How likely is it to detect a new incursion of PRRS in a PRRS-free region, within the first month?

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Danish PRRS REDUCTION

QR code for the paper evaluation the performance of surveillance systems in all Danish regions: Quantification of early detection surveillance in PRRS-free regions

In Denmark, a national reduction strategy of PRRS was launched in May 2022. Three regions are approaching a PRRS-free status. Hence, the question has arisen, as how the surveillance should be performed to identify new incursions of PRRS virus in PRRS-free regions as early as possible. Results from the present study estimates, that the current surveillance is expected to detect around one fifth of newly infected regions within the first month after incursion of PRRS. This sensitivity could be increased by more frequent testing, potentially in a risk-based manner.

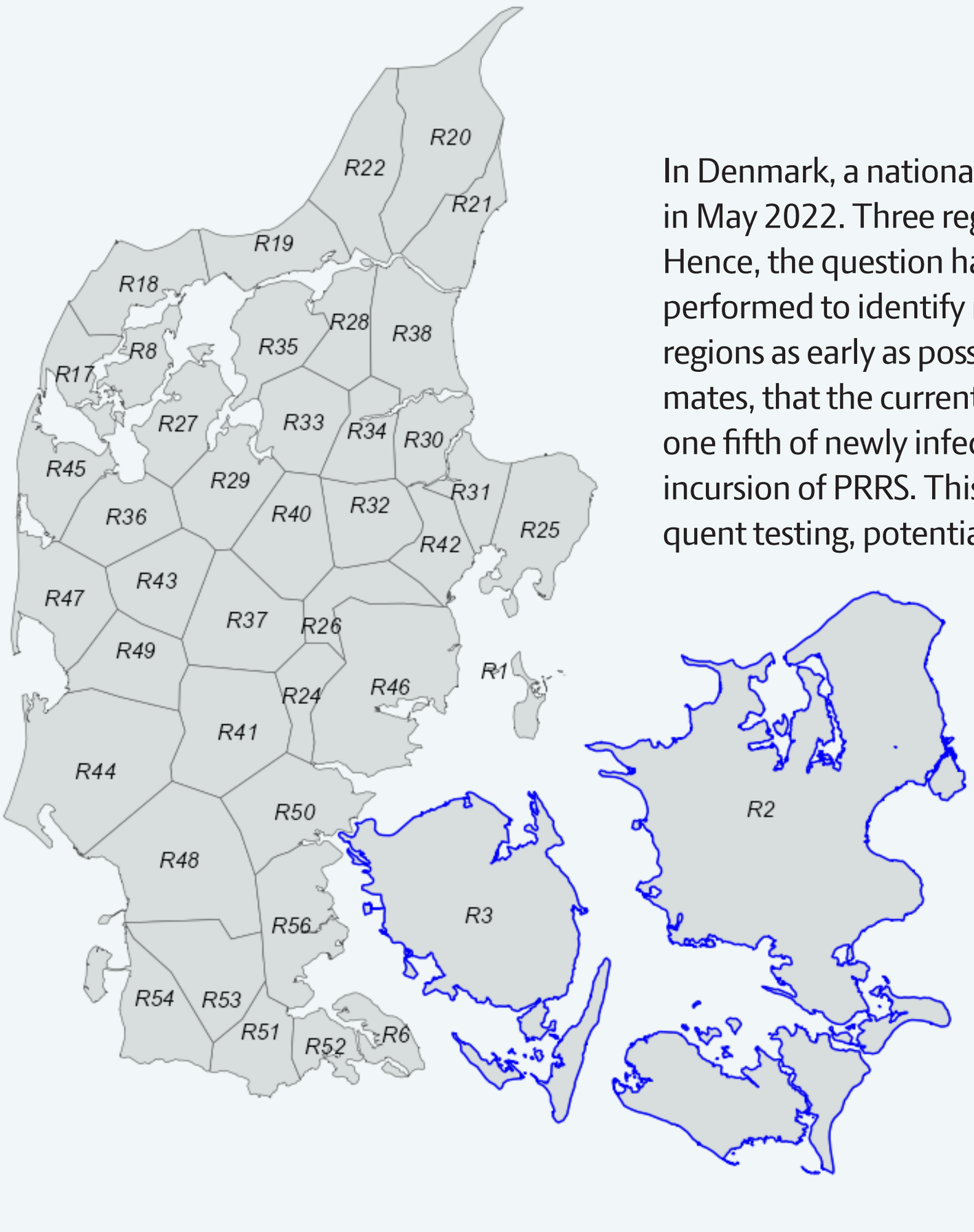
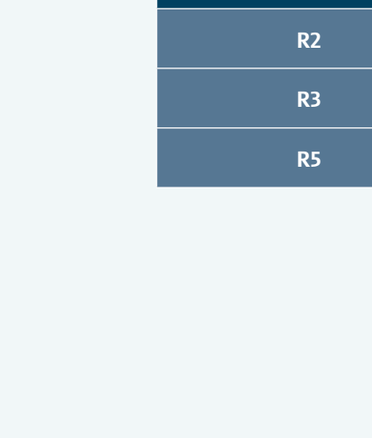
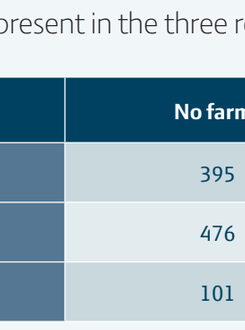


TABLE 1. Pig farms present in the three regions approaching a PRRS-free status, April 2024.

Region	No farms	PRRS+ farms (%)	Sow farms (%)	Breeding- and multiplier farms (%)	Farms w/ risky movements (%)
R2	395	10 (2.5)	111 (28.1)	19 (4.8)	26 (6.6)
R3	476	30 (6.3)	107 (22.5)	17 (3.6)	39 (8.2)
R5	101	19 (18.8)	21 (20.8)	0 (0.0)	0 (0.0)





Materials and Methods

The current PRRS surveillance consists of two components:

- A notifiable surveillance (performed monthly in all farms)
- Active antibody surveillance (performed monthly in multiplier/breeding farms and yearly in production farms)

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