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## **Timeliness of intervention in epidemic outbreaks**

During an epidemic outbreak the question about which intervention measures should be applied is tightly linked to how timely these measures can be applied. As a general rule, the earlier an intervention is applied the better is its result, however, due to logistics, policies, money, people and reality in general, delays on the application of interventions are inevitable. Therefore, the question comes down to decide, e.g., whether is it still worth applying a determined intervention (i.e., is it already too late for it to do something?), or whether a quicker intervention on a smaller group would have a better (or worse) effect than a slower intervention on a larger group. To answer this question we employ models to analyse the outcome of epidemics depending on when and to whom are the interventions applied. We show two examples where the models can support decision making. The first case shows the effect of vaccination during a measles outbreak in a school depending on when after the start of the outbreak vaccination is implemented. The second case investigates the effect of employing a quicker but less sensitive test than the gold standard to diagnose H1N1, followed by the isolation of positively diagnosed individuals.