



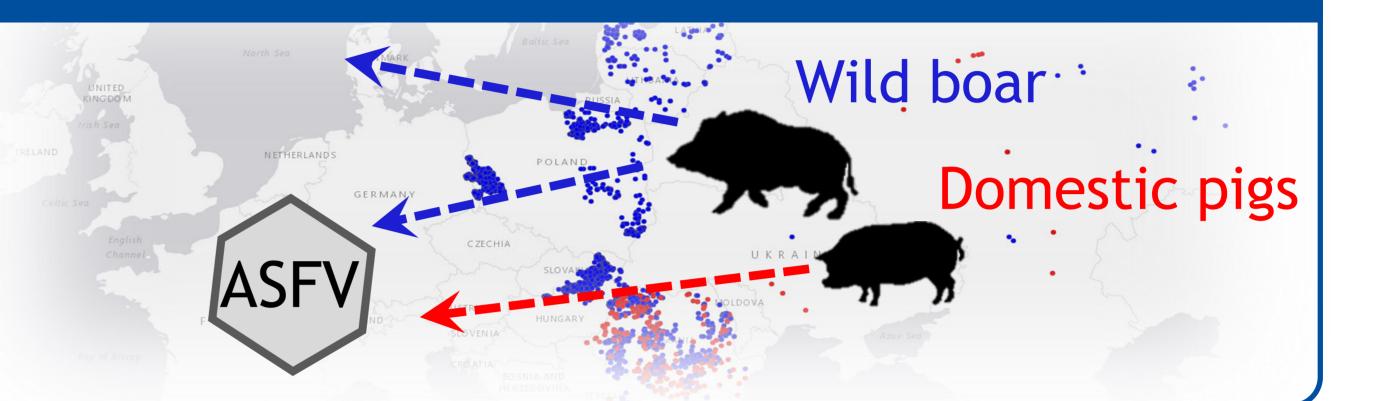
# Systematic literature-based identification of potential risk factors for African Swine Fever

Hannes Bergmann<sup>1\*</sup>, Johanna Dups-Bergmann<sup>1</sup>, Katja Schulz<sup>1</sup>, Carolina Probst<sup>1</sup>, Laura Zani<sup>2</sup>, Melina Fischer<sup>3</sup>, Nicolai Denzin<sup>1</sup>, Sandra Blome<sup>3</sup>, Franz J. Conraths<sup>1</sup>, Carola Sauter-Louis<sup>1</sup>

<sup>1</sup> Institute of Epidemiology, Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Südufer 10, 17493 Greifswald-Insel Riems, Germany <sup>2</sup> Institute of International Animal Health/One Health, Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Südufer 10, 17493 Greifswald-Insel Riems, Germany <sup>3</sup> Institute of Diagnostic Virology, Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Südufer 10, 17493 Greifswald-Insel Riems, Germany

#### 1 $\Delta im$

The aim was to identify any potential risk factors that have been considered to possibly contribute to the spread of African swine fever [ASF]. This was done to help understand why and where ASF continues to spread.



### 2. Materials and Methods

Systematic literature review following PRISMA guidelines:

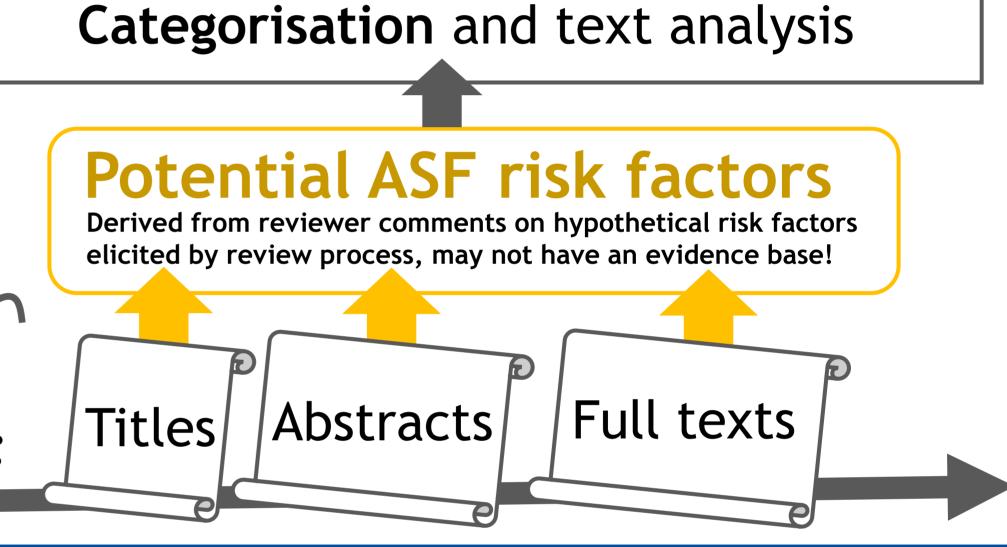
- PubMED
- Coopiu
- ScopusWeb of Science
- EFSA Journal
- FAO "AGRIS"
- Thesis repositories

Designed search strings to find "RISK" and "ASF" related literature and identified:

2683 records

Criteria-based screening of literature records

Reviewer screening:



## 3. Results

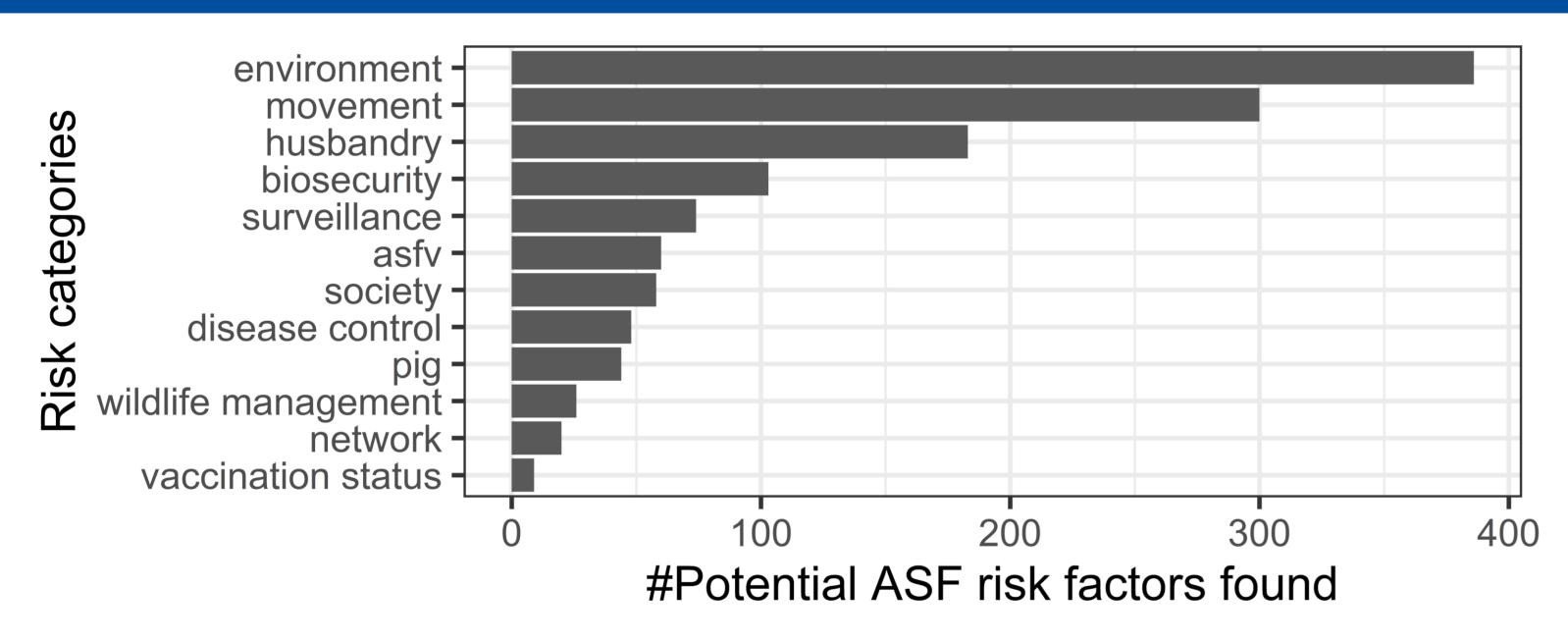
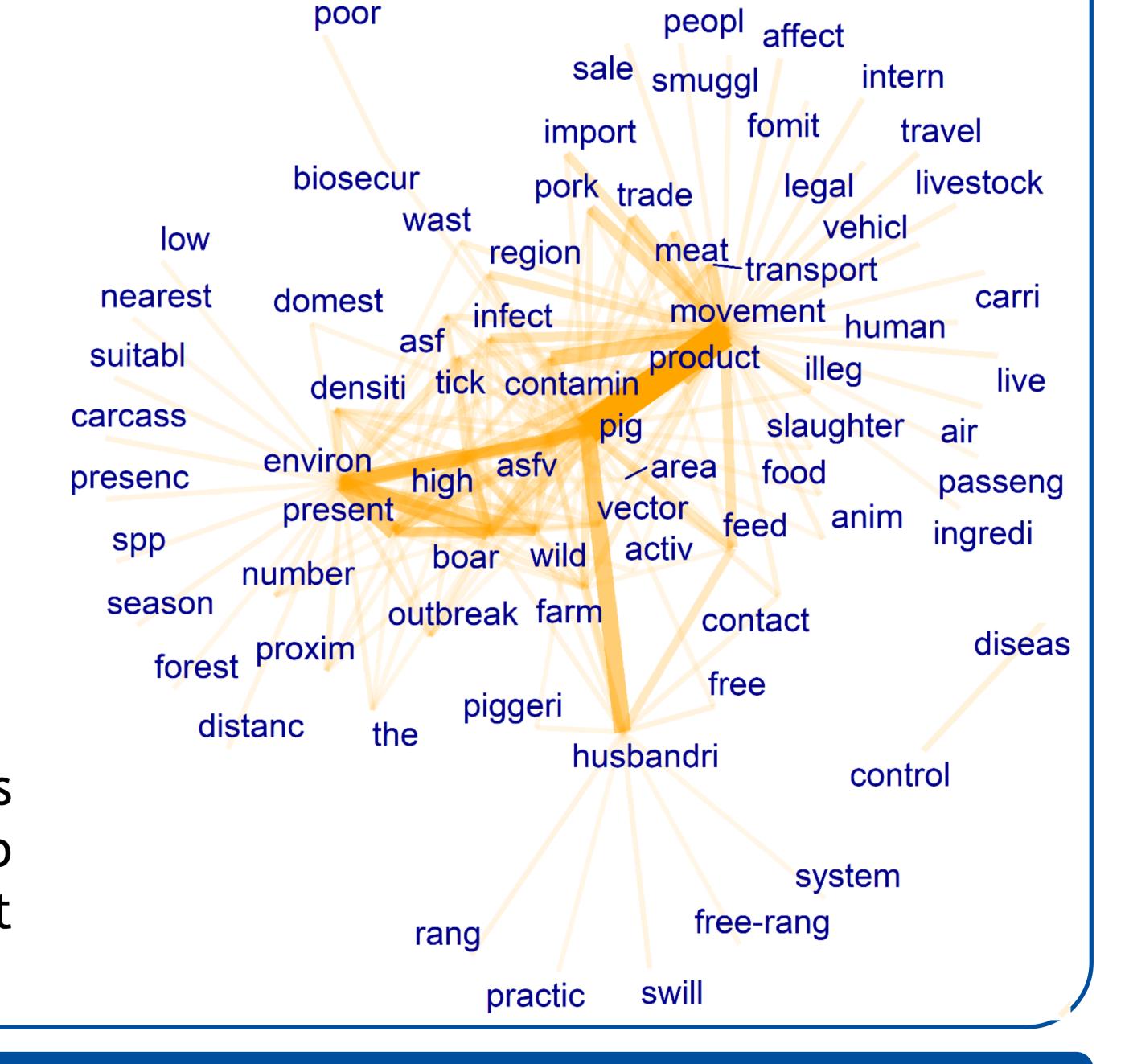


Fig. 1: Number of potential risk factors that may influence the spread of ASF. Identified factors were grouped into the indicated risk categories.

Fig. 2: Guided co-occurrence network of word stems among all identified potential ASF risk factors. The top 200 co-occurring words are shown. Orange bar weight represents the frequency of co-occurrence.



#### 4. Conclusion

- Exhaustive literature searching for potential disease risk factors as a supervised mining tool.
- Environment, movement and husbandry related ASF risk factors were most abundantly found.
- Supports risk assessments, hypothesis development and ASF related problem solving.





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 773701. For more Information see www.defend2020.eu