



COST Action “StanDerm”

Seminar on

**Etiology and Prevention of occupational contact  
dermatitis: New challenges**

Barcelona, 24 June 2014

# Secondary prevention strategies: The Dutch experience

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# Secondary prevention system of Occupational Skin Diseases in The Netherlands

None

for the time being

# Secondary prevention system of Occupational Skin Diseases in The Netherlands

But, increasingly felt urge to develop such a cost-effective system

Currently, negotiations with political, employer and social partners

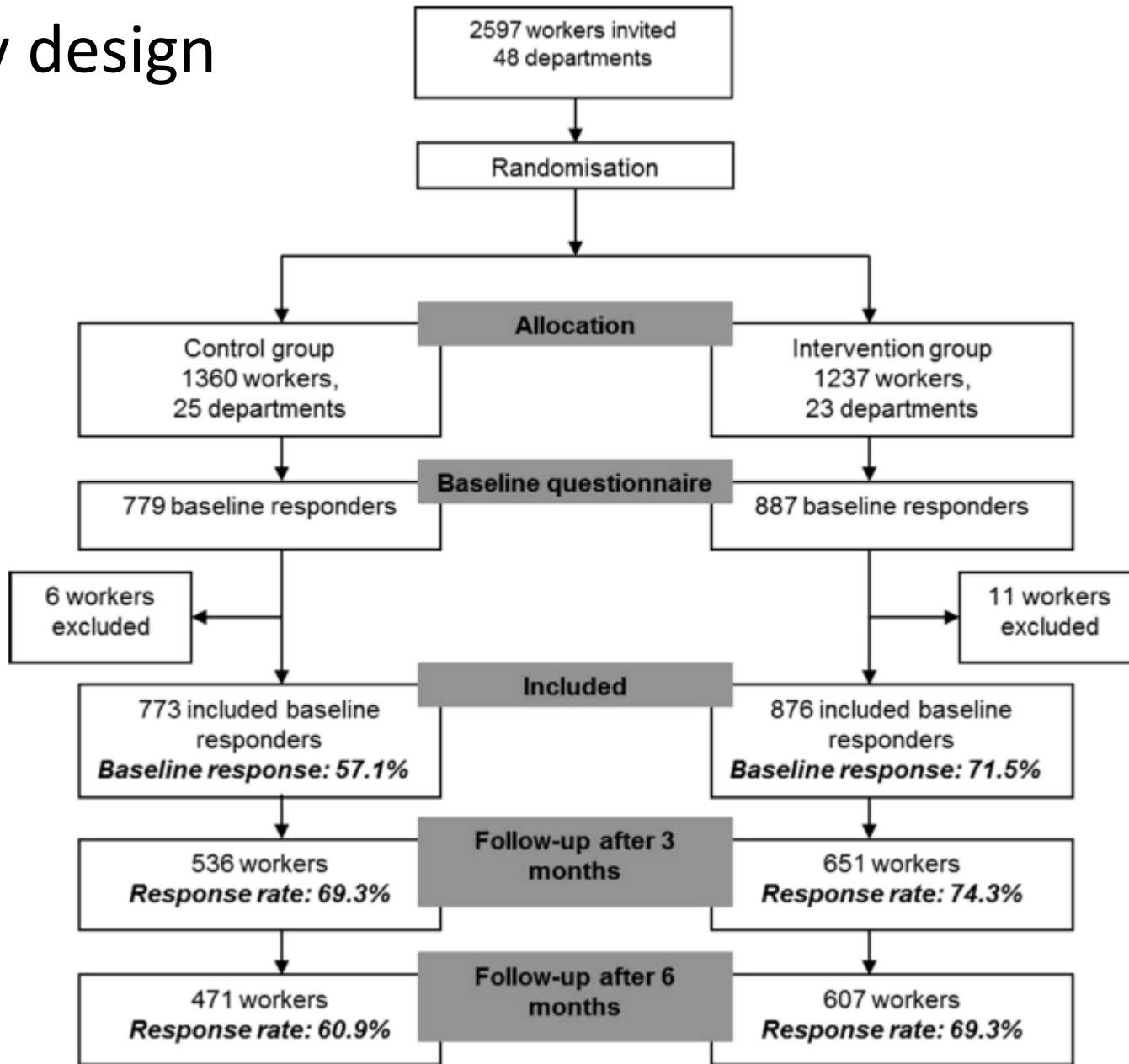
# Hands4U:

The effectiveness of a multifaceted implementation strategy on behaviour related to the prevention of hand eczema

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A randomised controlled trial among healthcare workers

# Study design



# Baseline characteristics

Variable	Total (n)	Control group (n=773)	Intervention group (n=876)
Female, n (%)	1641	603 (78.3)	683 (78.4)
Education*, n (%)	1640		
Low/middle		372 (48.3)	371 (42.6)
High		398 (51.7)	499 (57.4)
Patient-related task, n (%)	1641	626 (81.2)	604 (69.4)
Hand eczema at baseline, n (%)	1649	80 (10.3)	64 (7.3)
Symptoms related to hand eczema at baseline, n (%)	1635	359 (46.7)	361 (41.6)
Age, mean (SD)	1635	40.8 (11.3)	40.7 (11.5)
Working hours per week, mean (SD)	1636	30.2 (8.8)	29.8 (8.1)
Colleague support, mean (SD)	1600	3.1 (0.4)	3.1 (0.4)
Decision authority, mean (SD)	1605	2.8 (0.5)	2.8 (0.4)

# Intervention effects after 12 months of follow-up

Outcome variables	Adjusted† B/OR (95% CI)
Barriers for implementation	
Awareness ((totally) agree) (OR, 95% CI)	6.30 (3.41 to 11.63)
Knowledge (B, 95% CI)	0.74 (0.54 to 0.95)
Receiving information (yes) (OR, 95% CI)	9.81 (5.60 to 17.18)
Behavioural determinants	
Attitude: Important to protect hands ((totally) agree) (OR, 95% CI)	1.12 (0.57 to 2.22)
Attitude: Content with protective measures ((totally) agree) (OR, 95% CI)	1.37 (0.84 to 2.26)
Social influence (B, 95% CI)	0.03 (−0.14 to 0.19)
Self-efficacy (B, 95% CI)	0.04 (−0.07 to 0.15)
Intention (B, 95% CI)	0.02 (−0.11 to 0.15)
Behaviour	
Washing hands (B, 95% CI)	−0.40 (−0.51 to −0.29)
Wet work (B, 95% CI)	−0.08 (−0.18 to 0.03)
Use of moisturiser (B, 95% CI)	0.29 (0.20 to 0.38)
Use of disinfectant (B, 95% CI)	0.05 (−0.06 to 0.16)
Wearing gloves (B, 95% CI)	−0.22 (−0.60 to 0.15)
Use of body lotion (no, never) (OR, 95% CI)	1.07 (0.64 to 1.79)
Wearing jewellery (no, never) (OR, 95% CI)	1.03 (0.54 to 1.97)
Wearing cotton under gloves (once in a while/daily) (OR, 95% CI)	3.94 (2.04 to 7.60)
Compliance to guideline (B, 95% CI)	0.14 (0.02 to 0.26)

# Hands4you: Conclusions

Evidence based recommendations are available for the prevention of hand eczema in healthcare workers, but these are not implemented well into daily practice.

The multifaceted implementation strategy proved to be effective on behaviour related to the compliance of recommendations for the prevention of hand eczema.



# Hands4you: Conclusions

The multifaceted implementation strategy was effective for knowledge and awareness related to hand eczema prevention. The strategy can be used in practice to enhance implementation of recommendations for the prevention of hand eczema among healthcare workers.

Important milestone creating political and public attention

A blue handprint graphic is centered on a white background. The handprint is filled with a textured blue color. Overlaid on the handprint is text in red and black. The text is arranged as follows: 'SUSCEPTIBILITY TO' in red, 'HAND ECZEMA' in large red letters, 'IN HIGH RISK OCCUPATIONS' in red, 'Contribution of genetic and environmental factors' in red, and 'Maaïke Visser' in black at the bottom right.

**SUSCEPTIBILITY TO**

# **HAND ECZEMA**

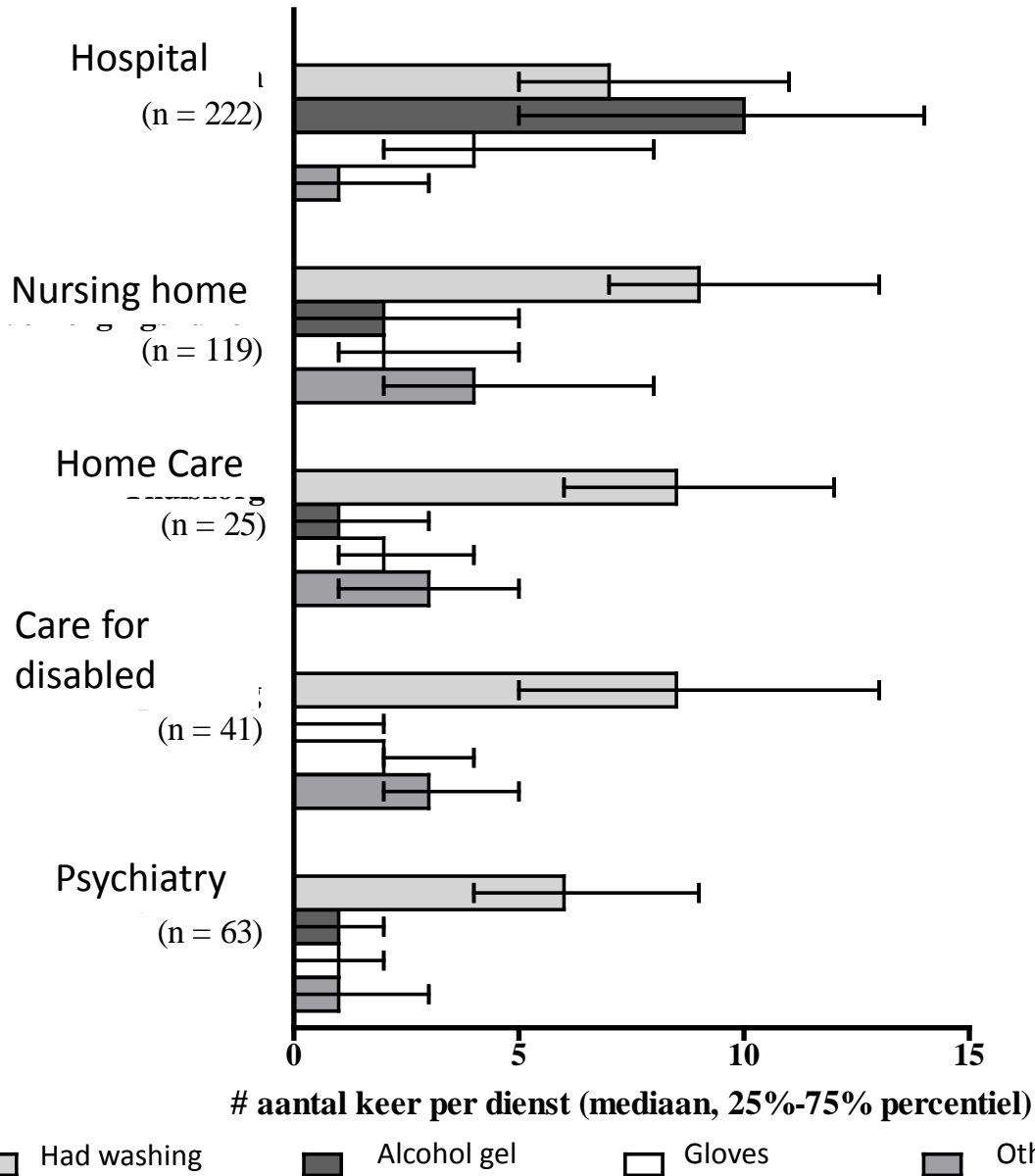
**IN HIGH RISK OCCUPATIONS**

**Contribution of genetic and environmental factors**

Maaïke Visser



# Results: Wet work exposure



8-10 times /day → **OR 2.2** (1.4 – 3.4)

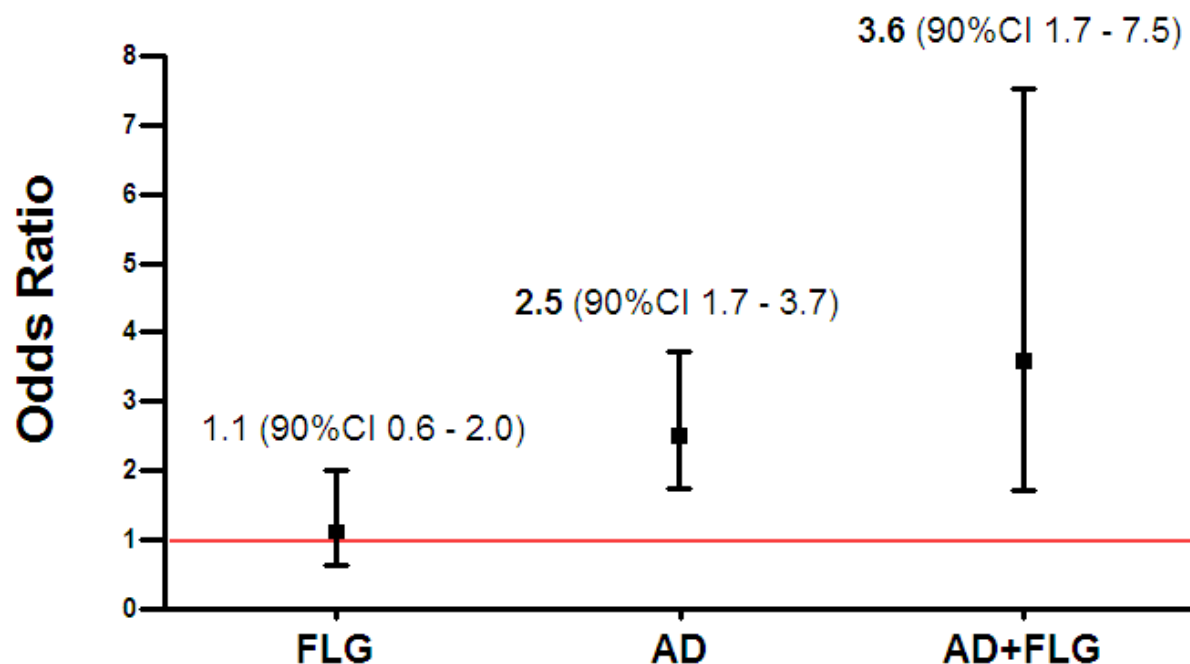


*Visser et al., Contact Dermatitis 2014*

# Results: risk factors

- Period prevalence of HE: 21% - 31%
- Among not previously exposed, no history of HE >> **18%** developed HE

Exposure: hand washing (8-10 times/day)		2.2
Exposure: alcohol gel rubs		Not significant



## Adjusted for wet work exposure:

- No effect of *FLG* mutations in absence of AD
- Combined *FLG* mutations and AD >> highest risk of HE

(Visser et al., Contact Dermatitis 2013)

# Acknowledgement

## **AMC, Coronel Institute**

Sanja Kezic

Maaïke Visser

Monique Frings

## **VUmc, Occupational Health**

Han Anema

Esther van der Meer

Robin van Gils

Willem van Mechelen

## **VUmc, Occupational Dermatology**

Jan Bakker