



National Institute for Public Health
and the Environment
Ministry of Health, Welfare and Sport

Surveillance of infectious disease incidence in Dutch nursing homes

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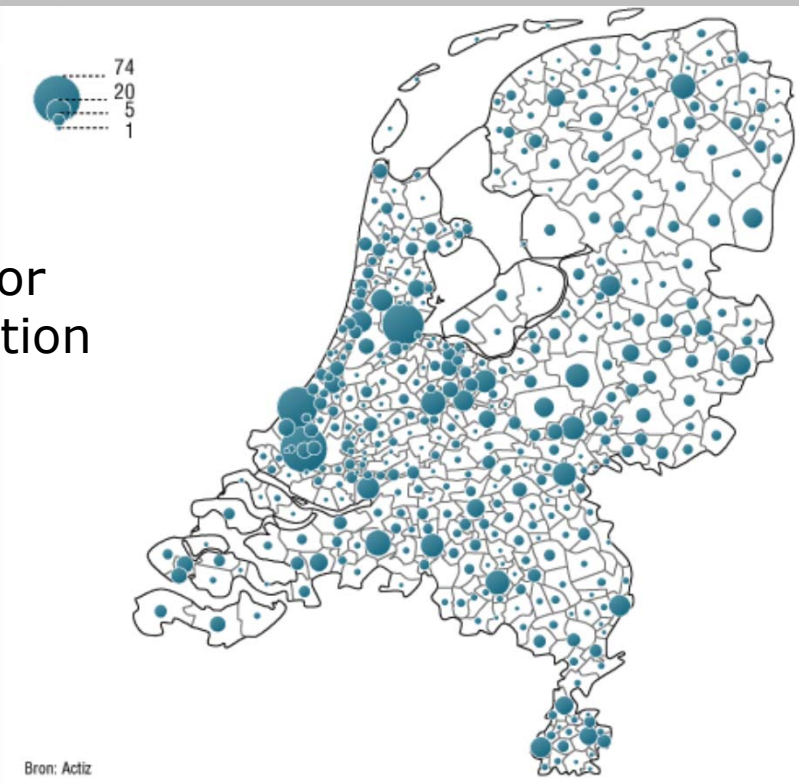


Nursing homes in the Netherlands

Facts about nursing homes:

- 373 Nursing homes
- Elderly with psycho geriatric and/or somatic problems and/or revalidation
- Elderly care physician

Nursing and residential homes





Nursing homes in the Netherlands





Surveillance Network Infectious Diseases in Nursing Homes (SNIV)

- Surveillance network, representative sample
- Started January 1st 2009
- Weekly number of new cases, based on clinical definitions:
 - Gastro-enteritis
 - Influenza-like illness
 - (probable) Pneumonia
 - All-cause mortality
 - Urinary tract infection (since 2011)
- Once yearly: general characteristics of nursing homes (e.g. number of residents, percentage of residents with single room).
- Feedback of results





Surveillance Network Infectious Diseases in Nursing Homes (SNIV)

	2009	2010	2011	2012	2013	2014
Number of nursing homes	25	28	25	19	24	31
Mean number of residents	158	130	128	124	113	100
Mean number of resident weeks	177,677	158,628	136,746	109,452	121,377	161,047



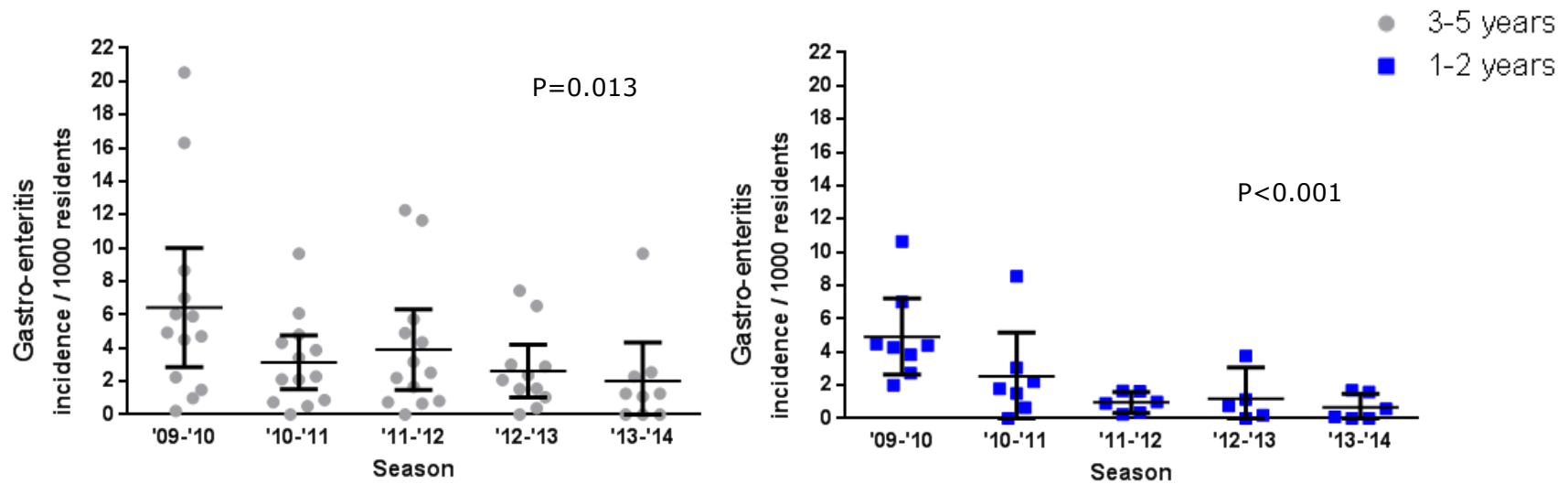
Surveillance Network Infectious Diseases in Nursing Homes (SNIV)

Influenza season	Number of nursing homes	
	3-5 years N=13	1-2 years N=20
2009-2010	13	8
2010-2011	13	7
2011-2012	13	6
2012-2013	11	5
2013-2014	9	6

- Compare groups
3-5 years vs. 1-2 years
- Changes in incidences
of infectious diseases
over time?

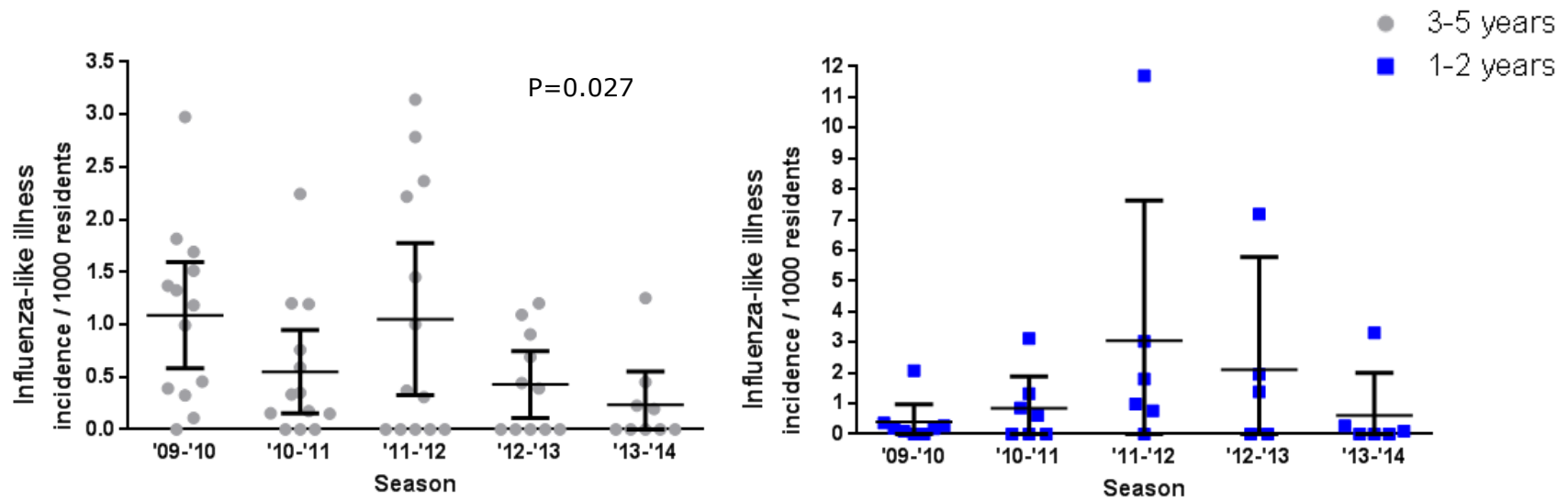


Gastro-enteritis incidence



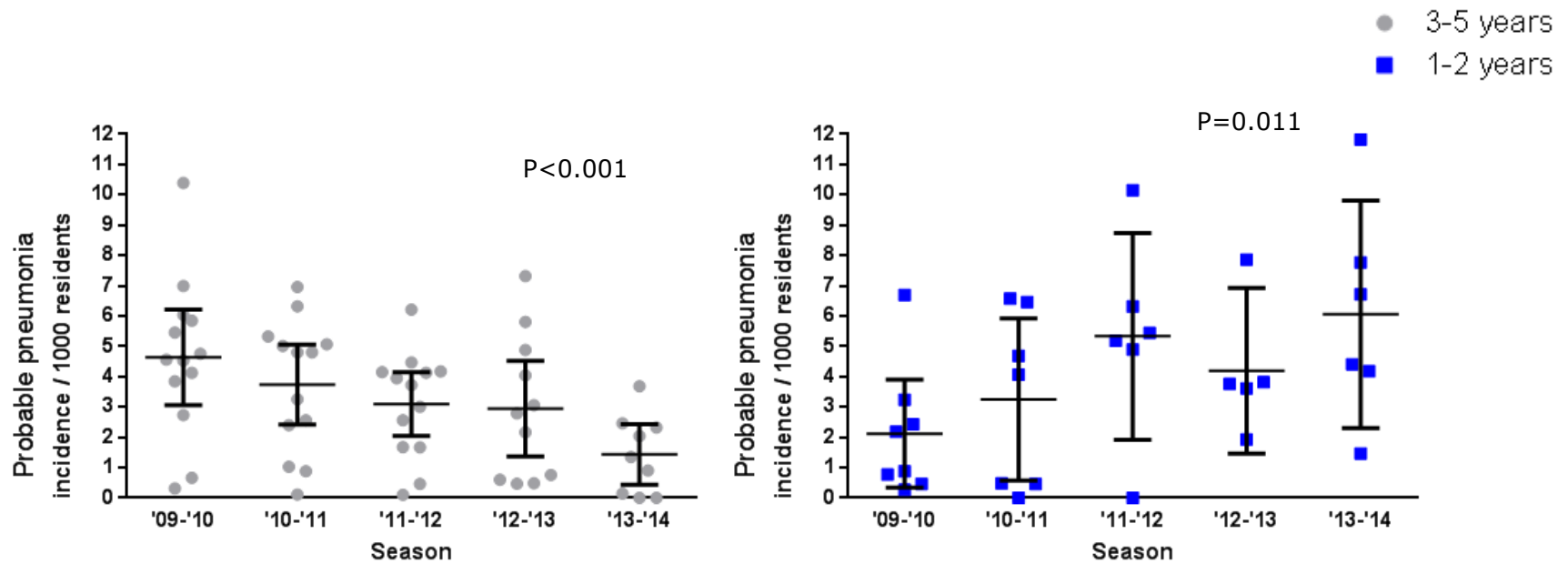


Influenza-like illness incidence





Probable pneumonia incidence





Nursing home characteristics

	1-2 years	4-5 years	
		1st year	Last year
Mean number of residents	143.9	144.2	147.5
% residents with private rooms (>50%)	70.0%	30.8%	69.2%
% residents with private bathroom (>50%)	30.0%	0%	23.1%
Exchange of personnel (rarely)	70.0%	69.2%	61.9%
Personnel wears uniforms (yes)	35.0%	61.5%	61.5%
Infection prevention committee (yes)	75.0%	92.3%	100%
Antibiotic stewardship (yes)	80.0%	92.3%	92.3%

Changes in nursing home characteristics over time, (partialy) due to changes in policy.



Conclusions

- Surveillance network infectious diseases in nursing homes.
- Trend towards a decreasing incidence of gastro-enteritis, influenza-like illness and probable pneumonia over time in nursing homes that participate in surveillance network for 3-5 years.
- Duration of participation in surveillance network may have an effect on incidences of infectious diseases.
- Changes in nursing home characteristics in 5 out of 13 nursing homes that participated for multiple years.
- Better awareness? Changes and/or interventions?
- Participation in surveillance network is not the whole answer!



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