

BIOSECURITY IN CATTLE TRANSPORT

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Final Degree Project – June 2022 Carles Alemany Mensa

Animal origin

Loading and Unloading

Critical points

Cleaning and disinfection

Animal transportation is a high-risk route for disease transmission

Outbreaks caused by cattle transport

Foot-and-mouth disease

OBJECTIVES

Characterise the biosecurity practices in cattle transportation

Find out the opinion on the applicability, feasibility and effectiveness of the main biosecurity practices by transporters

RESULTS

TABLE 1. Percentages of main biosecurity measures applied by transporters (n=23) (VC = Very common, C = Common, O = Occasional, R = Rare, N = Never)

Farm	VC	C	O	R	N
Enters the perimeter of the farm (%)	69	13	-	9	9
Use of loading and unloading bay (%)	22	39	22	13	4
Enters the pen where the animals are kept (%)	69	13	_	9	9
Maintains contact with the animals that stay on the farm (%)	61	17	4	9	9
Loading and unloading	VC	C	O	R	N
The footwear is replaced with own boots (%)	96	-	4	_	_
The footwear is replaced with boots provided by the farm (%)	17	-	-	-	83
Uses footwear covers (%)	4	-	-	_	96
Changes clothes for work (%)	82	-	9	-	9
Climbs into the cabin with overall and boots on (%)	19	10	10	_	61
Cleaning and disinfection	VC	C	O	R	N
Truck cleaning between two transports to different customer's farms (%)	74	9	9	4	4
Truck cleaning between two transports to farms of the same customer (%)		9	9	4	9
Truck disinfection between two transports to different customer's farms (%)		9	22	_	9
Truck disinfection between two transports to farms of the same customer (%)		9	22	-	13
Cleaning the cabin between two farm transports (%)		-	-	5	95

MATERIAL & METHODS

Exploratory interview (n=4)

Structured survey (n=23)

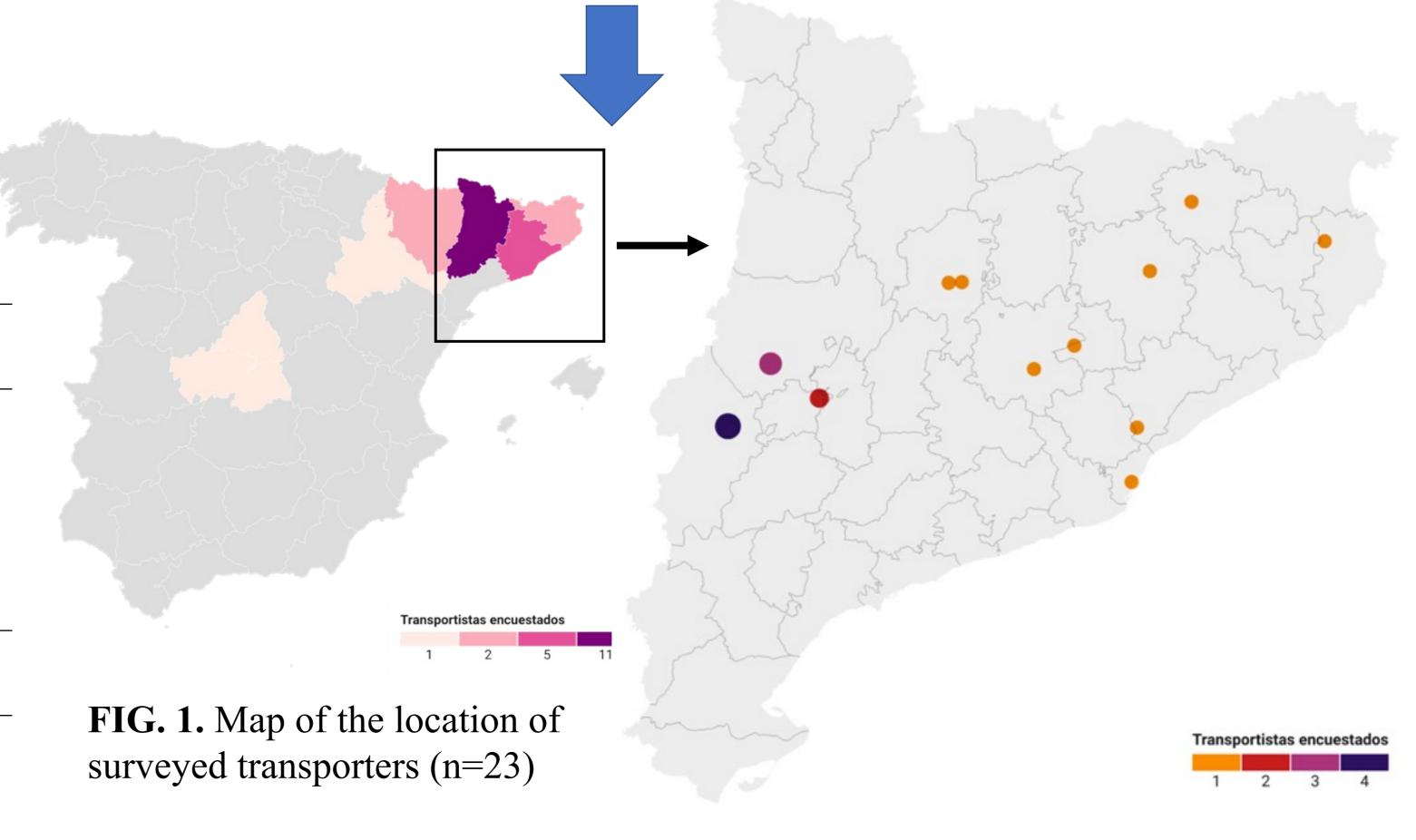


TABLE 2. Percentages of the completion of the load on one or more farms for the different types of cattle transported

	Calves for rearing (n=13)	Restocking (n=4)	Calves for fattening (n=11)	Cattle to slaughter (n=22)	Culling animals (n=2)
Complete the load on 1 farm (%)	76,92	50	72,73	45,45	0
Complete the load on >1 farm (%)	23,08	50	27,27	54,55	100

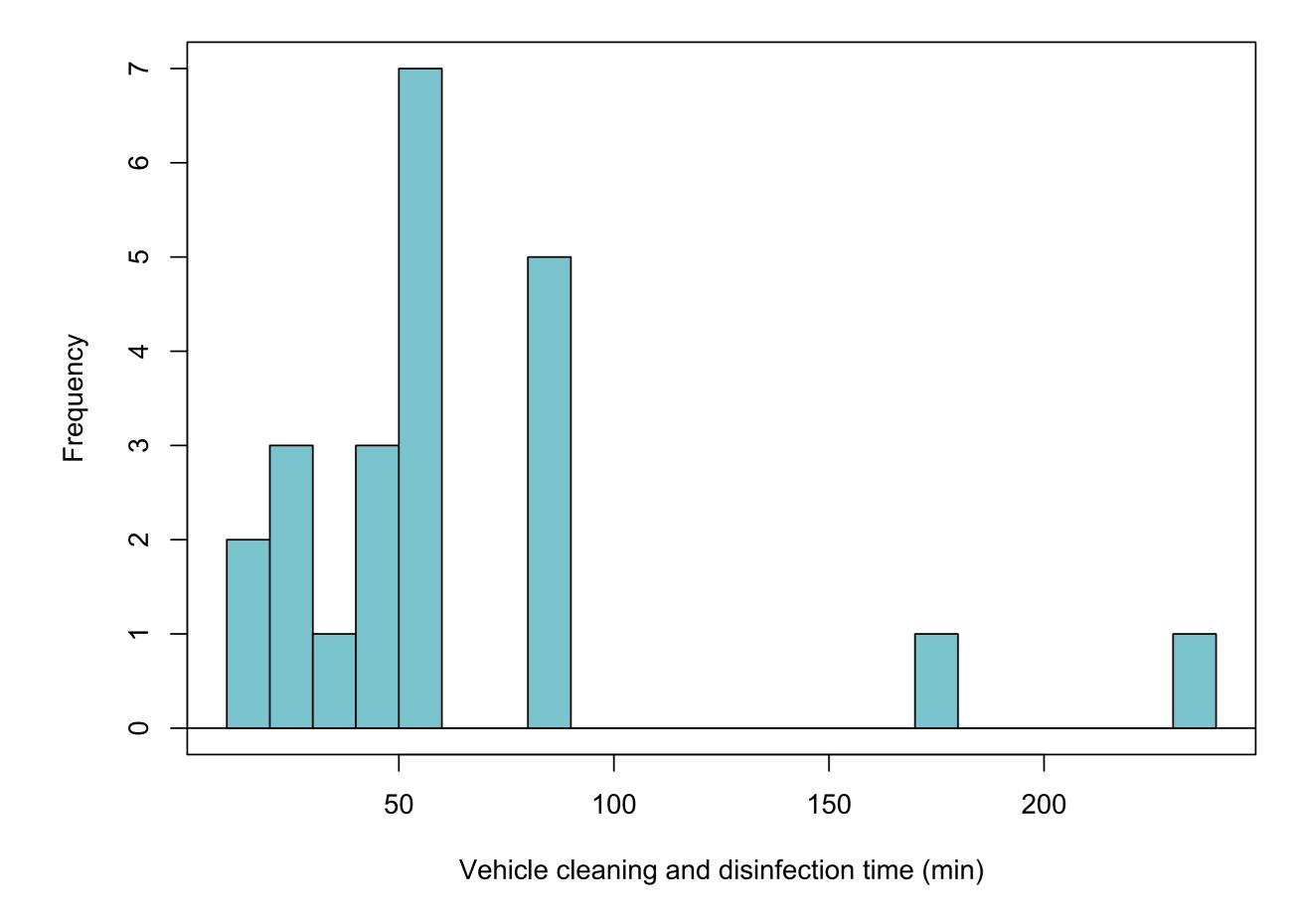


FIG. 2. Frequencies of time taken by transporters to clean and disinfect their transport vehicle (n=23)

Cleaning and disinfection of vehicles

4% swipes and brushes dry organic matter

39% uses hot water

87% uses detergent

91% uses disinfectant

