# Contacts carers-isolation

## Req 550 Syria Team

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Assume one carer per isolated, and assume $n$ contacts per day between carer and isolated. Let $N_{Iso}$ be the total number of people in isolation. The fraction of the population (total $N$) that will be in contact with isolated is $N_{Iso}/N$. Therefore, we will have $nN_{Iso}/N$ contacts between the population and isolated, per day, per individual. Using the same coefficient for the reduction of the probability of infection per contact as we did in the "neutral zone" (0.2), we get $0.2nN_{Iso}/N$.

This computation is independent of the contact matrix/management matrix, since we assume that carers will keep their normal behaviour whilst taking care of the isolated.

Although it is not clean in terms of the implementation, the carer population should be among age2-nocomorbid-orange (that is, excluding kids or people in the green zone).

In terms of the implementation, this means that lambda must have an extra term

$$0.2nN_{Iso}/N_{age2-nocomorbid-orange},$$

only for the class age2-nocomorbid-orange. Note that this term is NOT multiplied by the management matrix term, but it is multiplied by $\tau$ as usual.