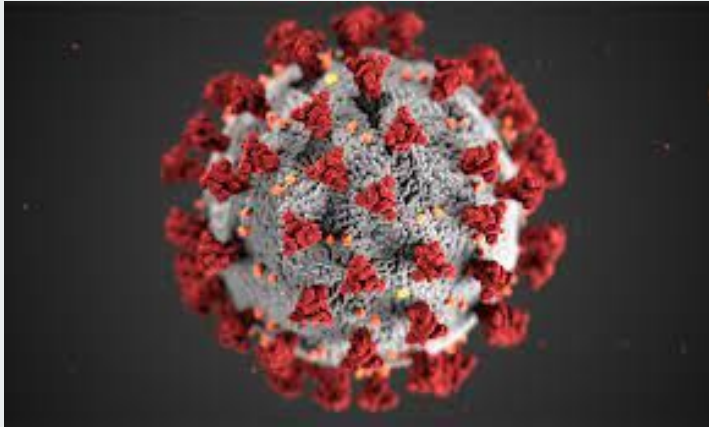




Measures chosen to deal with the epidemic

Team D
Nathan Alimi
Timothé loos
Grégoire Collier
Thierry Zhang



Budget:

500 k€



Kill a certain proportion of migratory geese



Positive aspects :

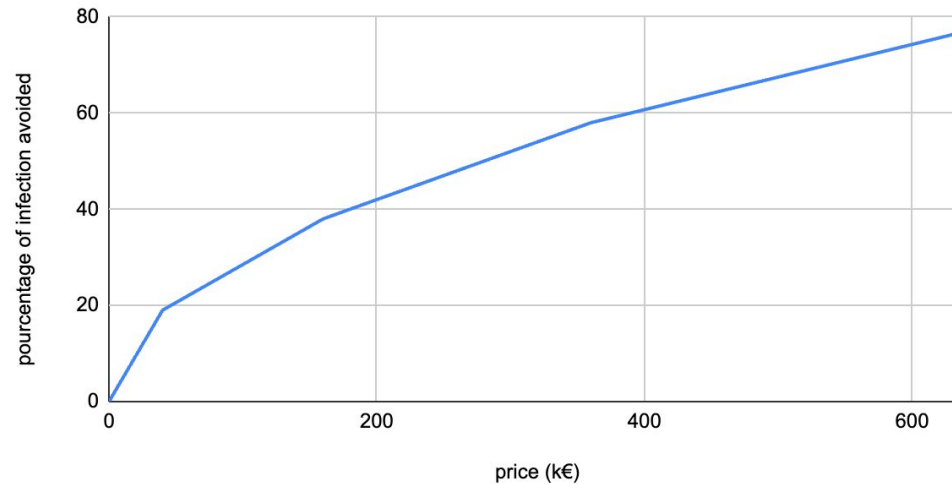
- **Really effective** solution
- Stems the epidemic **at its roots**, before it spreads → For the humans AND the local avian population

Negative aspects :

- **Cost**
- Locate population / capture
- Killing infected geese : **Impact on the local ecosystem**
- **Not very ethical**

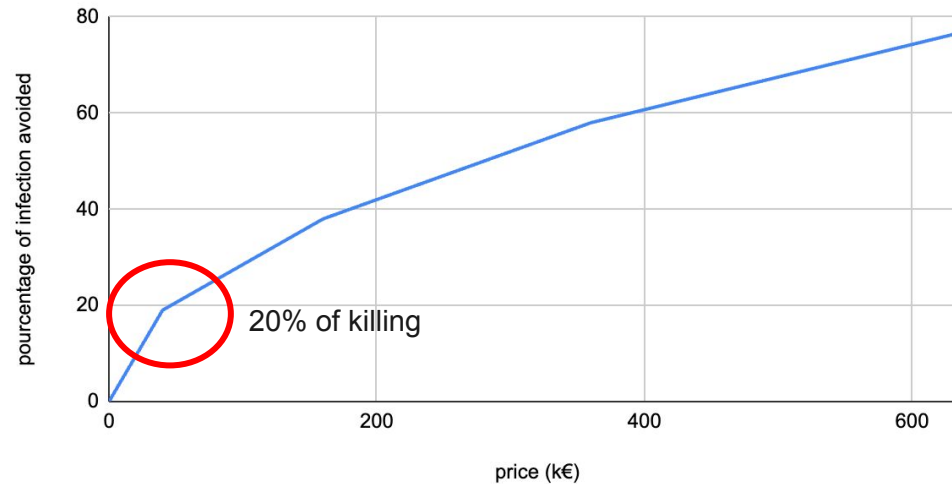
Kill the infected birds at time the first day

Pourcentage of infection avoided depending on the price needed



Kill the infected birds at time the first day

Pourcentage of infection avoided depending on the price needed




**Quarantine a certain proportion
of the infected migratory geese**



Positive aspects :

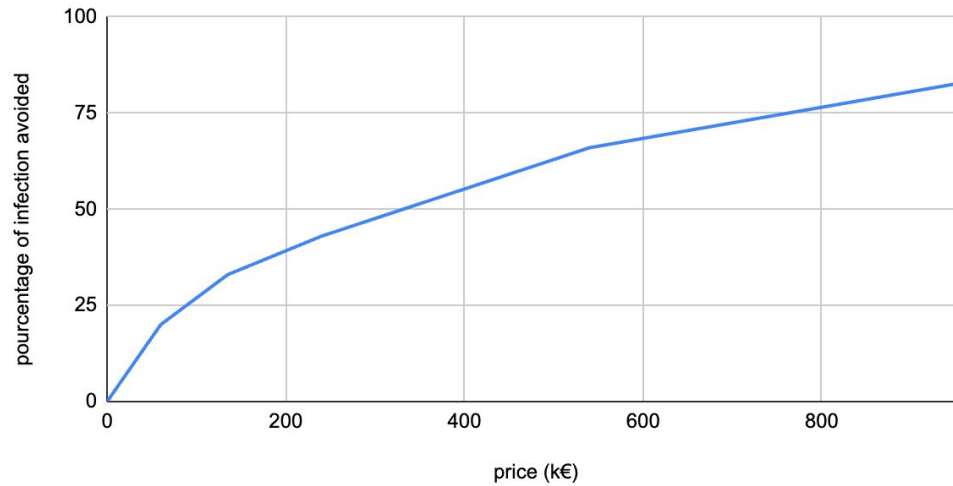
- **Effective** solution
- Stems the epidemic **at its roots**, before it spreads → For the humans AND the local avian population
- Don't kill the infected goose population

Negative aspects :

- **Cost**
- Locate population / capture

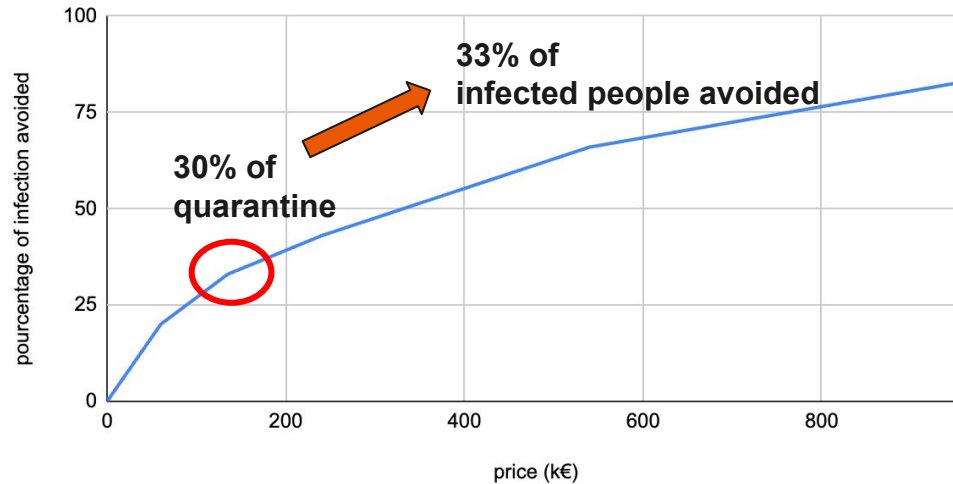
Put infected birds in quarantine

Pourcentage of infection avoided depending on the price needed



Put infected birds in quarantine

Pourcentage of infection avoided depending on the price needed




Buy a mosquito net for each student.



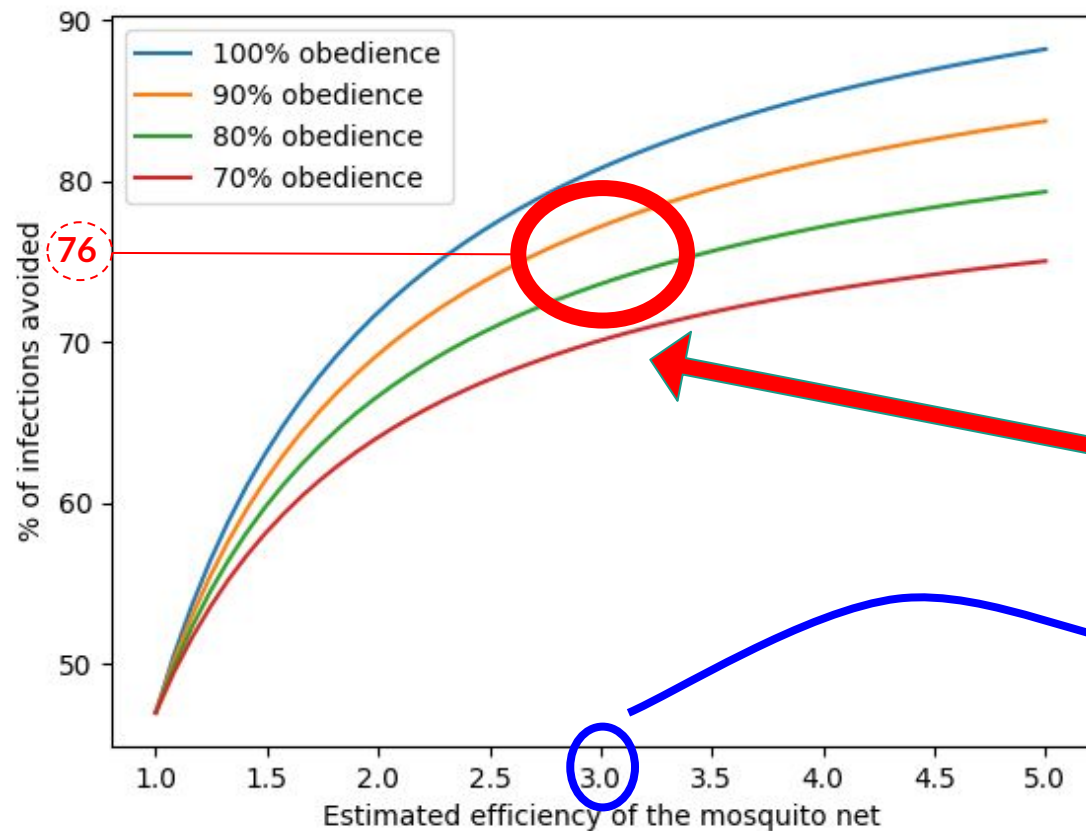


Positive aspects :

- mosquitoes mainly bite during the night/sunset

Negative aspects :

- Cost
- Resilience



Most likely zone

Culex mosquitoes mainly bite during the **night**.

- Research articles [1] and [2]
- ecdc.europa.eu
- www.napamosquito.org

Relocate $r\%$ of the students





Positive aspects :

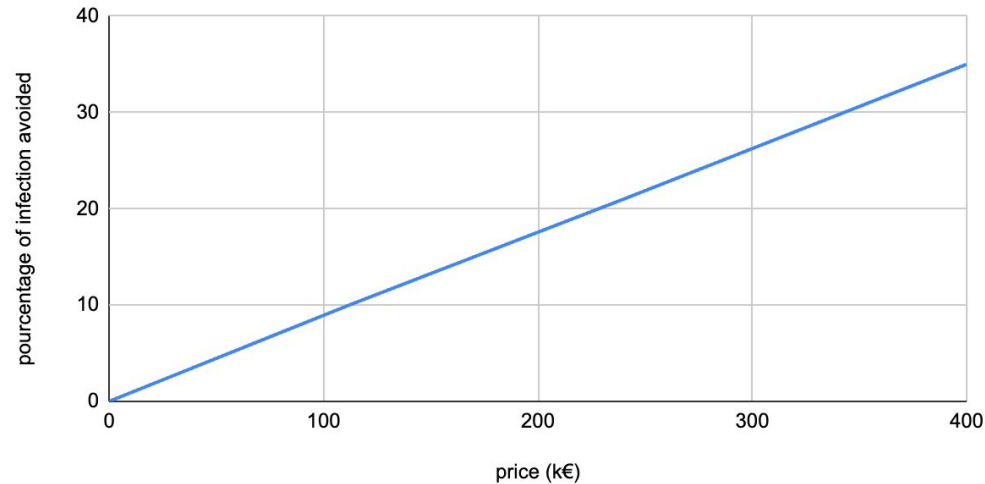
- Students moved away from the epicenter of the epidemic
- Students stressed by the situation

Negative aspects :

- It is expensive and time consuming to relocate someone
- Loss of stability/social circle

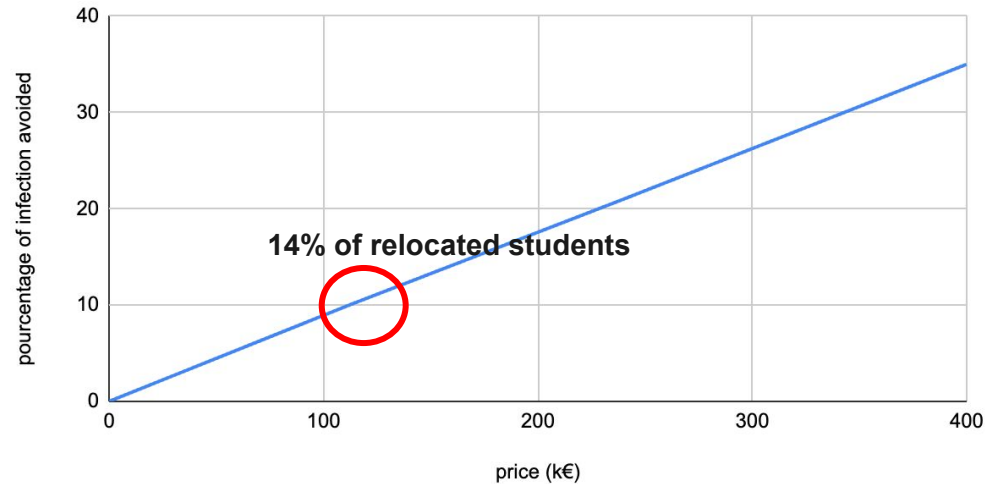
Relocate $r\%$ of the students

Pourcentage of infection avoided depending on the price needed



Relocate $r\%$ of the students

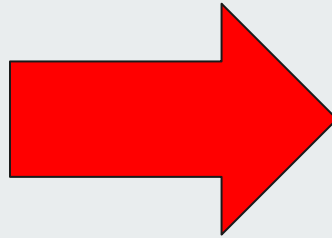
Pourcentage of infection avoided depending on the price needed





Summary

- Quarantine 30% of infected geese
- Kill 20% of infected geese
- Provide all students with a mosquito net
- Relocate 14% of students



76% of the infection avoided