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# Modelling the applicability of voluntary testing methods for COVID-19 transmission

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To prevent the spread of SARS-CoV-2, various measures have been implemented worldwide. One of most effective non-pharmaceutical measure is to conduct regular mass testing on a proportion of the population which can help reduce disease transmission. We develop a compartmental model to study the applicability of a voluntary testing method. The model includes isolated compartments as well, from where individuals become removed. A non-monotonic relationship is shown between the testing rate and the observed epidemic. By collecting real-world data, we aim to compare strategies throughout the pandemic by applying different testing activities. Joint work with Gergely Röst.