



# 67° CONGRESSO NAZIONALE SIGG

LA LONGEVITÀ DECLINATA AL FEMMINILE

**MARCO CLARI**

La vaccinazione del personale sanitario per la tutela degli anziani



SOCIETÀ ITALIANA  
DI GERONTOLOGIA  
E GERIATRIA

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UNIVERSITÀ CATTOLICA DEL SACRO CUORE



UNIVERSITÀ  
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# Conflitti di interesse

Marco Clari RN, PhD

**Nulla da dichiarare**





Cochrane Database of Systematic Reviews

## Influenza vaccination for healthcare workers who care for people aged 60 or older living in long-term care institutions (Review)

Thomas RE, Jefferson T, Lasserson TJ





**Reported and predicted percentage reductions in patient outcomes between intervention and control sites among cluster randomized controlled trials to assess indirect patient benefits from increased influenza vaccine coverage of healthcare workers in long-term care facilities.**

	HCW Influenza Vaccine Coverage and Absolute Difference (Δ%)	Patient Outcomes		
Publication		Laboratory-confirmed influenza	Influenza-like Illness (ILI)	All-cause mortality
Summary pooled estimates from meta-analyses				
United States Centers for Disease Control and Prevention [15]				
Incidence intervention vs. control sites	NA	5.1% vs. 6.4%	8.1% vs. 14.1%	9.0% vs. 13.0%
Reported relative % reduction (95% CI) <sup>†</sup>	NA	20% (-108%, 69%)	42% (27%, 54%)	29% (15%, 41%)
Cochrane Collaboration [16]				
Incidence intervention vs control sites	NA	4.5% vs. 5.3%	8.1% vs. 11.4%	9.0% vs. 13.0%
Reported relative % reduction (95% CI) <sup>†</sup>	NA	14% (-68%, 56%)	29% (10%, 45%)	34% (21%, 45%)

De Serres G, Skowronski DM, Ward BJ, Gardam M, Lemieux C, et al. (2017) Influenza Vaccination of Healthcare Workers: Critical Analysis of the Evidence for Patient Benefit Underpinning Policies of Enforcement. PLOS ONE 12(1): e0163586. <https://doi.org/10.1371/journal.pone.0163586>  
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0163586>

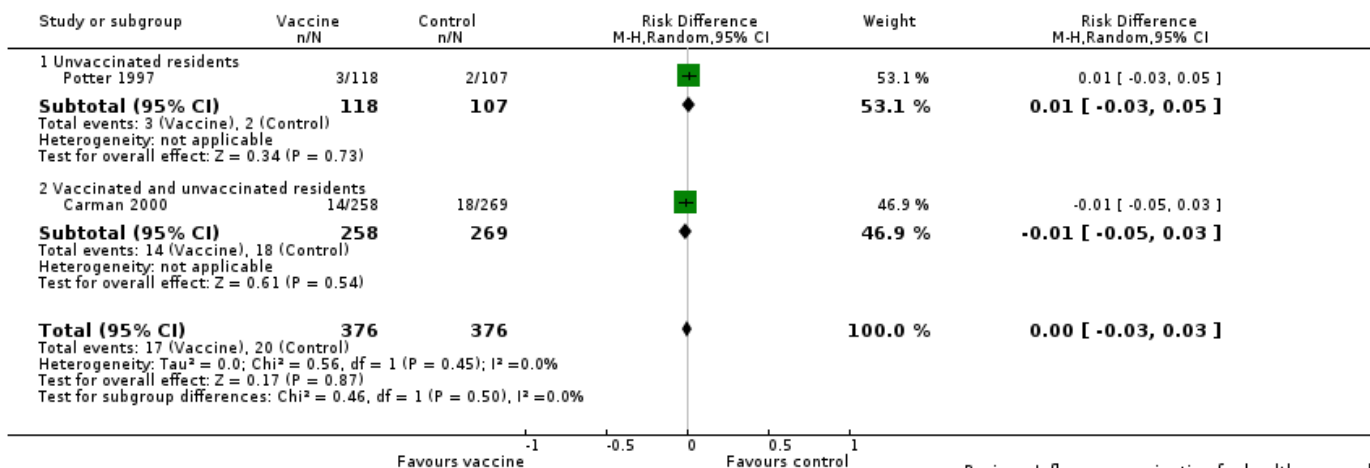




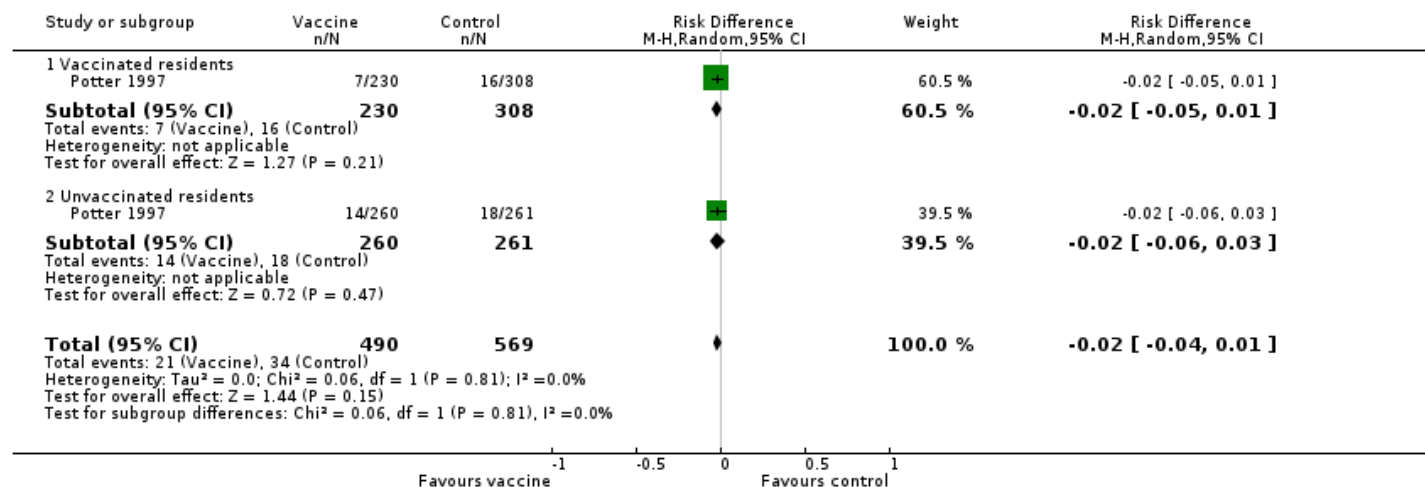
Outcomes	Anticipated absolute effects* (95% CI)		Risk difference (95% CI)	N of participants (studies)	Quality of the evidence (GRADE)	Comments
	Risk in people living in care institutions where HCWs not offered influenza vaccination	Risk in people living in care institutions where HCWs offered influenza vaccination				
Influenza	Study population		0 (-0.03 to 0.03)	752 (2 studies)	⊕⊕⊕⊕ LOW <sup>1 2</sup>	
Follow-up to end of influenza season	5 per 100	<b>5 per 100</b> (2 to 8)				
Lower respiratory tract infection	Study population		-0.02 (-0.04 to 0.01)	1059 (1 study)	⊕⊕⊕⊕ MODERATE <sup>1</sup>	
Follow-up to end of influenza season	6 per 100	<b>4 per 100</b> (2 to 7)				
Admission to hospital for respiratory illness	Study population		0 (-0.02 to 0.02)	3400 (1 study)	⊕⊕⊕⊕ LOW <sup>1 2</sup>	
Follow-up to end of influenza season	9 per 100	<b>9 per 100</b> (7 to 11)				
Deaths from influenza or its complications	The results of the studies differed substantially. We did not combine data due to the inconsistency of the size and direction of the trial risk differences. The risk of death from influenza or pneumonia was 1% and 8% in the control arms of the studies. The risk of death in the HCW vaccination arms was 5% and 1% in the two studies.		Not pooled	4459 (2 studies)	⊕⊕⊕⊕ VERY LOW <sup>3 4</sup>	
Follow-up to end of influenza season						
Deaths from all causes	The results of the studies differed substantially. We did not combine data due to the inconsistency of the size and direction of the trial risk differences. The risk of death from any cause ranged from 6% to 22% in the control groups. The risk of death in the HCW vaccination arms ranged from 5% to 13%.		Not pooled	8468 (4 studies)	⊕⊕⊕⊕ VERY LOW <sup>3 4</sup>	



Review: Influenza vaccination for healthcare workers who care for people aged 60 or older living in long-term care institutions  
Comparison: 1 HCWs offered vaccination versus HCWs offered no vaccination: experimental design; data for periods of high influenza activity (three C-RCTs; Carman 2000 ,  
Outcome: 1 Influenza



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Outcome: 2 Lower respiratory tract infection

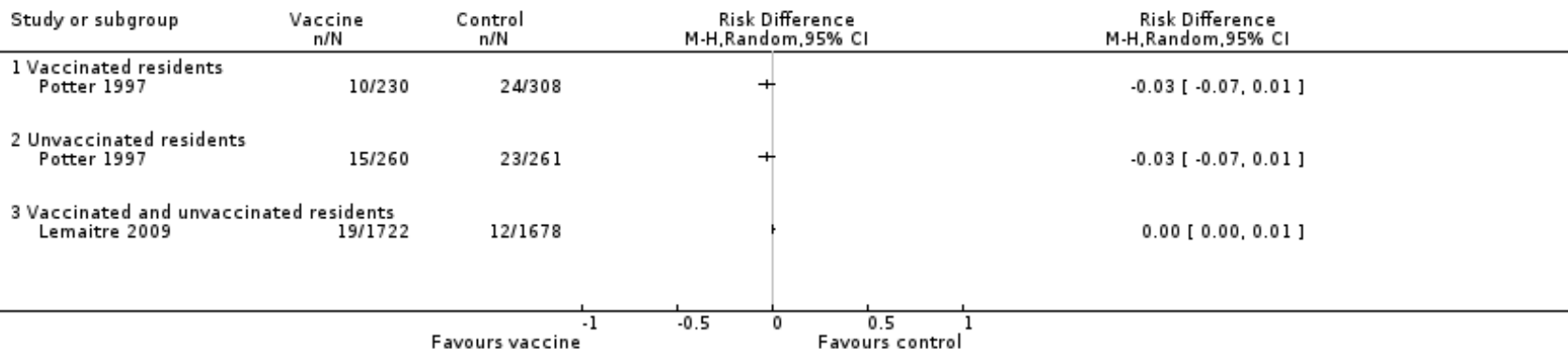




Review: Influenza vaccination for healthcare workers who care for people aged 60 or older living in long-term care institutions

Comparison: 1 HCWs offered vaccination versus HCWs offered no vaccination: experimental design; data for periods of high influenza activity (three C-RCTs; Carman 2000 ,

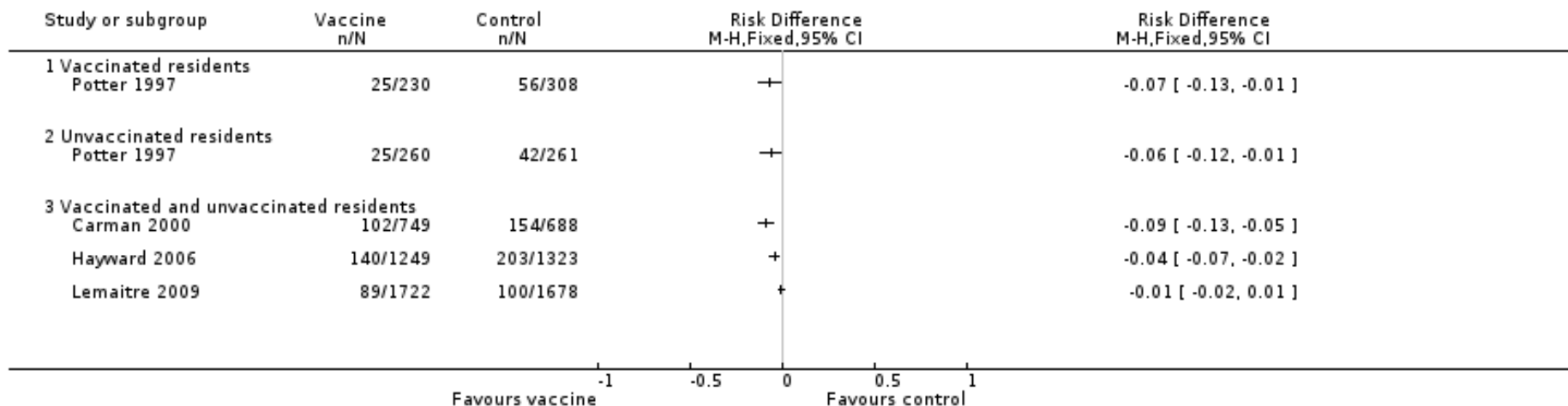
Outcome: 4 Deaths from influenza or its complications



Review: Influenza vaccination for healthcare workers who care for people aged 60 or older living in long-term care institutions

Comparison: 1 HCWs offered vaccination versus HCWs offered no vaccination: experimental design; data for periods of high influenza activity (three C-RCTs; Carman 2000 ,

Outcome: 5 Death from any cause








There are **no conclusive evidence of benefit of HCW vaccination programmes** on specific outcomes of laboratory-proven influenza, its complications (lower respiratory tract infection, hospitalisation or death due to lower respiratory tract illness), or all cause mortality in people over the age of 60 who live in care institutions. **No reasonable evidence to support the vaccination of healthcare workers** to prevent influenza in those aged 60 years or older resident in LTCIs is present.

Thomas RE, Jefferson T, Lasserson TJ. Influenza vaccination for healthcare workers who care for people aged 60 or older living in long-term care institutions. Cochrane Database Syst Rev. 2016 Jun 2;2016(6):CD005187. doi: 10.1002/14651858.CD005187.pub5. PMID: 27251461; PMCID: PMC8504984.





Who needs  
more  
protection?



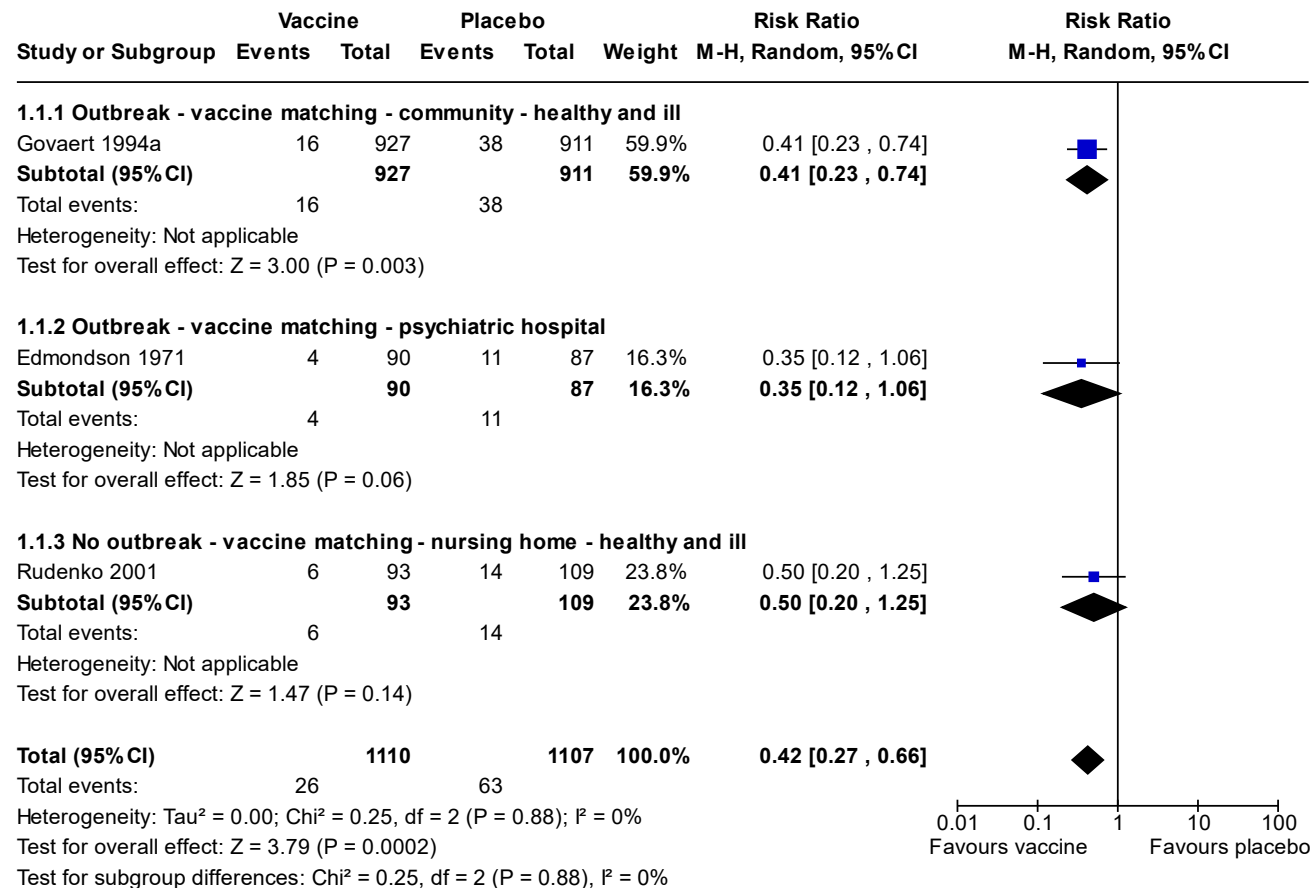
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## Vaccines for preventing influenza in the elderly (Review)

Demicheli V, Jefferson T, Di Pietrantonj C, Ferroni E, Thorning S, Thomas RE, Rivetti A

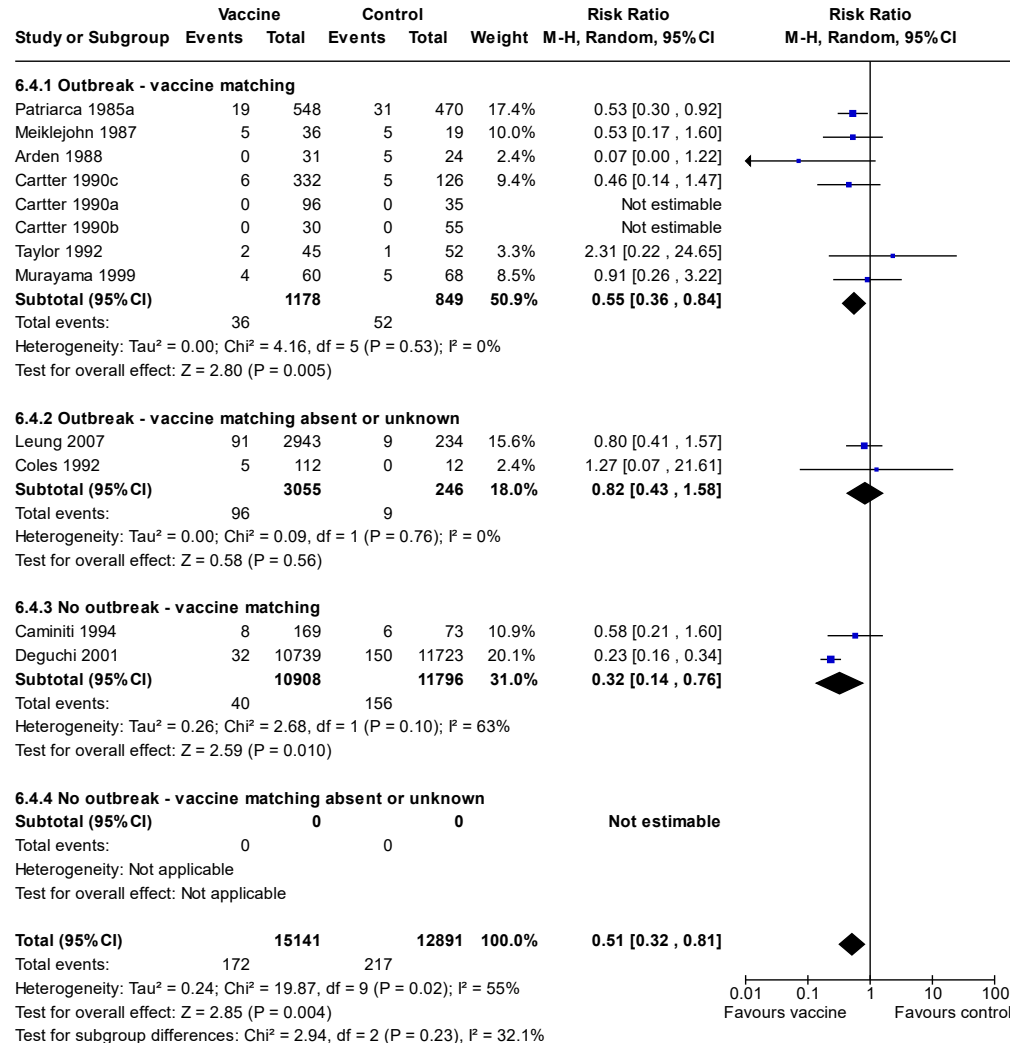
In the over-65s, the vaccine reduced the risk of influenza from 6% to 2.4% (risk ratio (RR) 0.42, 95% CI 0.27–0.66; NNT=30), and ILI from 6% to 3.5% (RR 0.59, 95% CI 0.47–0.73; NNT=42) in comparison to placebo.

## Outcome: Influenza

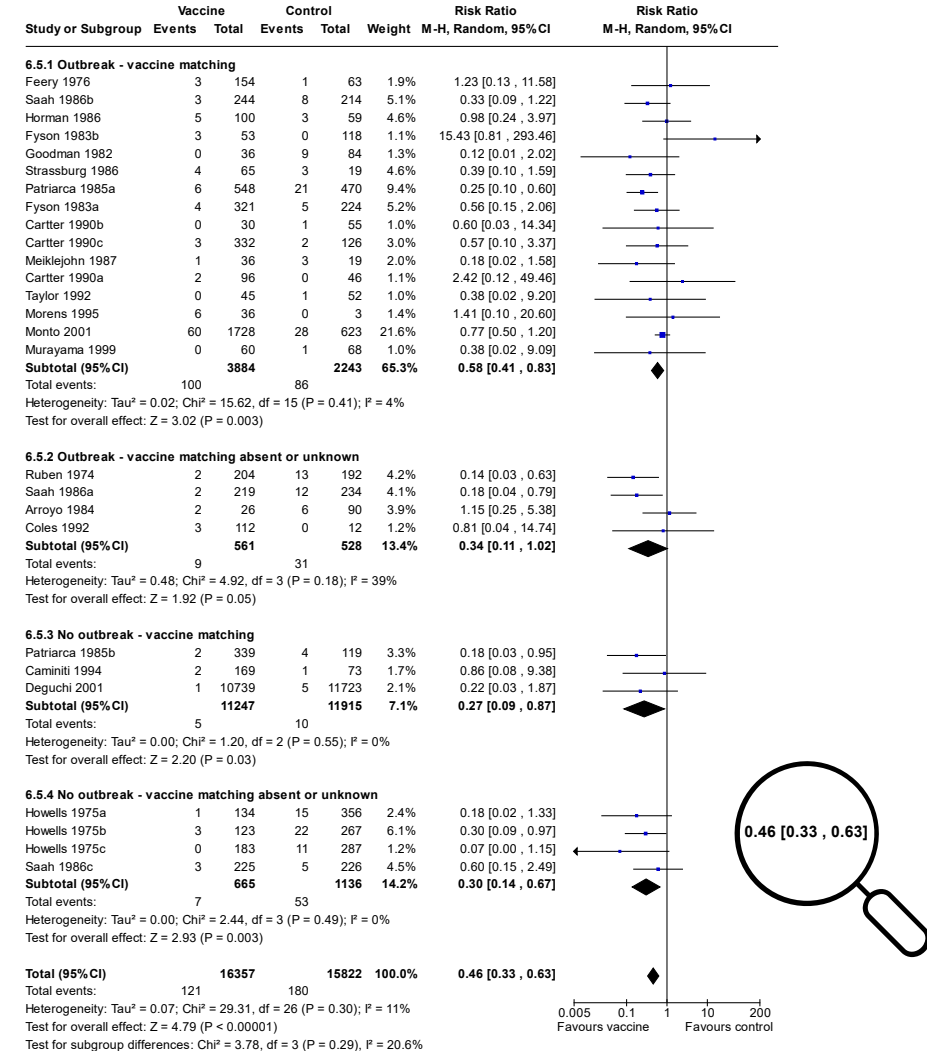




Outcome: Hospitalisation for influenza-like illness



Outcome: Deaths from flu or pneumonia

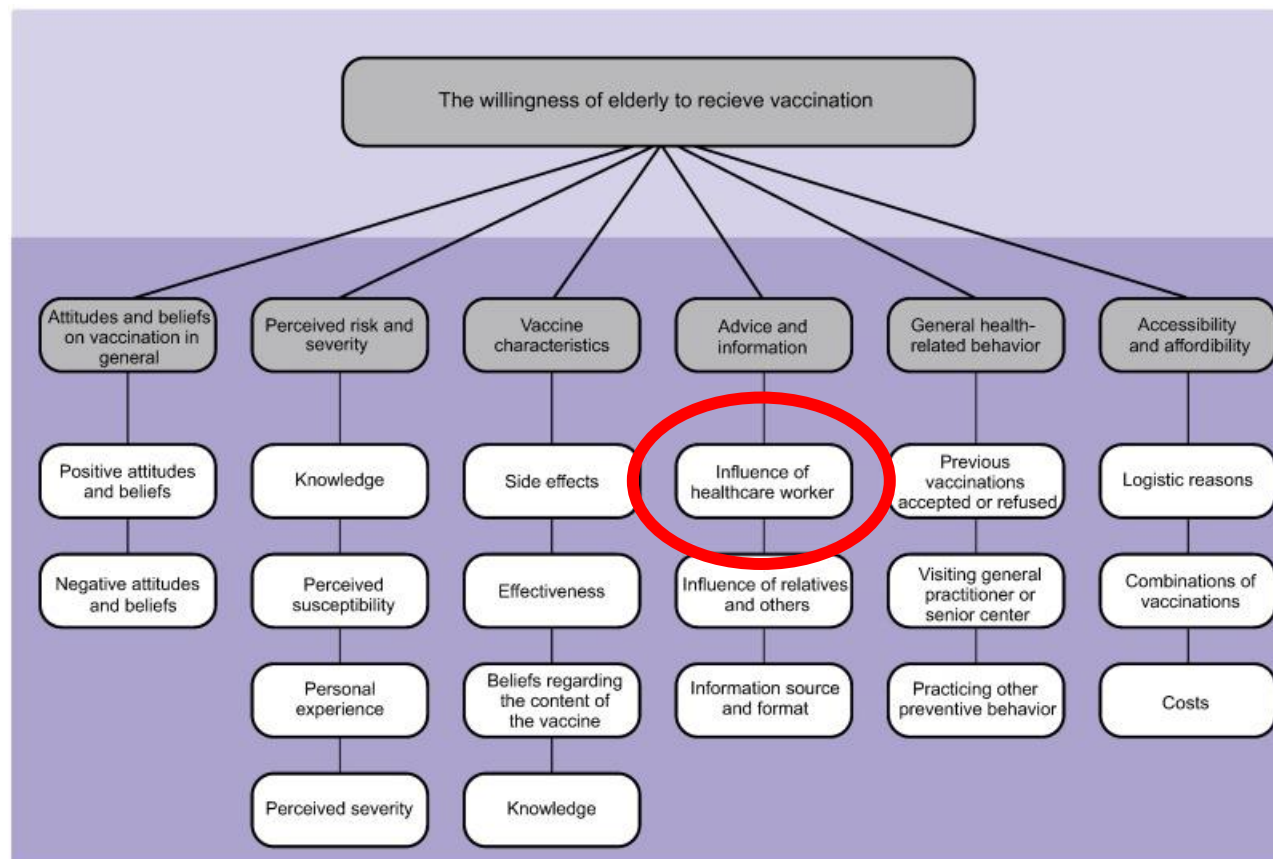






So why should  
healthcare  
workers get  
vaccinated?





Preventive Medicine  
Volume 69, December 2014, Pages 224-234



Review

## Factors affecting the uptake of vaccination by the elderly in Western society

R. Eilers <sup>a, b</sup>, P.F.M. Krabbe <sup>a</sup>, H.E. de Melker <sup>b</sup>

### Highlights

- Negative attitudes and beliefs about vaccination are crucial in low vaccine uptake.
- Awareness of personal susceptibility is a key factor for vaccine uptake.
- Perceived side effects and effectiveness are the most important aspects of low vaccine uptake.
- Healthcare workers (HCW) play a central role in vaccination uptake by elderly.
- Miscommunication between elderly and HCW could lead to low vaccination rates.





Cochrane Database of Systematic Reviews | [Review - Qualitative](#)

## Healthcare workers' perceptions and experiences of communicating with people over 50 years of age about vaccination: a qualitative evidence synthesis

✉ Claire Glenton, Benedicte Carlsen, Simon Lewin, Manuela Dominique Wennekes, Brita Askeland Winje, Renske Eilers, on behalf of the VITAL consortium | [Authors' declarations of interest](#)

Version published: 20 July 2021 | [Version history](#)

<https://doi.org/10.1002/14651858.CD013706.pub2> 

Finding 6. Some healthcare workers who had chosen not to have the influenza vaccine themselves noted that they would still promote this vaccine to older people. However, other healthcare workers suggested that it was easier to convince older adults to accept vaccines if the healthcare workers themselves believed in the advantages of vaccination and if they led by example in accepting vaccination.

Low  
confidence

Finding 15. The extent to which healthcare workers regarded vaccine services as part of their role and responsibilities varied. Some providers saw it as part of their role, others were concerned about encroaching on the roles of other providers, and others were unclear about who was responsible.

Moderate  
confidence





# Take-home messages

No conclusive evidence of benefit of HCW vaccination programmes are present

Older people benefit from vaccination especially in terms of hospitalizations and mortality

Healthcare workers play a central role in vaccination uptake by elderly

More research on vaccine decision-making and communication about vaccines between healthcare workers and older adults is needed. This includes research in nursing home and research on communication with older adults family members.





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## LA VACCINAZIONE DEL PERSONALE SANITARIO PER LA TUTELA DEGLI ANZIANI

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