

# Biosecurity practices and in-between contacts in commercial and hobby poultry holdings, in Belgium

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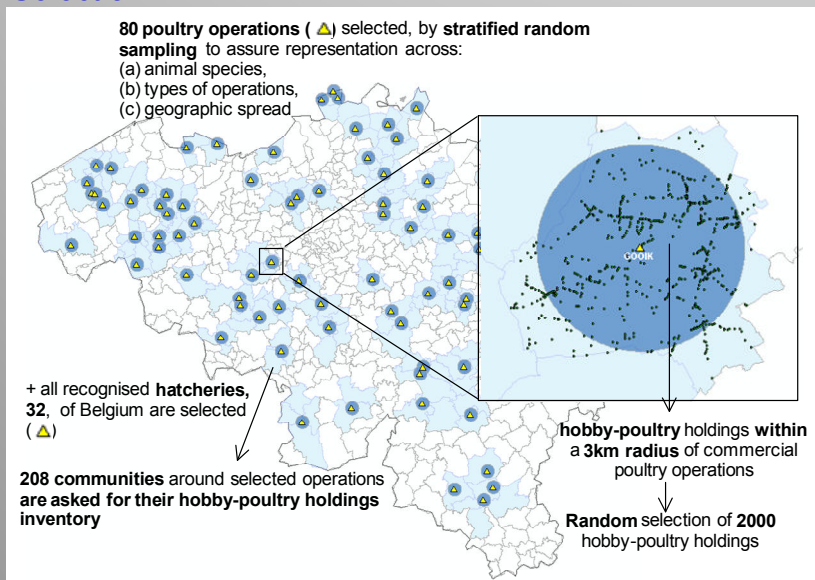
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## INTRODUCTION

With the rising global concern of **emerging diseases**, appropriate **biosecurity** measures are very important, especially in densely populated livestock areas. These measures aim to either **prevent the introduction of infectious diseases** or are applied to **manage or eradicate them**. To this end, the **coexistence of commercial and hobby poultry flocks** needs to be taken into account, since these hobby holdings might play a role in the **spread of infectious diseases**. Therefore the objective of this study was to investigate the **biosecurity status of the whole Belgian poultry population (commercial and hobby)** and the **contacts within and between the different production systems**.

## MATERIAL AND METHODS

### Selection



### Questionnaire

- 80 commercial poultry premises: **oral** questionnaire
- 32 hatcheries: questionnaire by **regular mail**
- 2000 hobby-poultry holdings: **online** questionnaire
- **Standardised semi-closed** questionnaire

<input checked="" type="checkbox"/>	Housing?
<input checked="" type="checkbox"/>	Animal species?
<input checked="" type="checkbox"/>	Sanitation?
<input checked="" type="checkbox"/>	Contacts?

## RESULTS

### Response:

- Professional poultry operations: **59%**
- Hatcheries: **55%**
- Hobby-poultry holdings: **16%**

	hobby	commercial
<b>free-range</b>	94%	27%
<b>housing not secure against wild birds</b>	83%	22%
<b>wild bird acces to feed storage</b>	5%	3%
<b>wild bird acces to stored litter</b>	24%	16%

type	Frequency/year of selling live poultry to hobby-poultry holdings
<b>commercial poultry holding: 27% sells live poultry to hobby-poultry holdings</b>	95 (min. 4 - max. 700)
<b>hatcheries: 42% sells live poultry to hobby-poultry holdings</b>	66 (min. 5 - max. 250)

Contacts of hobby-poultry holdings with:	Frequency/year	
	DIRECT contact	INDIRECT contact
<b>commercial poultry premises: 21% of the hobby-poultry holdings have contacts with commercial poultry premises</b>	1.5 (min. 0.8 - max. 24)	57.9 (min. 0.5 - max. 284)
<b>other hobby-poultry holdings: 39% of the hobby-poultry holdings have contacts with other hobby-poultry holdings</b>	9.3 (min. 0.25 - max. 52)	52.6 (min. 0.2 - max. 377)

## CONCLUSIONS

**Professional** poultry farms and hatcheries in Belgium **generally** have an **acceptable biosecurity** level, although **improvements** are **still possible**. In contrast, biosecurity practices in **hobby poultry premises** are **mostly lacking**. In addition, this study revealed several types of **contacts between commercial and hobby-poultry flocks**. Since the **risk of spread** of infectious diseases is the **combined result of the level of sanitation and the type and intensity of contacts**, **hobby poultry holdings might play a role in the spread** of infectious diseases towards the commercial poultry industry.

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