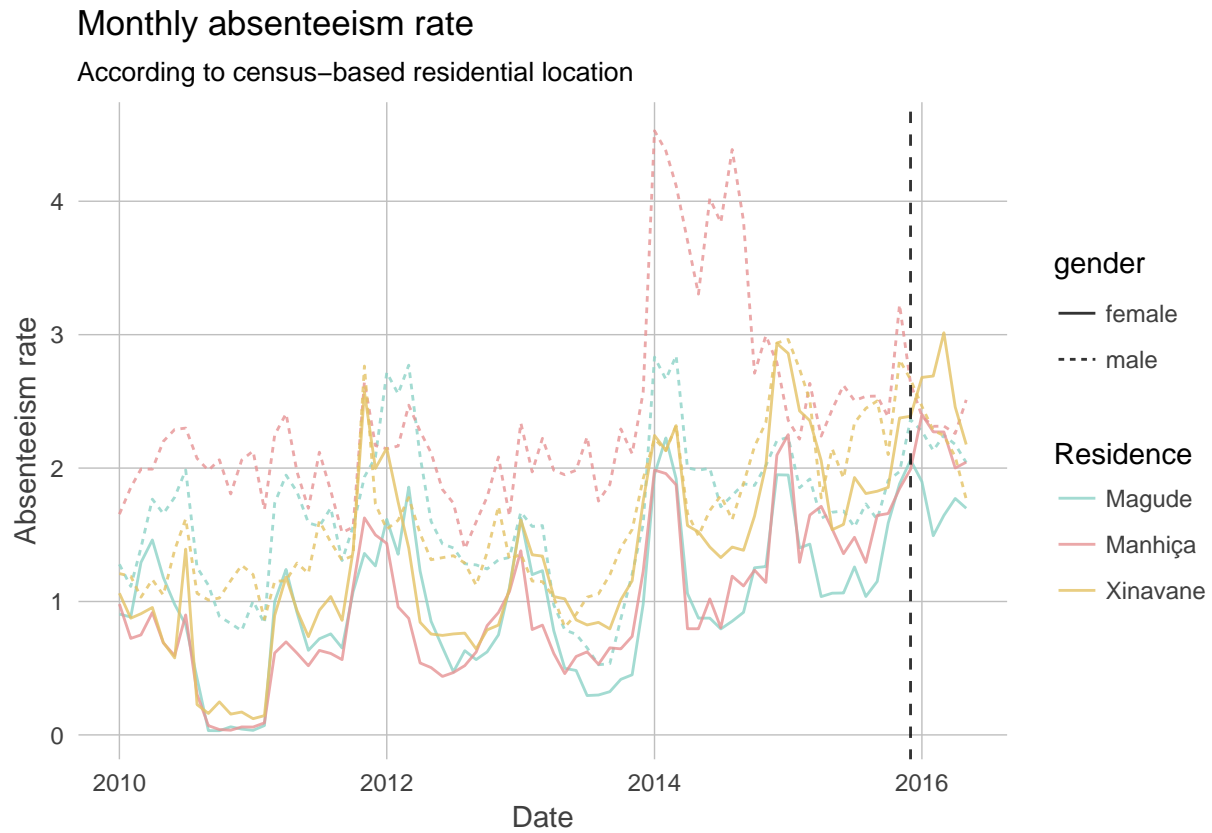
According to company records-based residential locations

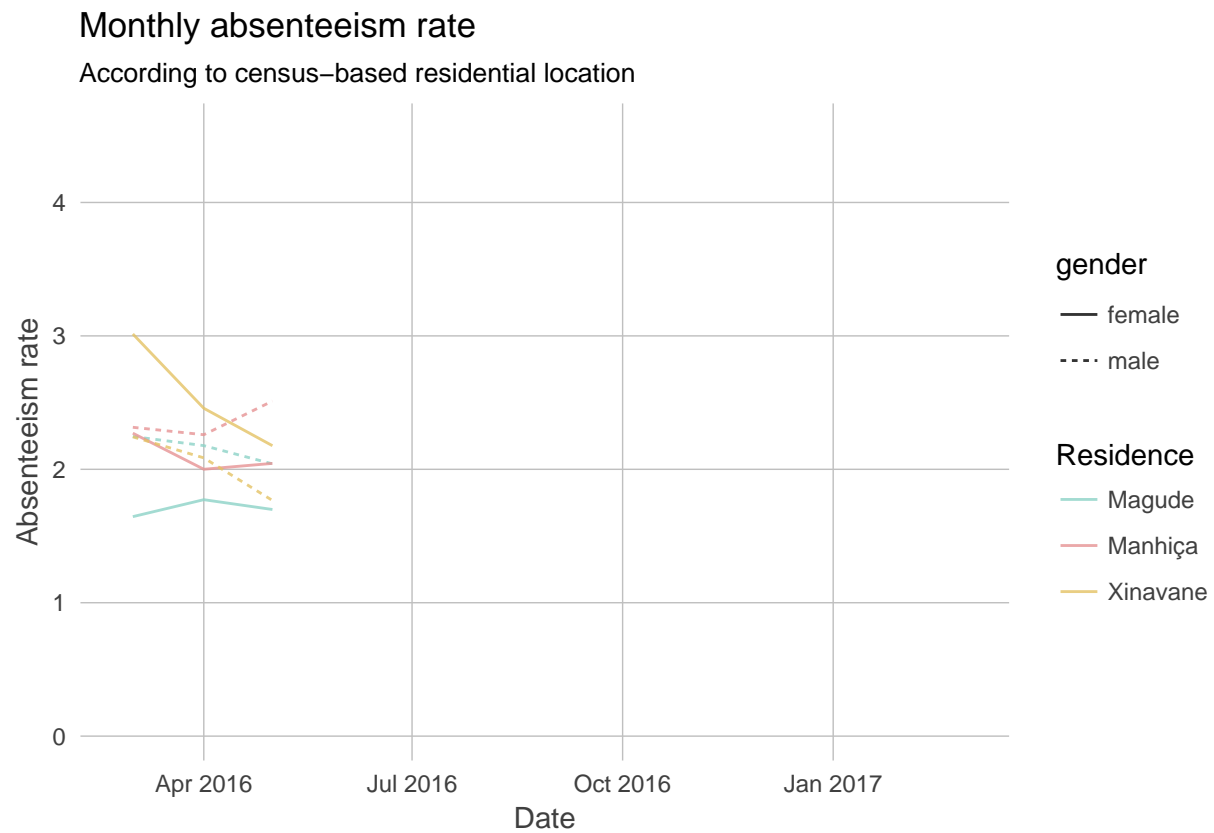


Below is a table of the same data.

Absenteeism over time by place of residence and sex

Using census-based locations



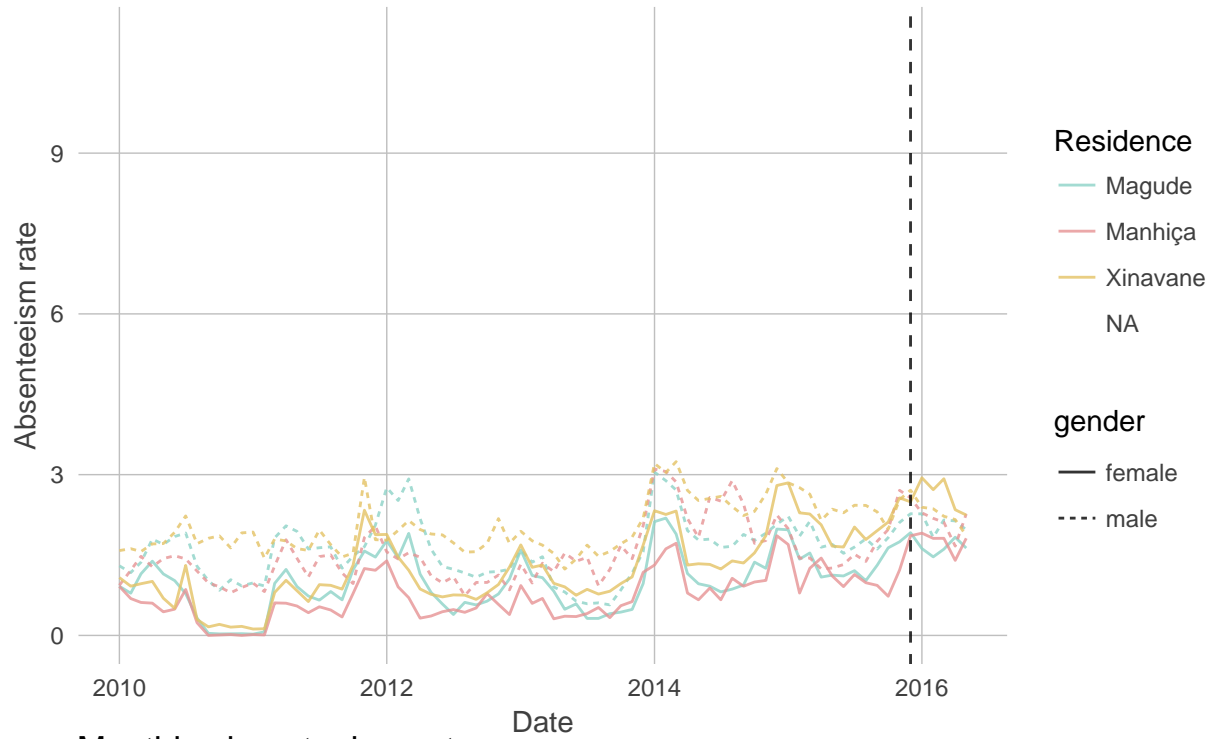


Below is a table of the same data.

Using company-based locations

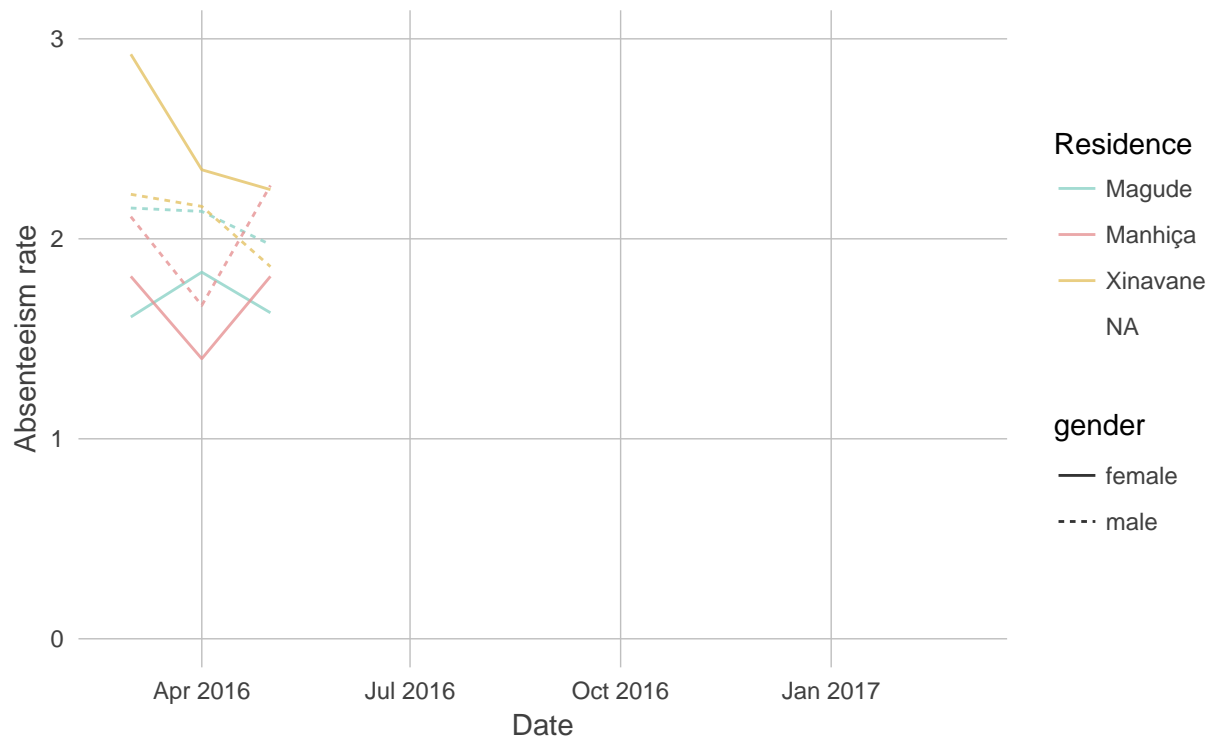
Monthly absenteeism rate

According to company records—based residential locations



Monthly absenteeism rate

According to company records—based residential locations



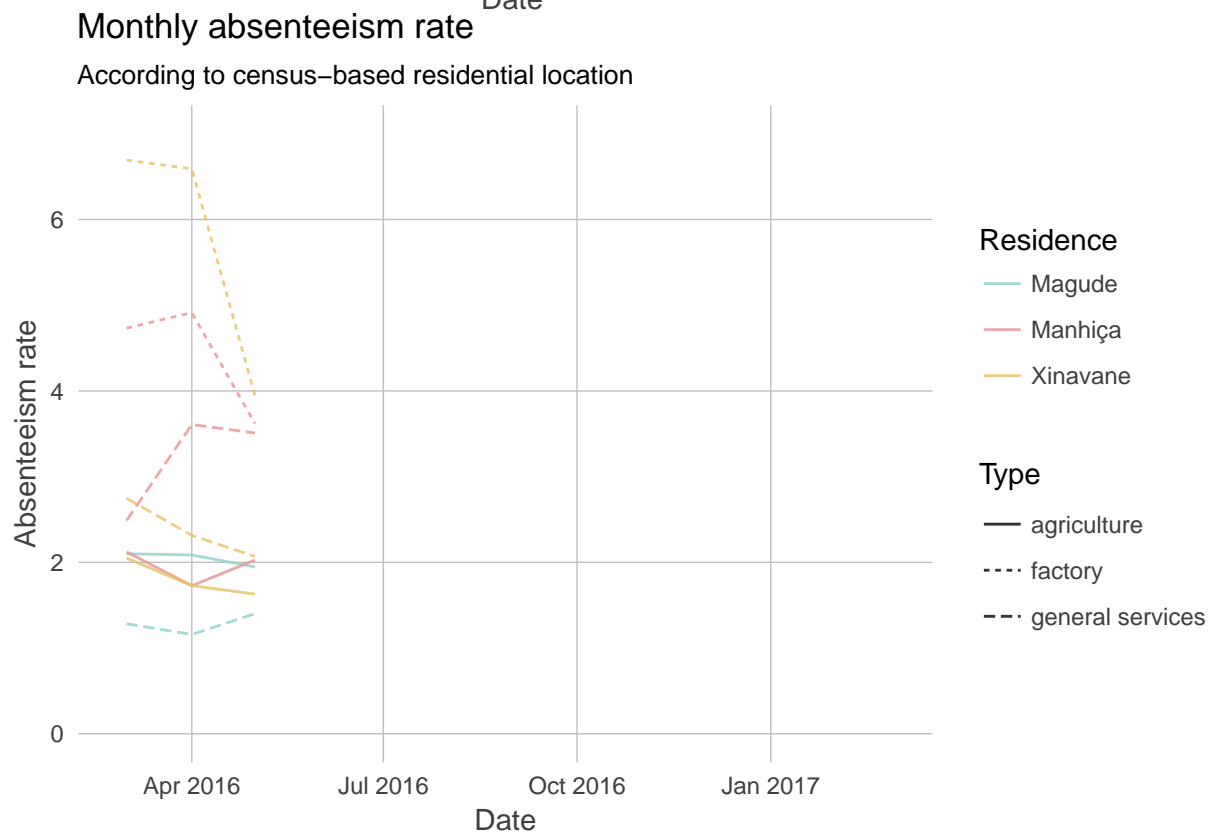
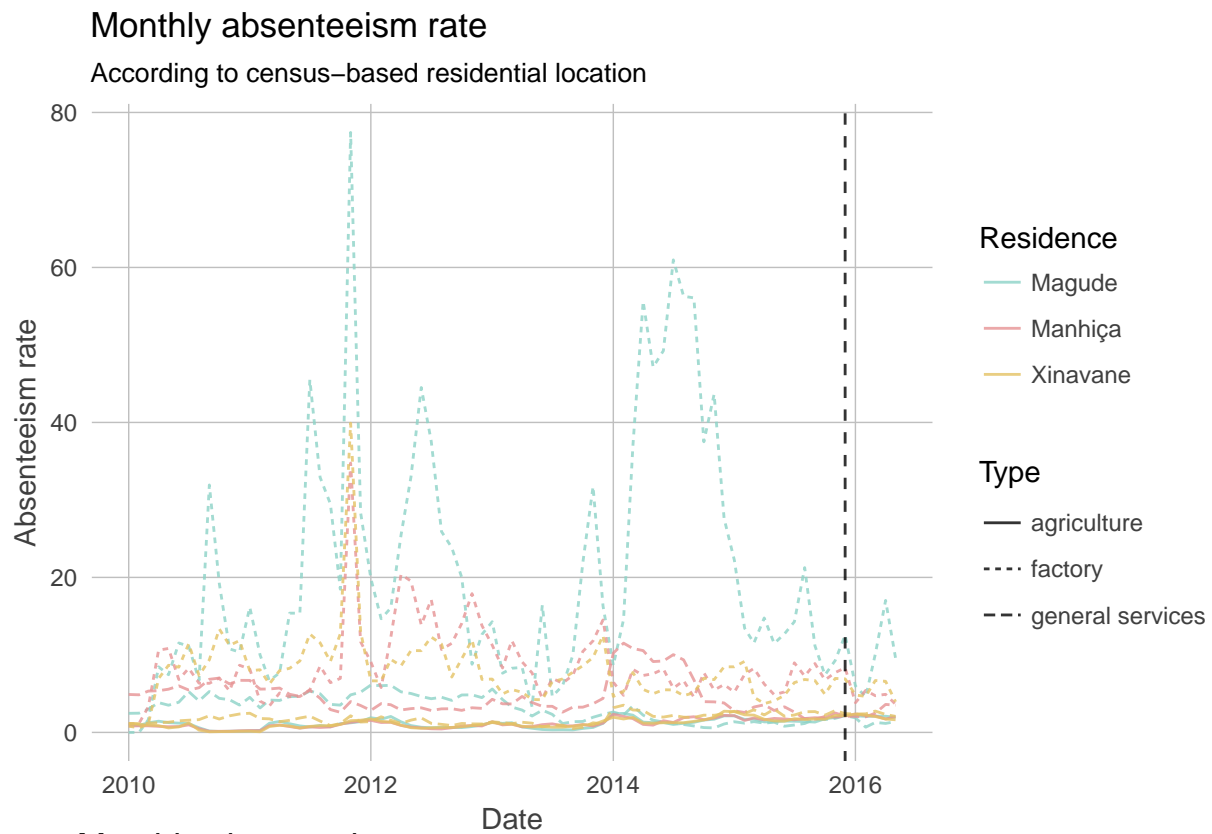
Below is a table of the same data.

Absenteeism over time by place of residence and seasonal vs. permanent status

Not possible. <2% of all workers are classified as permanent or not; the rest are missing.

Absenteeism over time by place of residence and worker type

Using census-based locations

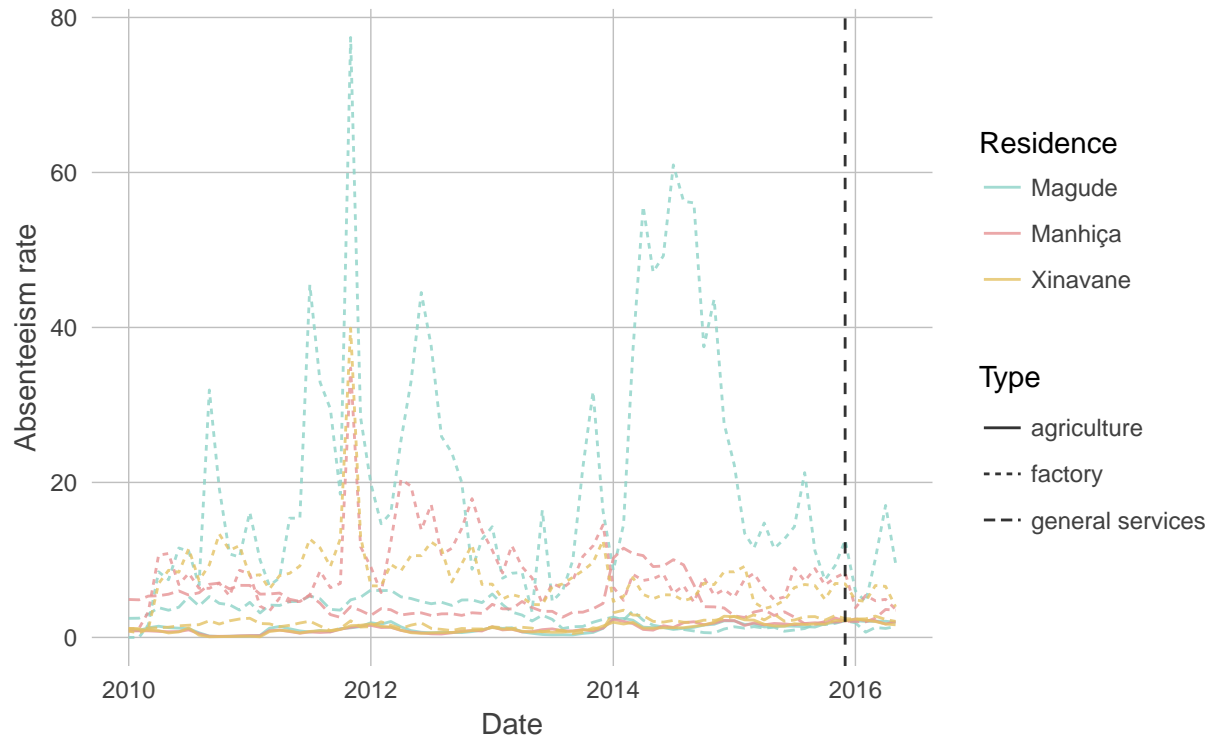


Below is a table of the same data.

Using company-based locations

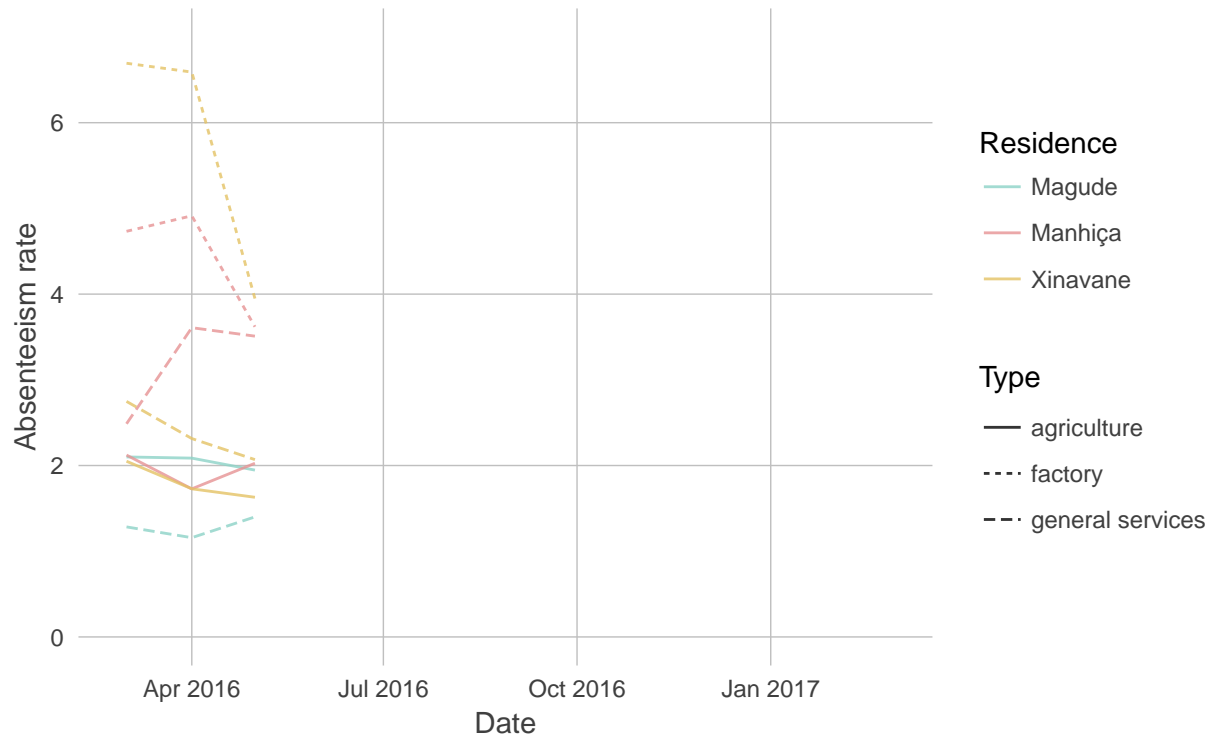
Monthly absenteeism rate

According to company records–based residential locations



Monthly absenteeism rate

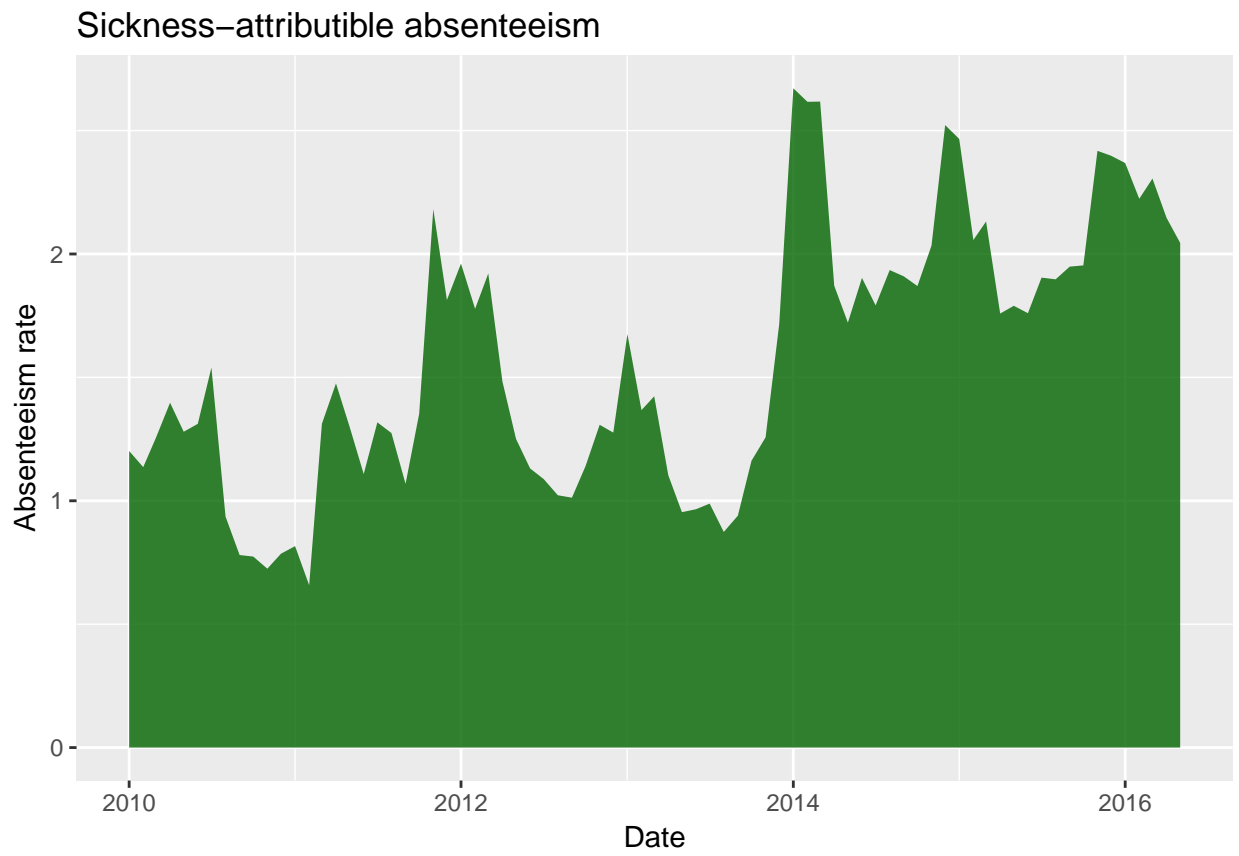
According to company records—based residential locations



Below is a table of the same data.

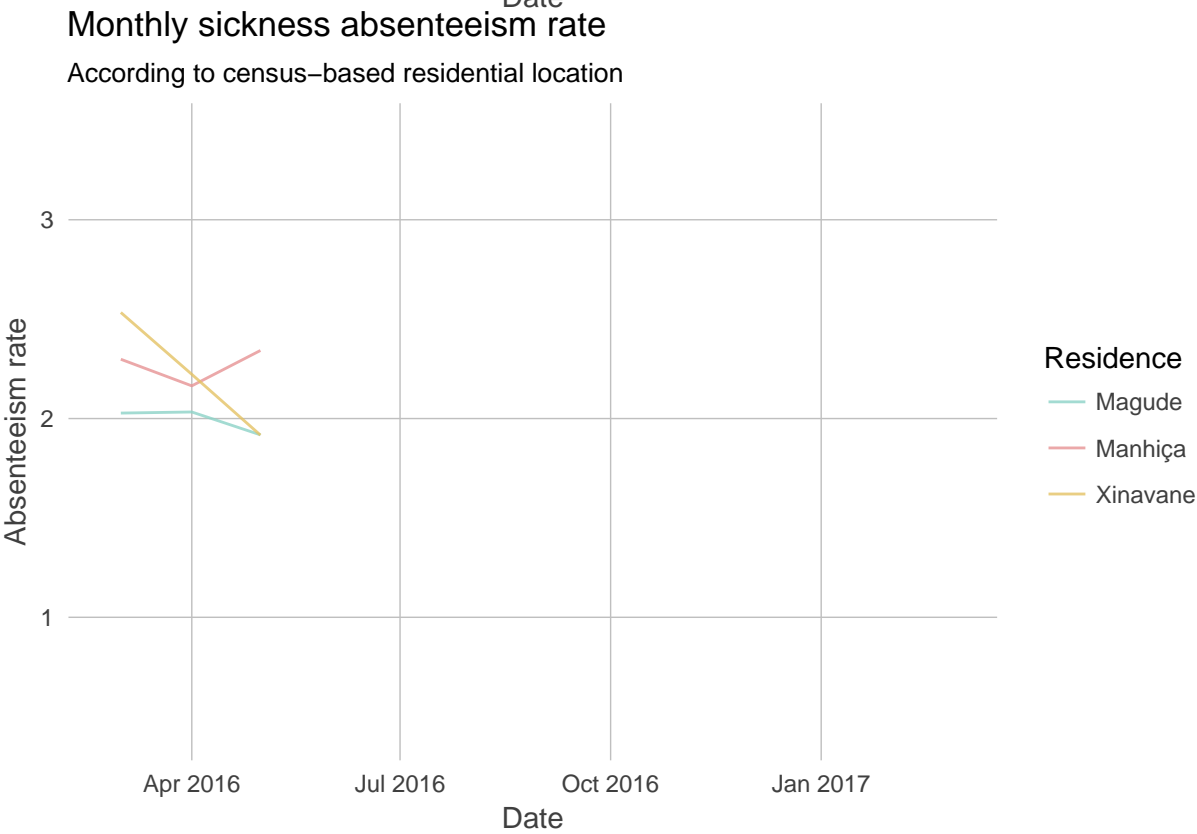
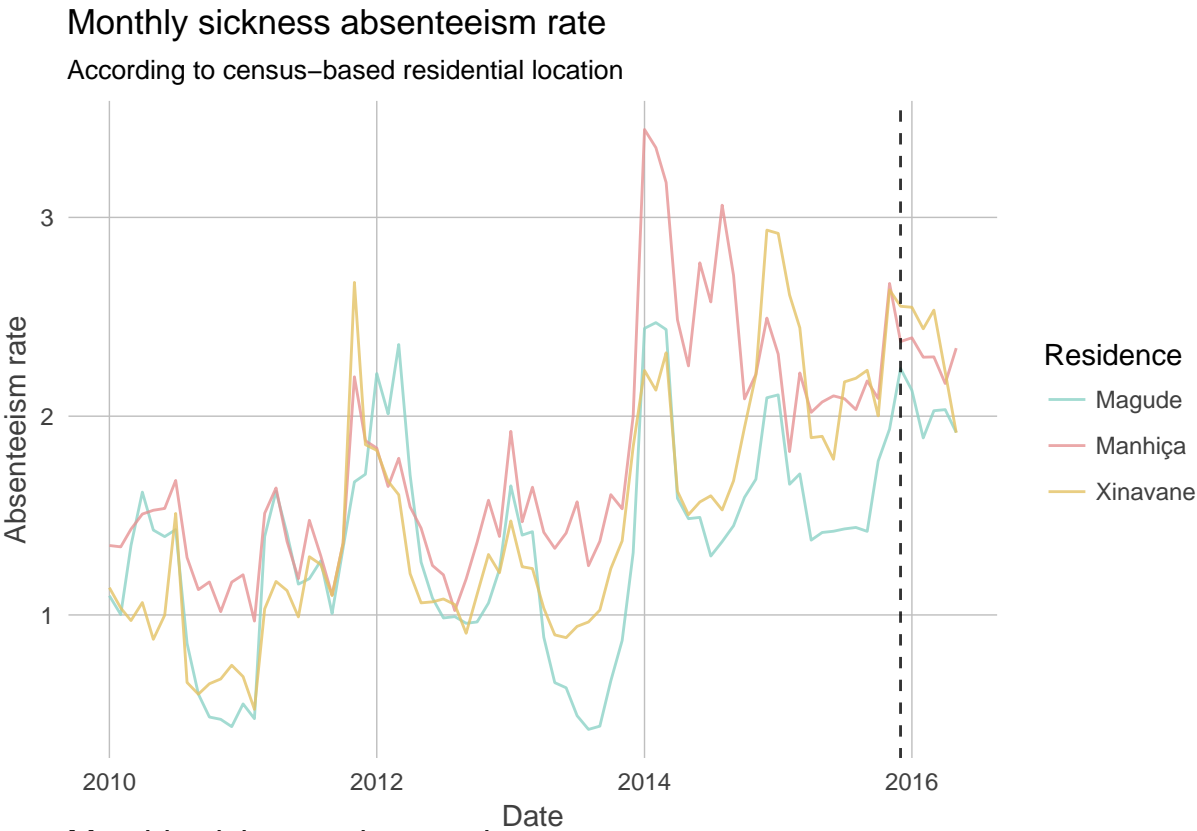
Sickness-only absenteeism

What follows are the same charts and tables, but only for sickness-attributable absenteeism. Note, these data may not be reliable prior to 2014, when it appeared that sickness-attributable absenteeism was significantly lower than it has been for the last 3 years.



Sick absenteeism over time by place of residence

Using census-based locations

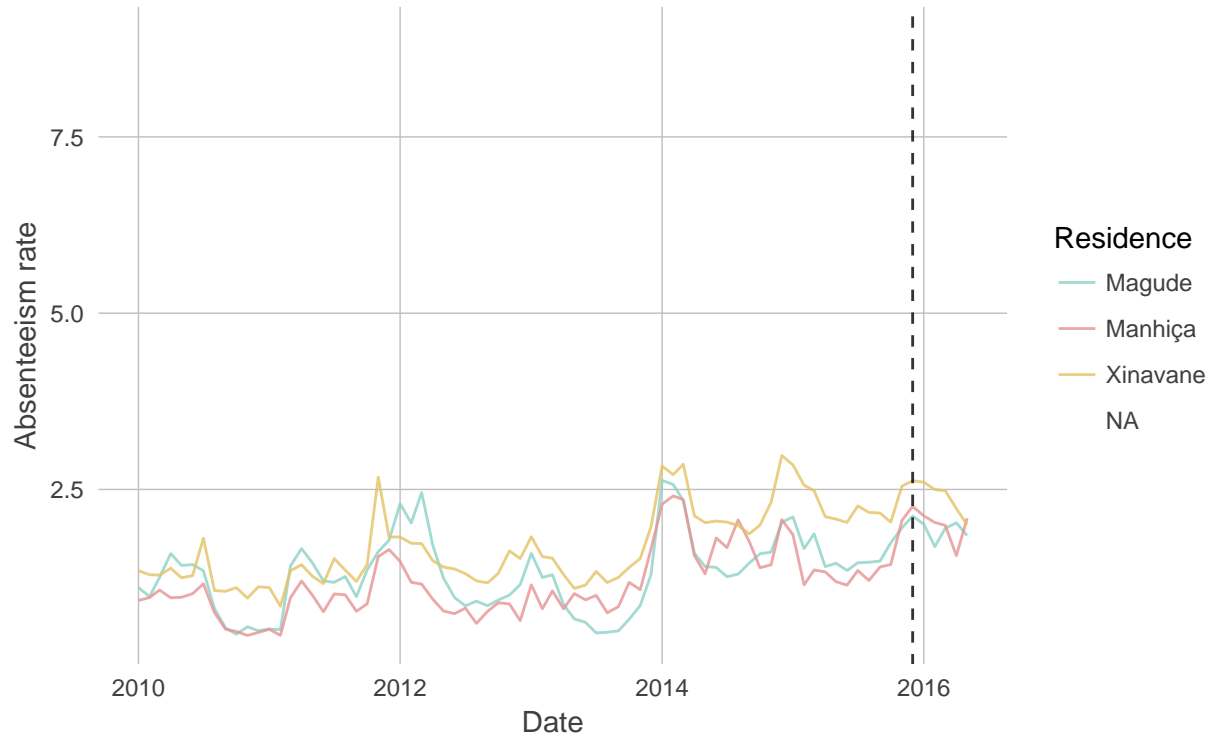


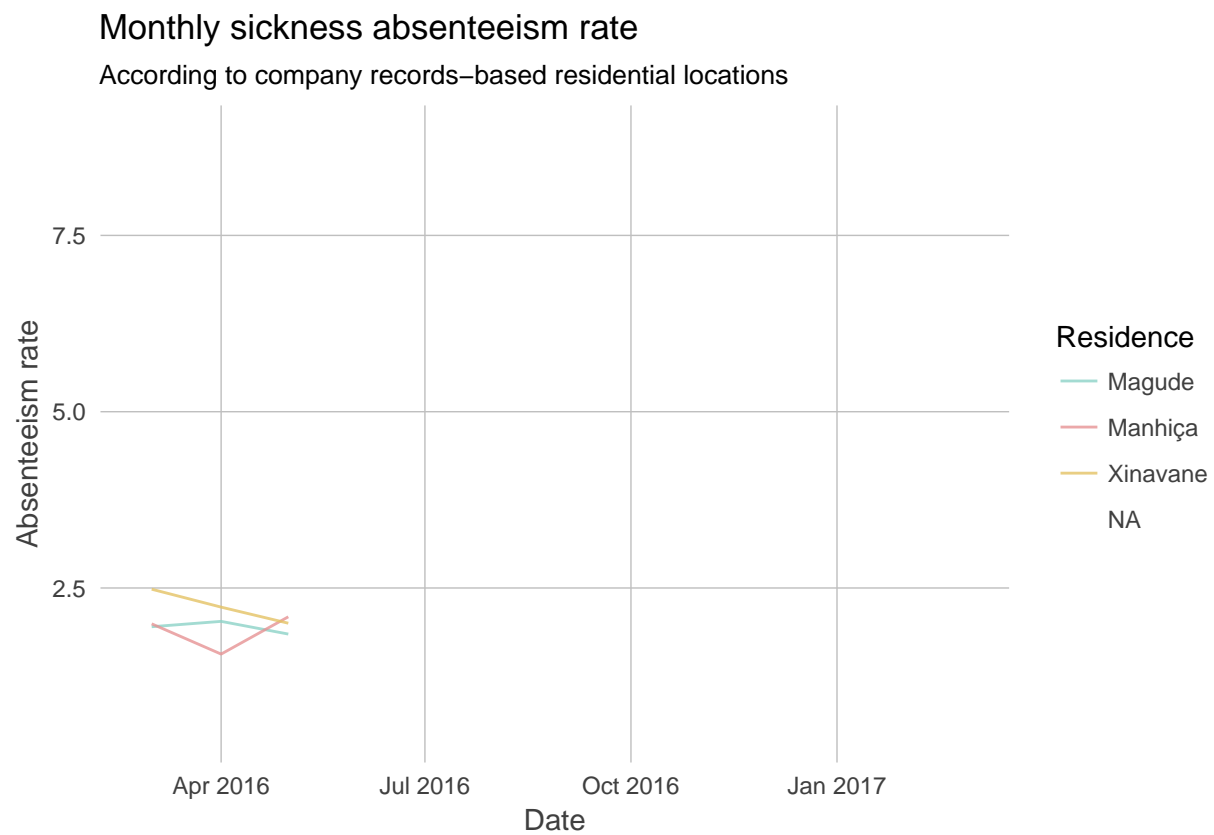
Below is a table of the same data.

Using company-based locations

Monthly sickness absenteeism rate

According to company records–based residential locations

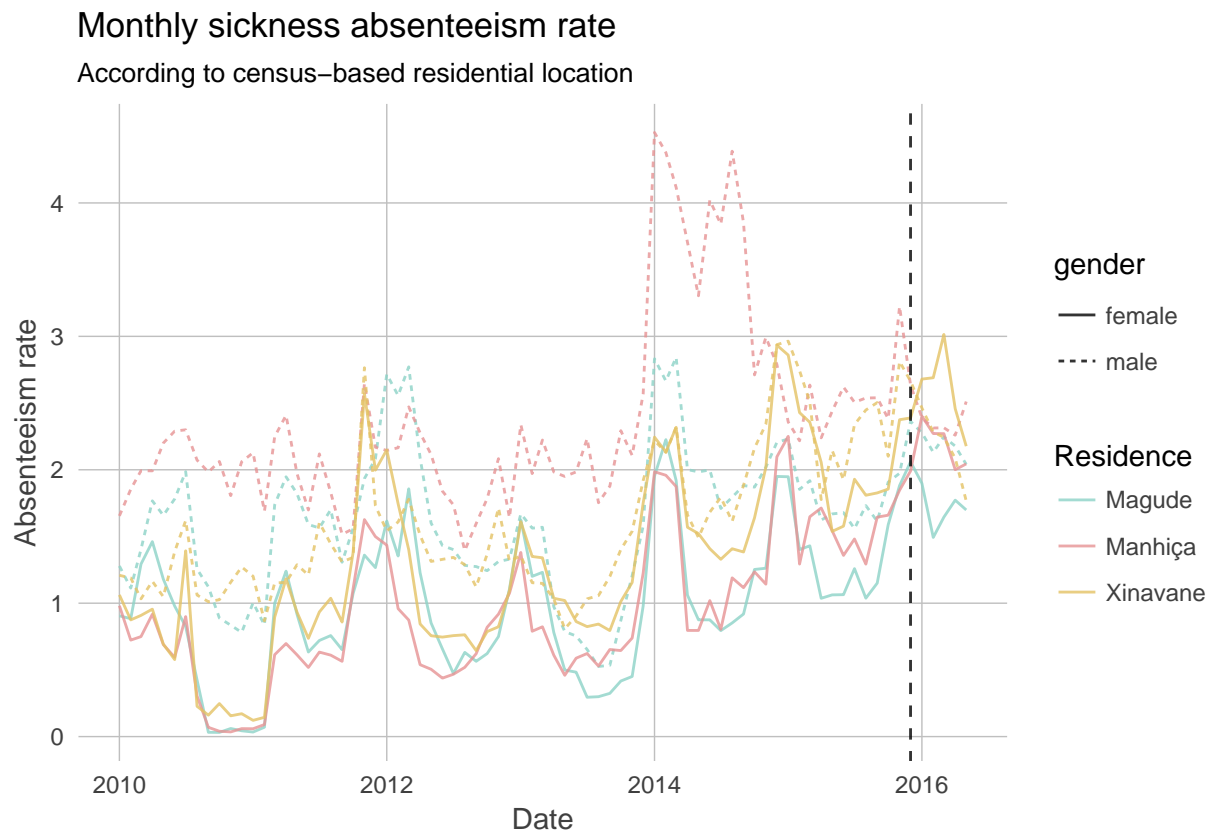


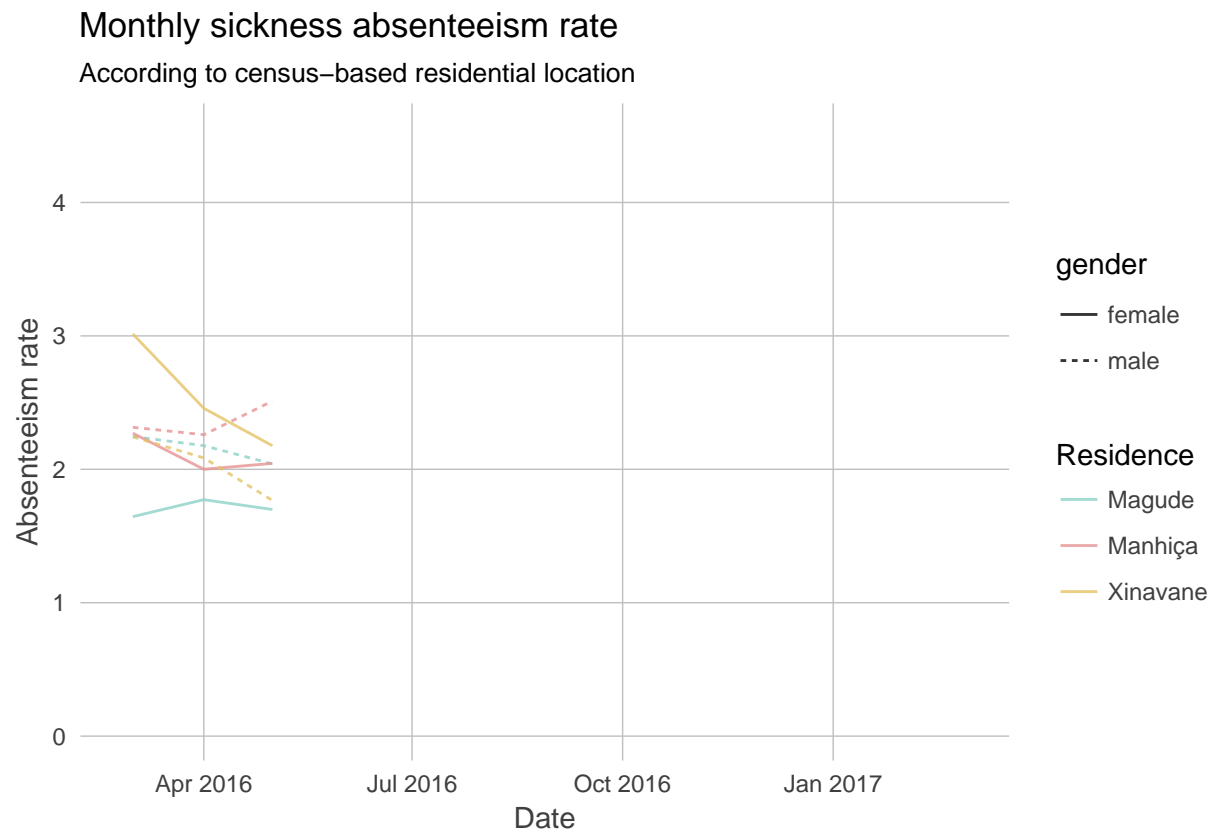


Below is a table of the same data.

Absenteeism over time by place of residence and sex

Using census-based locations



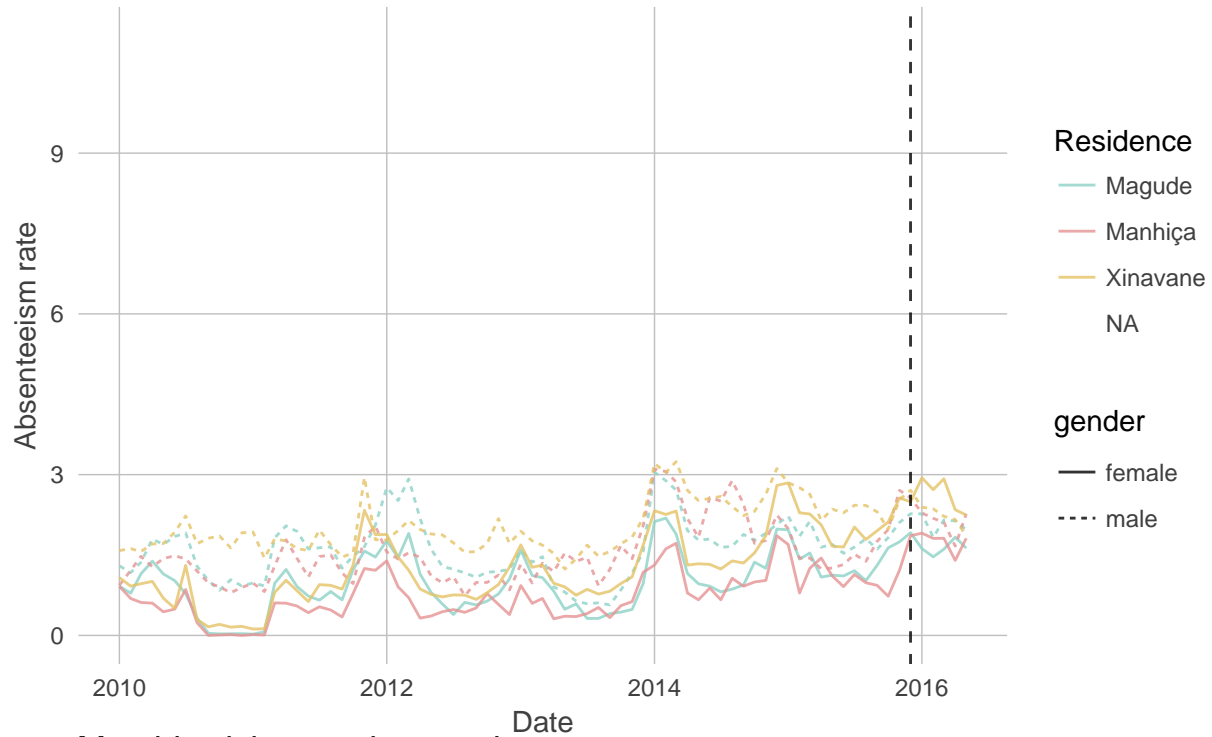


Below is a table of the same data.

Using company-based locations

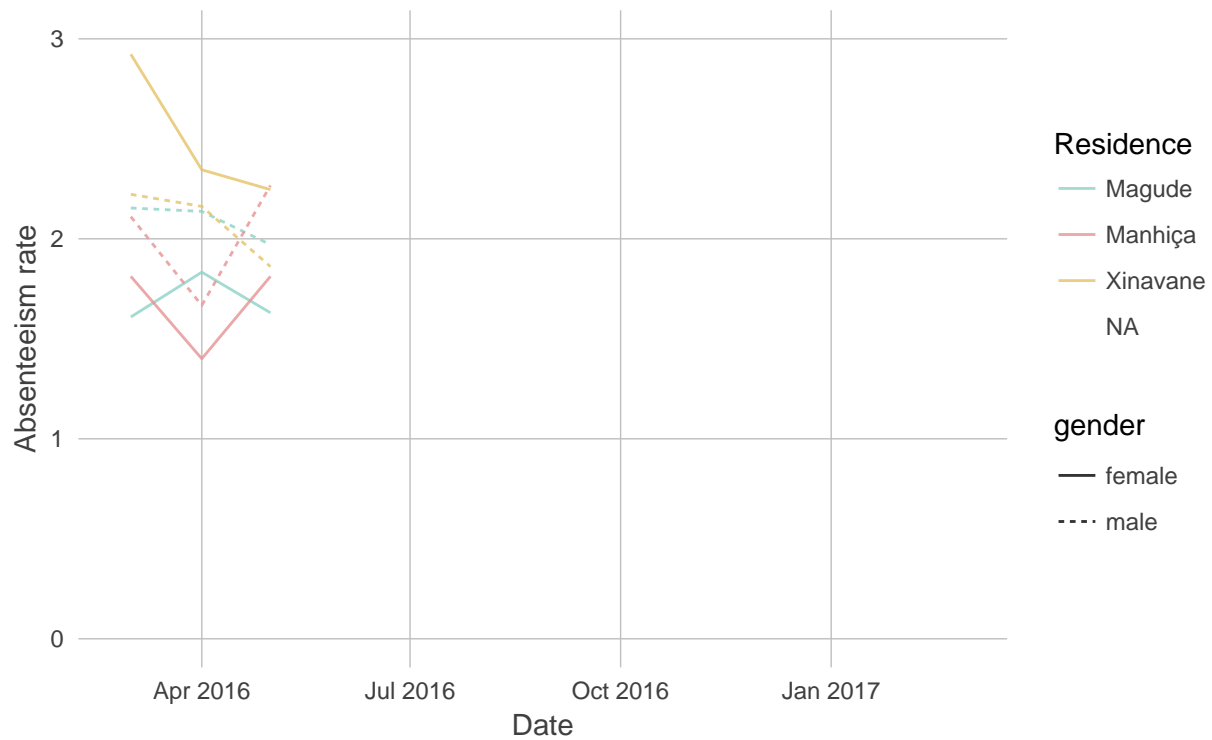
Monthly sickness absenteeism rate

According to company records—based residential locations



Monthly sickness absenteeism rate

According to company records—based residential locations



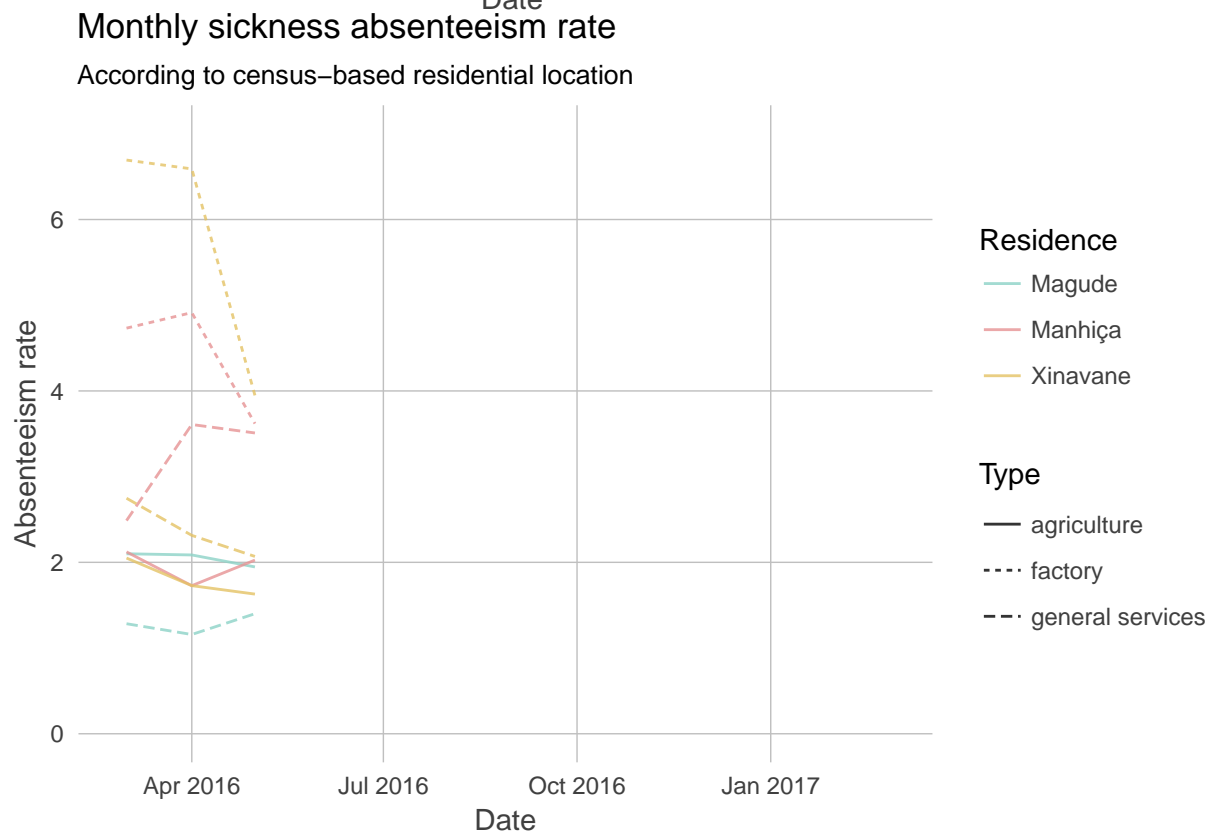
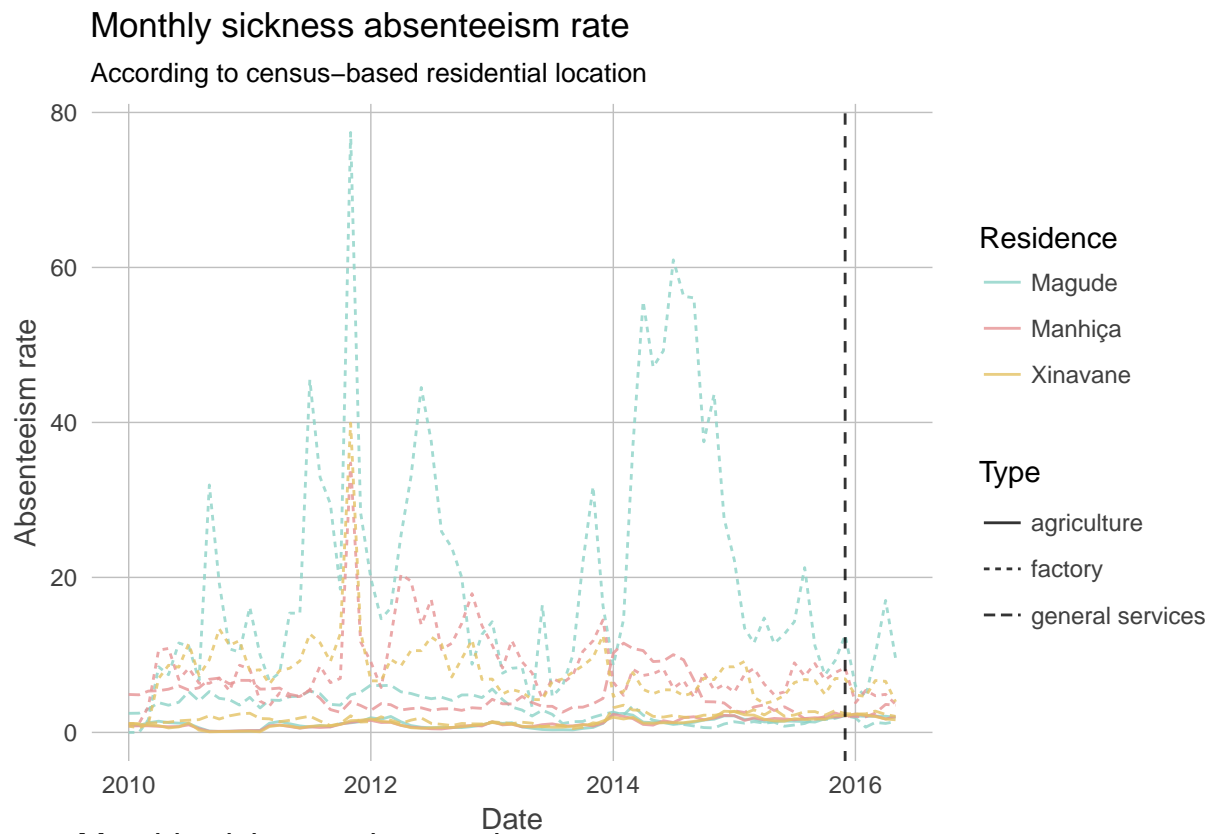
Below is a table of the same data.

Absenteeism over time by place of residence and seasonal vs. permanent status

Not possible. <2% of all workers are classified as permanent or not; the rest are missing.

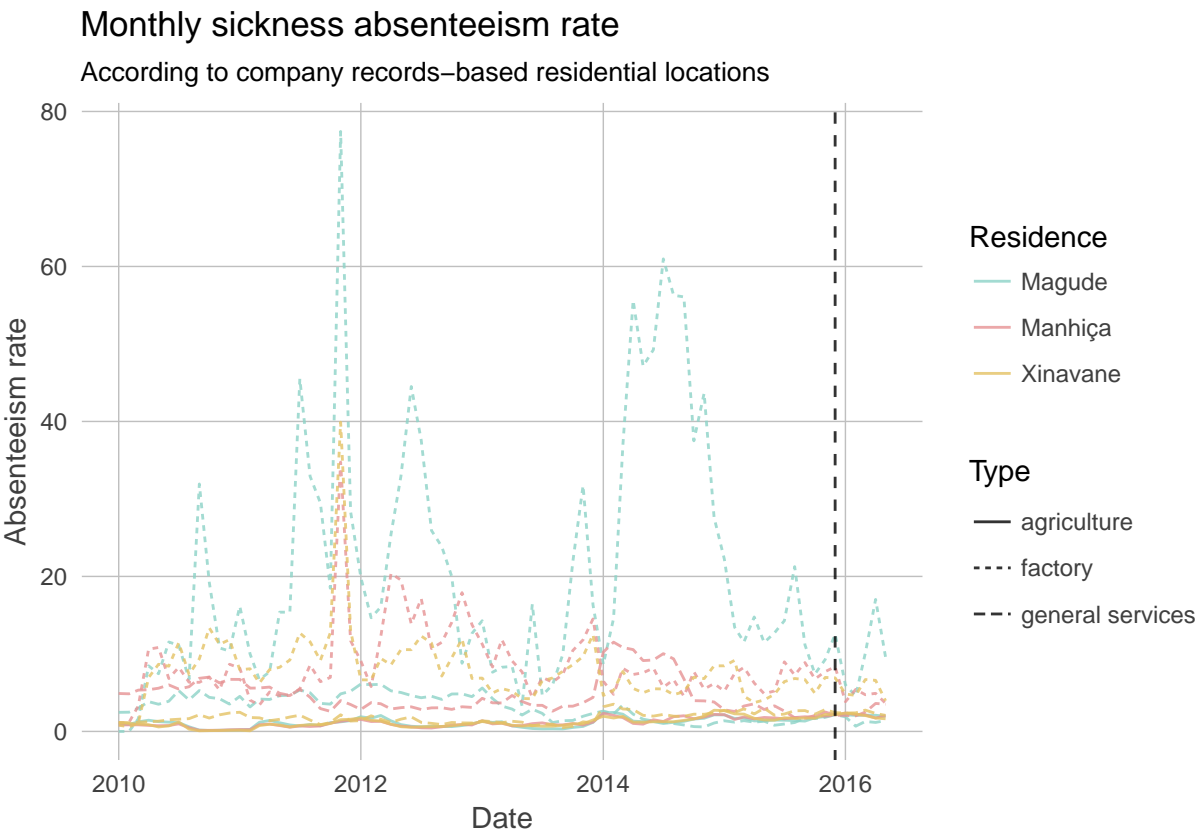
Absenteeism over time by place of residence and worker type

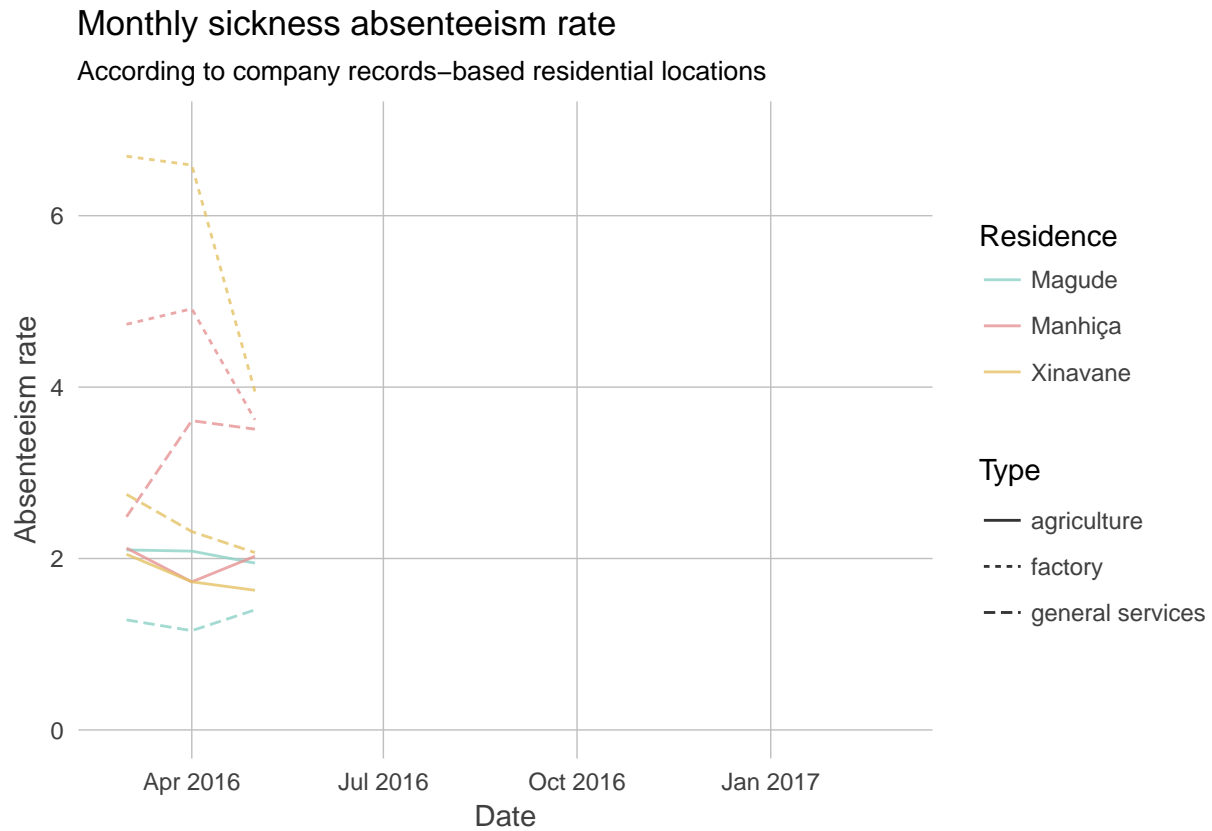
Using census-based locations



Below is a table of the same data.

Using company-based locations





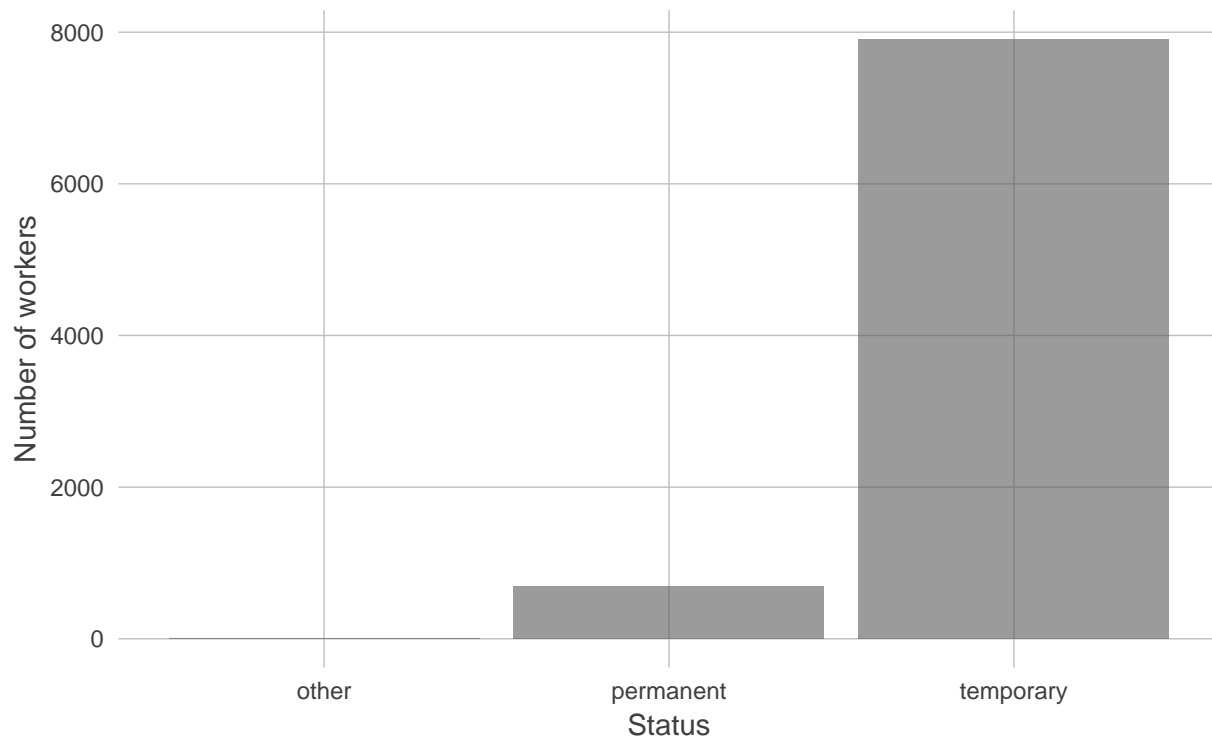
Filtering to exclude multi-contract workers

In the below analyses, we filter so as to keep only those workers who had exactly one contract. We do this because we can then use contract start date and contract end date as the *true* employment period, and we are therefore more confident about these workers' absenteeism.

After this filter, we are left with 8610 workers (of the original 31882). Their breakdown by permanent/temporary status is below.

Temporary vs. permanent status

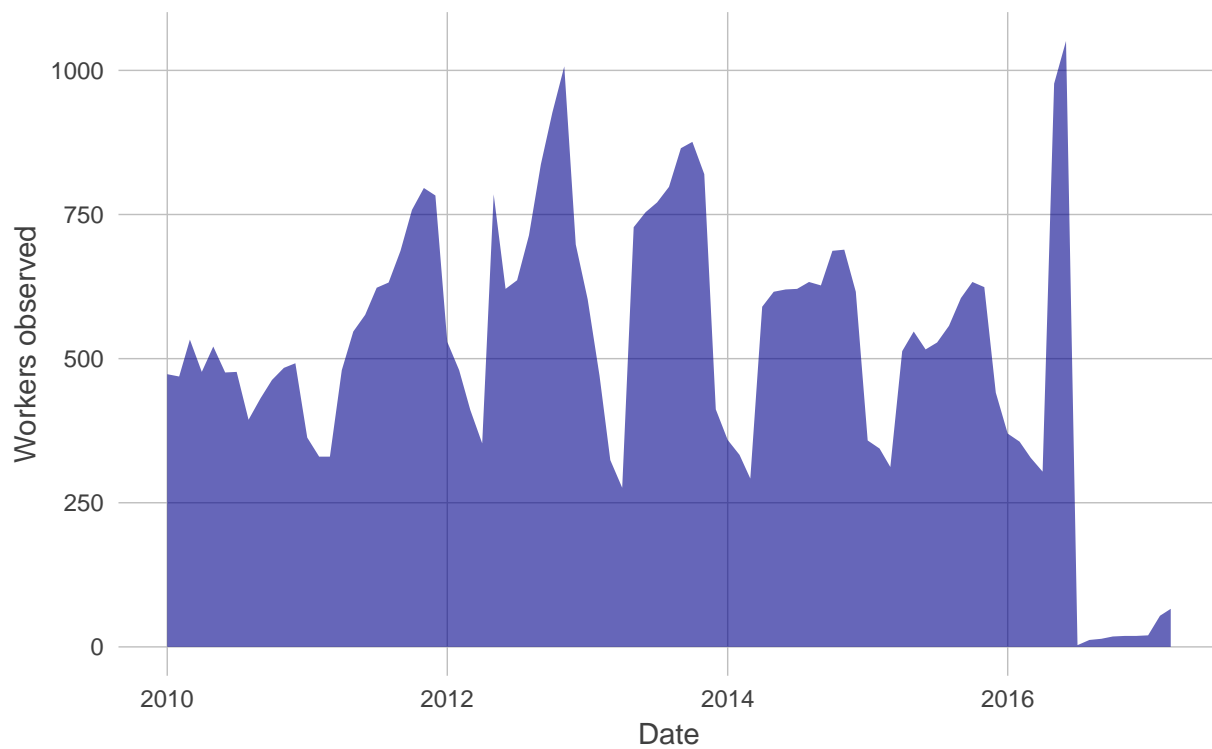
One-contract workers only



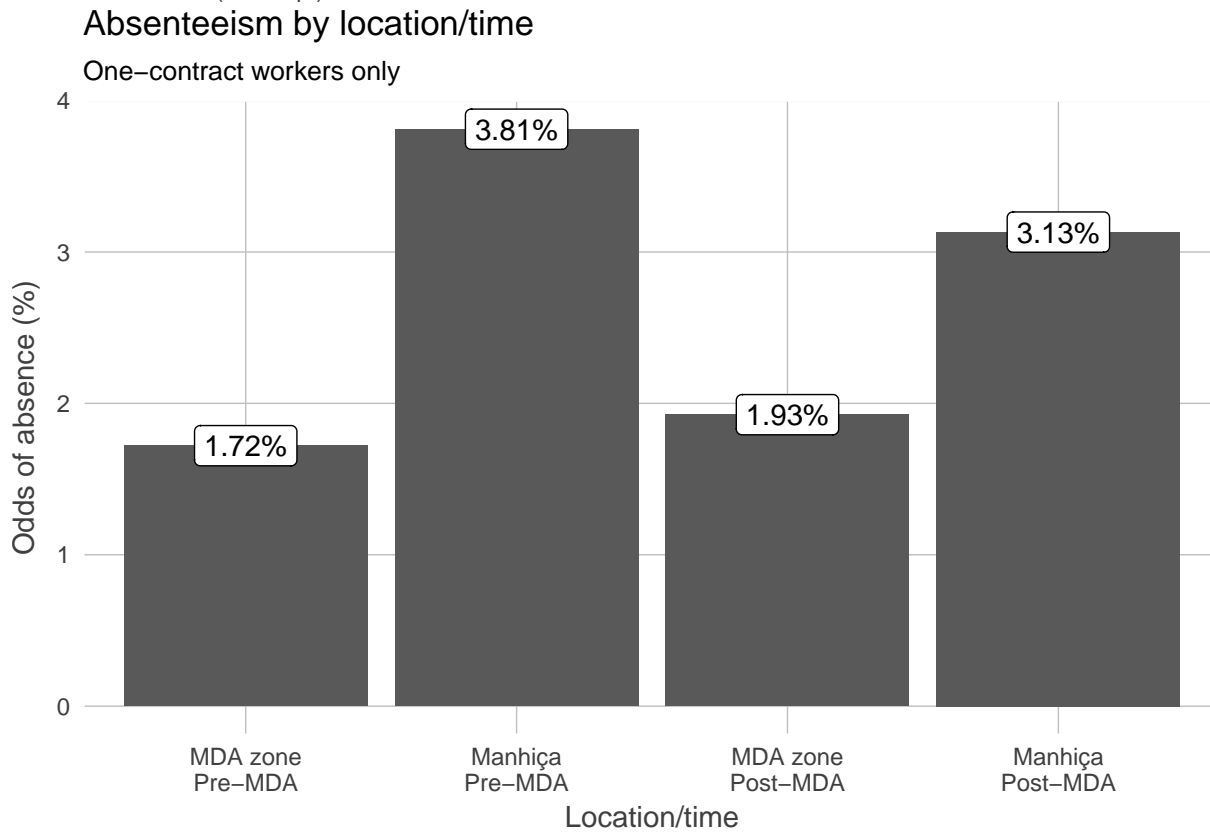
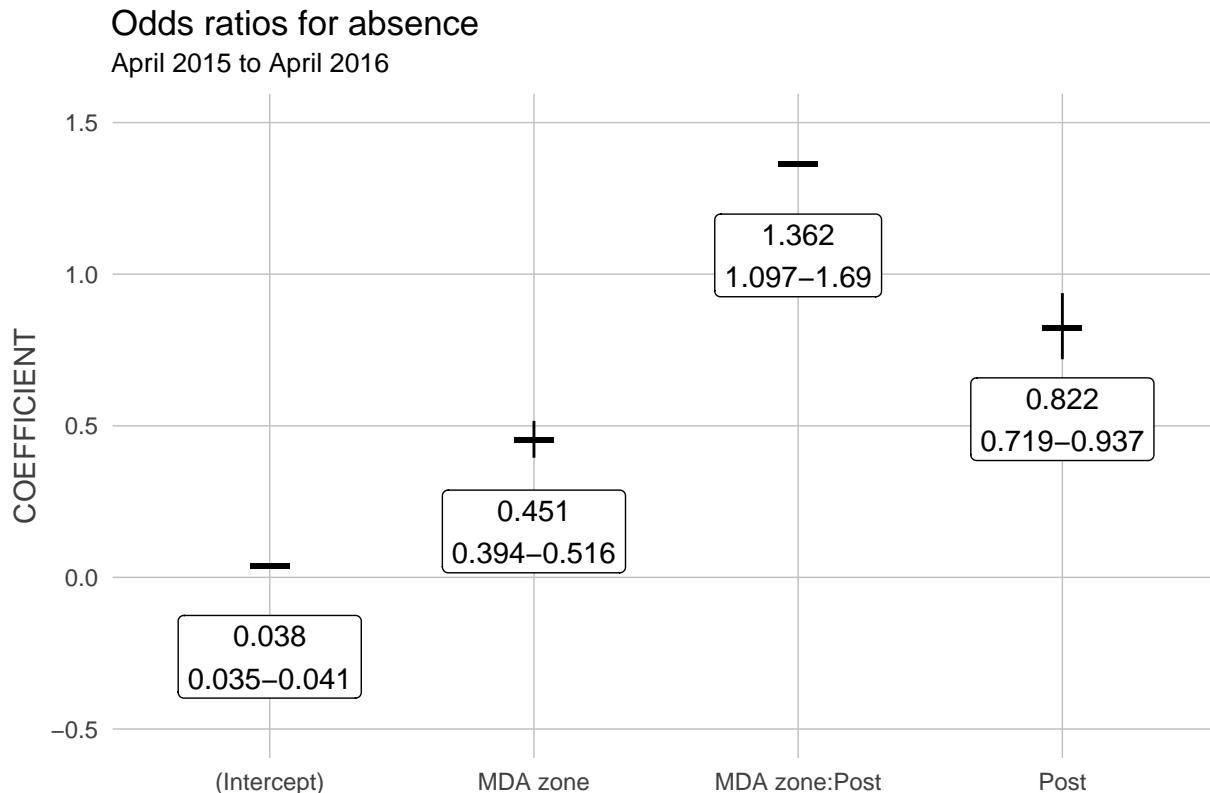
We can also examine the number of workers under observation at any given time.

Number of workers under observation

One contract only

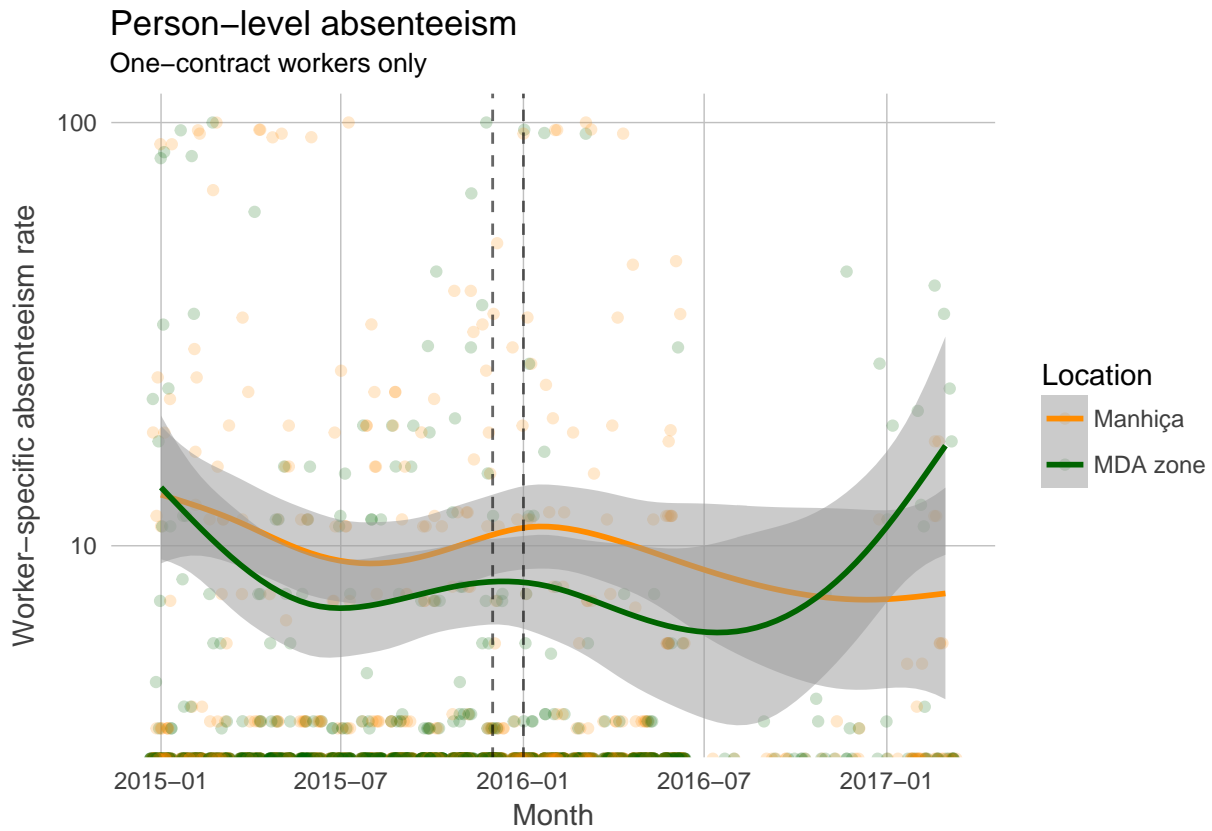


Modeling

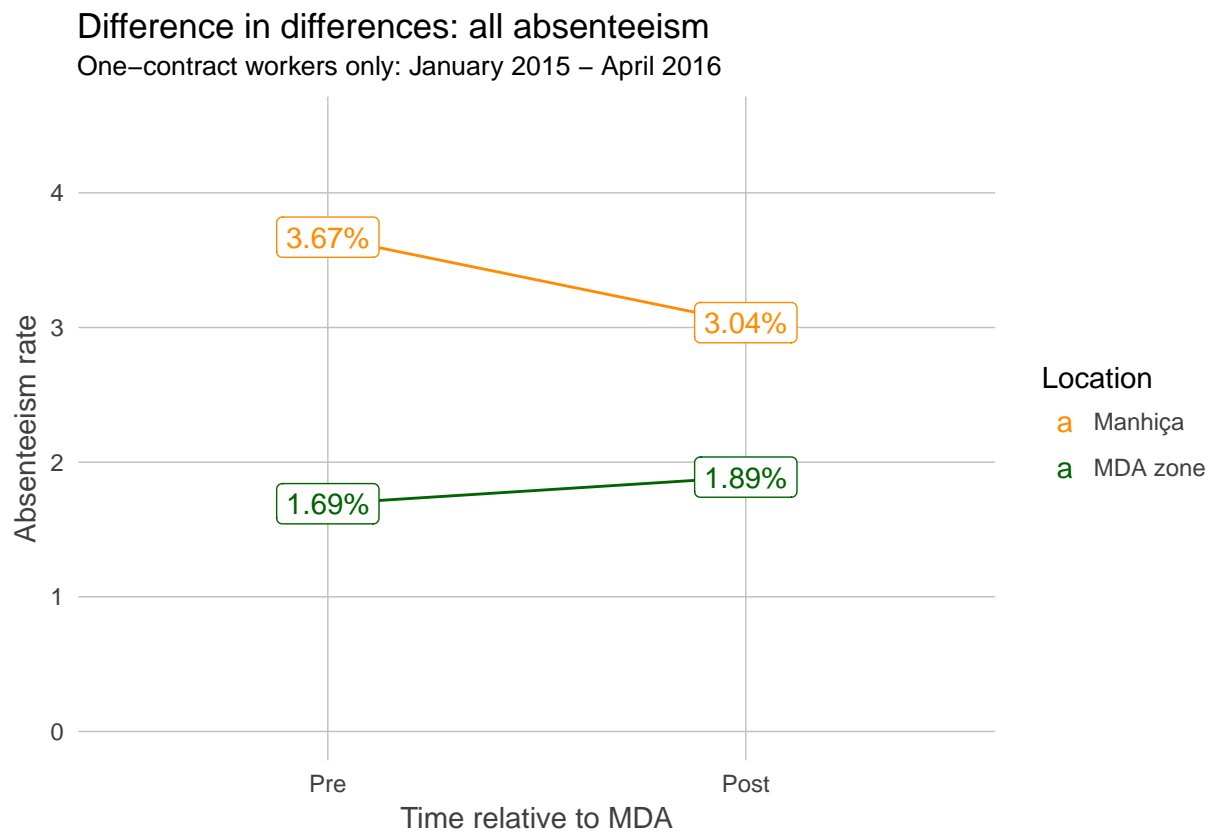
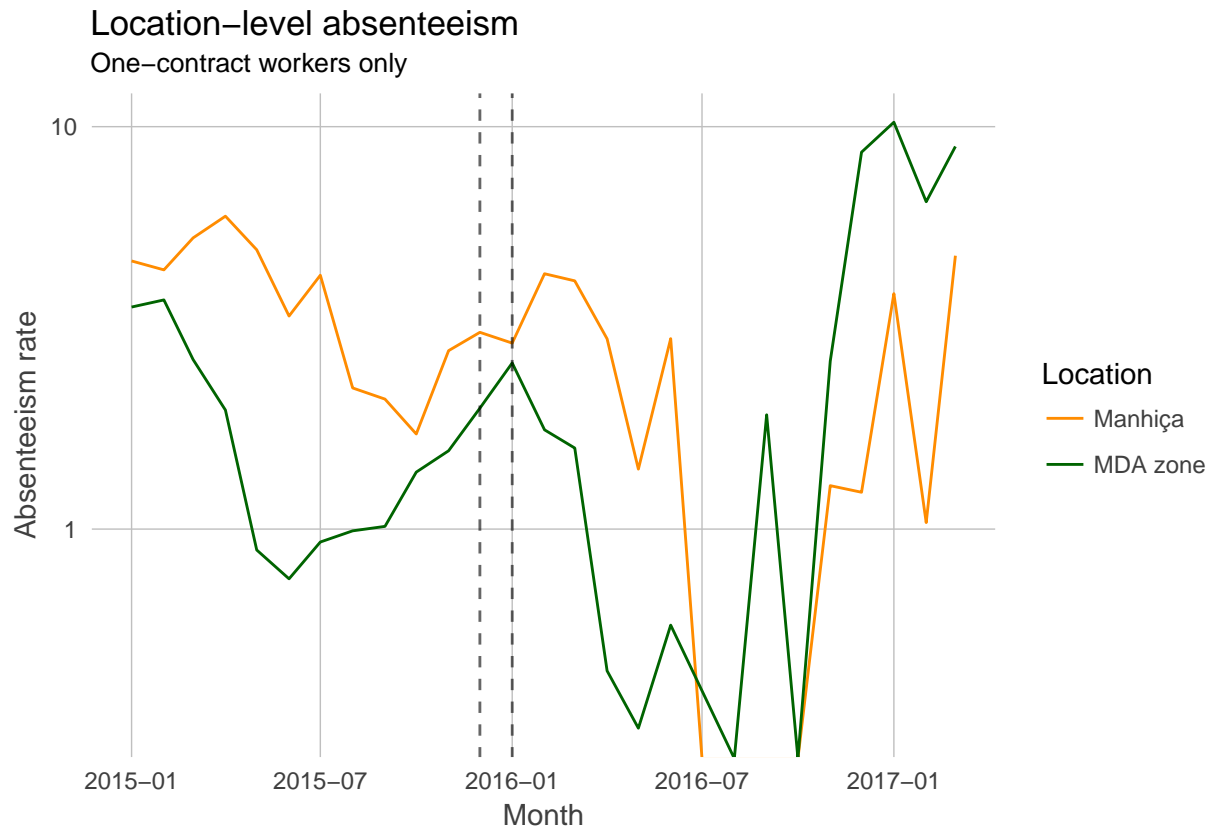


Difference in differences visualization

Difference in differences with detail

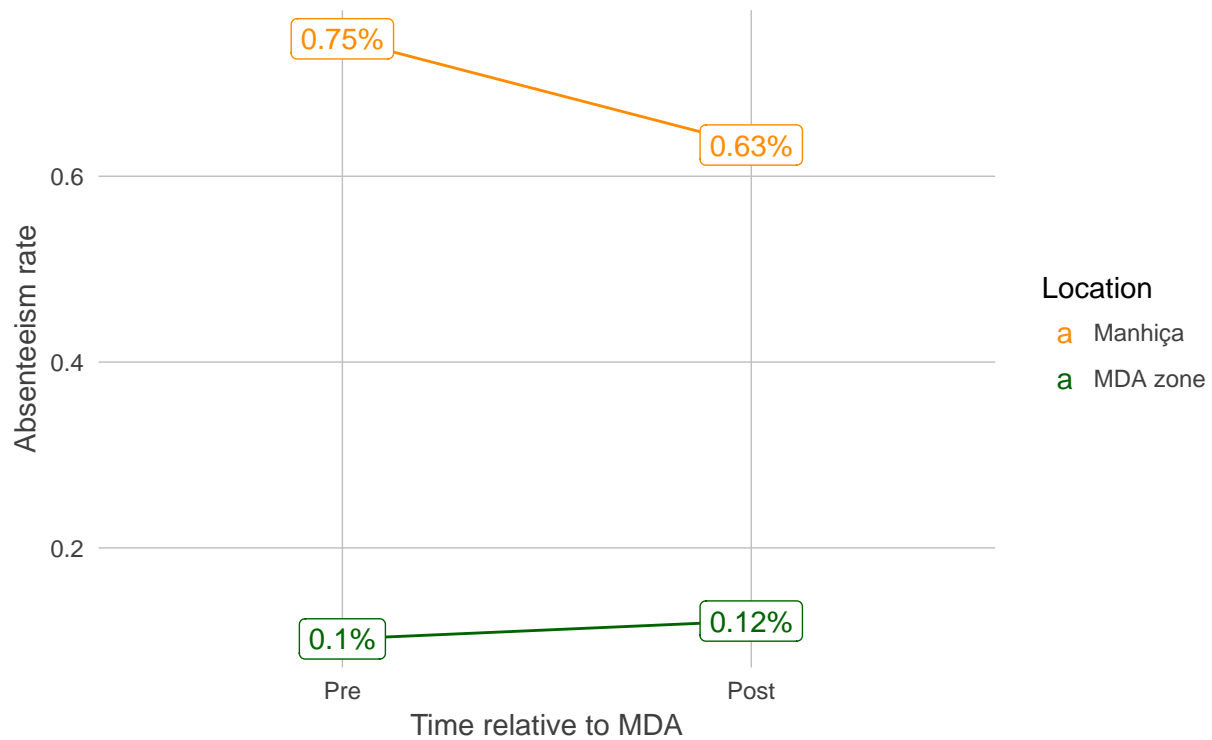


Difference in differences with more aggregation



Difference in differences: sick absenteeism only

One-contract workers only: January 2015 – April 2016

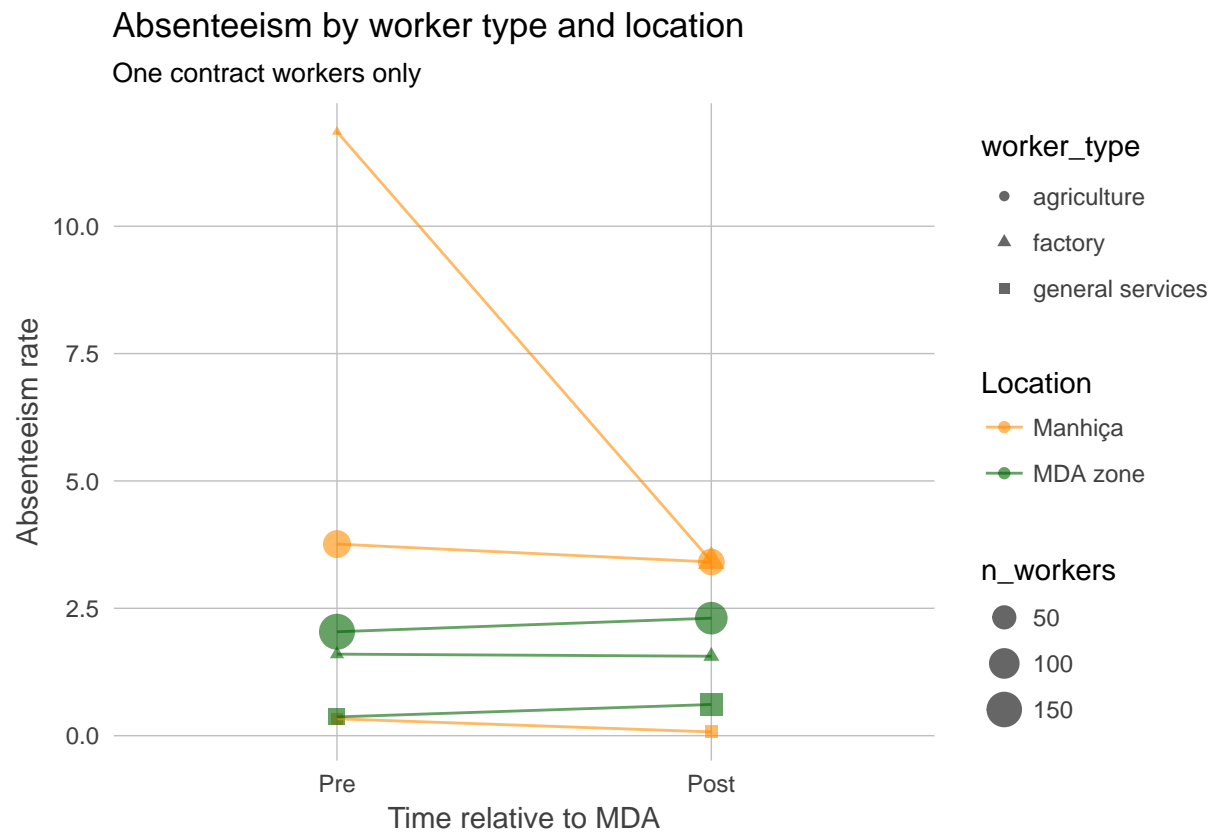


Below is a standardized version of the diff in diffs chart.

Scaled difference in differences: all absenteeism

One-contract workers only: January 2015 – April 2016





Details

All code for the cleaning, analysis and generation of this report are hosted on Joe Brew's github page.
