

MARCO CLARI

La vaccinazione del personale sanitario per la tutela degli anziani















Conflitti di interesse

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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	Pat	tient Outcomes	
Publication	Absolute Difference (Δ%)	Laboratory-confirmed influenza	Influenza-like Illness (ILI)	All-cause mortality
Summary pooled estimates from m	eta-analyses			
United States Centers for Disease C	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) ^f	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) ^f	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



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Outcomes	Anticipated absolute effects* (95% CI)		Risk	N of	Quality of	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	difference (95% CI)	participants (studies)	the evidence (GRADE)	
Influenza	Study population		0 (-0.03 to	752	⊕⊕⊝⊝ LOW ¹²	
Follow-up to end of influenza season	5 per 100	5 per 100 (2 to 8)	- 0.03)	(2 studies)	LOW 12	
Lower respiratory	Study population		-0.02 (-	1059	⊕⊕⊕⊖	
tract infection Follow-up to end of influenza season	6 per 100	4 per 100 (2 to 7)	0.04 to 0.01)	(1 study)	MODERATE 1	
Admission to hospital	Study population		0 (-0.02 to	3400	⊕⊕⊝⊝ LOW ¹²	
for respiratory illness Follow-up to end of influenza season	9 per 100	9 per 100 (7 to 11)	- 0.02)	(1 study)	LOW	
Deaths from influenza or its complications	The results of the studies differed substantially. We did not combine data due to the influenza or pneumonia was 1% and 8% in the control arms of the studies. The results of the studies of the studies of the studies of the studies of the studies.	· · · · · · · · · · · · · · · · · · ·	Not pooled	4459 (2 studies)	⊕⊝⊝⊝ VERY LOW 34	
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 informany cause ranged from 6% to 22% in the control groups. The risk of death in the	· · · · · · · · · · · · · · · · · · ·	Not pooled	8468 (4 studies)	⊕⊝⊝⊝ VERY LOW 34	



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LA LONGEVITÀ DECLINATA AL FEMMINILE

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

Study or subgroup	Vaccine n/N	Control n/N	Risk Difference M-H,Random,95% CI	Weight	Risk Difference M-H,Random,95% CI	
1 Unvaccinated residents Potter 1997	3/118	2/107	-	53.1 %	0.01 [-0.03, 0.05]	
Subtotal (95% CI) Total events: 3 (Vaccine), 3 Heterogeneity: not applica Test for overall effect: Z =	ble	107	•	53.1 %	0.01 [-0.03, 0.05]	
2 Vaccinated and unvaccin Carman 2000	nated residents 14/258	18/269	-	46.9 %	-0.01 [-0.05, 0.03]	
Subtotal (95% CI) Total events: 14 (Vaccine), Heterogeneity: not applica Test for overall effect: Z =	ble	269	•	46.9 %	-0.01 [-0.05, 0.03]	
Total (95% CI) Total events: 17 (Vaccine), Heterogeneity: Tau² = 0.0; Test for overall effect: Z = Test for subgroup difference	Chi ² = 0.56, df = 1 0.17 (P = 0.87)		•	100.0 %	0.00 [-0.03, 0.03]	
		-1	-0.5 0 0.5	1		
		Favours vaccine	Favours	control	Review: Influenza vaccination for healthc	are worker

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 and Outcome: 2 Lower respiratory tract infection

Study or subgroup	Vaccine n/N	Control n/N	Risk Difference M-H,Random,95% CI	Weight	Risk Difference M-H,Random,95% CI	
1 Vaccinated residents Potter 1997	7/230	16/308		60.5 %	-0.02 [-0.05, 0.01]	
Subtotal (95% CI) Total events: 7 (Vaccine), Heterogeneity: not applica Test for overall effect: Z =	ble	308	•	60.5 %	-0.02 [-0.05, 0.01]	
2 Unvaccinated residents Potter 1997	14/260	18/261		39.5 %	-0.02 [-0.06, 0.03]	
Subtotal (95% CI) Total events: 14 (Vaccine), Heterogeneity: not applica Test for overall effect: Z =	ble	261	•	39.5 %	-0.02 [-0.06, 0.03]	
Total (95% CI) Total events: 21 (Vaccine), Heterogeneity: Tau² = 0.0; Test for overall effect: Z = Test for subgroup differenc	Chi ² = 0.06, df = 1 1.44 (P = 0.15)			100.0 %	-0.02 [-0.04, 0.01]	
		-1 Favours vaccine	-0.5 0 0.5 Favours c	ontrol		



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LA LONGEVITÀ DECLINATA AL FEMMINILE

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

Study or subgroup	Vaccine n/N	Control n/N	Risk Difference M-H,Random,95% CI	Risk Difference M-H,Random,95% CI	
l Vaccinated residents Potter 1997	10/230	24/308	+	-0.03 [-0.07, 0.01]	
2 Unvaccinated residents Potter 1997	15/260	23/261	+	-0.03 [-0.07, 0.01]	
3 Vaccinated and unvaccin Lemaitre 2009	ated residents 19/1722	12/1678	•	0.00[0.00,0.01]	
		-1	-0.5 0 0.5	1	
		Favours vaccine	Favours	control	

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

Study or subgroup	Vaccine n/N	Control n/N	Risk Difference M-H,Fixed,95% CI	
1 Vaccinated residents Potter 1997	25/230	56/308	+	-0.07 [-0.13, -0.01]
2 Unvaccinated residents Potter 1997	25/260	42/261	+	-0.06 [-0.12, -0.01]
3 Vaccinated and unvaccin Carman 2000	ated residents 102/749	154/688	+	-0.09 [-0.13, -0.05]
Hayward 2006	140/1249	203/1323	+	-0.04 [-0.07, -0.02]
Lemaitre 2009	89/1722	100/1678	†	-0.01[-0.02, 0.01]
			-1 -0.5 0	0.5 1
		Favours vaccine		ours control















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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Favours placebo

Favours vaccine

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Total events:

26

Test for overall effect: Z = 3.79 (P = 0.0002)

Heterogeneity: $Tau^2 = 0.00$; $Chi^2 = 0.25$, df = 2 (P = 0.88); $I^2 = 0\%$

Test for subgroup differences: $Chi^2 = 0.25$, df = 2 (P = 0.88), $I^2 = 0\%$

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Cochrane Database of Systematic Reviews

Vaccines for preventing influenza in the elderly (Review)

Demicheli V. Jefferson T. Di Pietrantoni 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.

	Vaco	ine	Place	ebo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% Cl
1.1.1 Outbreak - vac	ccine mate	ching - c	ommunity	/ - health	y and ill		
Govaert 1994a	16	927	38	911	59.9%	0.41 [0.23 , 0.74]	-
Subtotal (95% CI)		927	•	911	59.9%	0.41 [0.23 , 0.74]	
Total events:	16		38				_
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 3.00 (P = 0.003	3)				
1.1.2 Outbreak - vac	ccine mate	ching - p	sychiatric	: hospita	ıl		
Edmondson 1971	4	90	11	87	16.3%	0.35 [0.12 , 1.06]	
Subtotal (95% CI)		90)	87	16.3%	0.35 [0.12 , 1.06]	
Total events:	4		11				
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 1.85 (P = 0.06)				
1.1.3 No outbreak -	vaccine n	natching	ı - nursing	home -	healthy a	and ill	
Rudenko 2001	6	93	14	109	23.8%	0.50 [0.20 , 1.25]	-
Subtotal (95% CI)		93	}	109	23.8%	0.50 [0.20 , 1.25]	
Total events:	6		14				
Heterogeneity: Not ap	plicable						
Test for overall effect:	: Z = 1.47 (P = 0.14))				
Total (95% CI)		1110)	1107	100.0%	0.42 [0.27 , 0.66]	

Outcome: Influenza



Outcome: Hospitalisation for influenza-like illness

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	Vacc	ine	Cont	rol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
6.4.1 Outbreak - vac	cine mate	hing					
Patriarca 1985a	19	548	31	470	17.4%	0.53 [0.30 , 0.92]	
Meiklejohn 1987	5	36	5	19	10.0%	0.53 [0.17 , 1.60]	
Arden 1988	0	31	5	24	2.4%		
Cartter 1990c	6	332	5	126	9.4%	0.46 [0.14 , 1.47]	
Cartter 1990a	0	96	0	35		Not estimable	-
Cartter 1990b	0	30	0	55		Not estimable	
Taylor 1992	2	45	1	52	3.3%	2.31 [0.22 , 24.65]	
Murayama 1999	4	60	5	68	8.5%		
Subtotal (95% CI)		1178		849	50.9%		
Total events:	36		52			• / •	•
Heterogeneity: Tau ² =	0.00; Chi ²	= 4.16, 0	df = 5 (P =	0.53); l² :	= 0%		
Test for overall effect:				,,			
6.4.2 Outbreak - vac	cino mate	hina ah	cont or w	nknown			
Leung 2007	91	2943		234	15.6%	0.80 [0.41 , 1.57]	
Coles 1992	5	112		12			- -
Subtotal (95% CI)	5	3055	-	246	18.0%		
Total events:	96	3033	9	240	10.0 /	0.02 [0.43 , 1.30]	
Heterogeneity: Tau ² =		- 0 00 7	-	0.76). 12 -	- 0%		
Test for overall effect:				0.70), 1	- 0 70		
6.4.3 No outbreak -	vaccino m	natching					
Caminiti 1994	8	169		73	10.9%	0.58 [0.21 , 1.60]	_
Deguchi 2001	32	10739	-	11723			
Subtotal (95% CI)	52	10908		11796			<u> </u>
Total events:	40	10300	156	11730	31.0 /	0.52 [0.14 , 0.76]	
Heterogeneity: Tau ² =		= 2.68 (∩ 1∩\· l² :	= 63%		
Test for overall effect:				0.10), 1	- 0070		
C 4 4 No outbrook			ahaant a				
6.4.4 No outbreak - Subtotal (95% CI)	vaccine ii	iatening 0		r unknov 0	WII	Not estimable	
Total events:	0	·	0	Ū		HOL GOLINIADIG	
Heterogeneity: Not ap			U				
Test for overall effect:		ahle					
rest for overall effect.	Not applic	abic					
Total (95% CI)		15141		12891	100.0%	0.51 [0.32 , 0.81]	◆
Total events:	172		217				
Heterogeneity: Tau ² =	0.24; Chi ²	= 19.87,	df = 9 (P =	= 0.02); l ²	= 55%	0.0	01 0.1 1 10 10
	Z = 2.85 (_	ours vaccine Favours cont

Outcome: Deaths from flu or pneumonia

	Events	ne Total	Cont Events		Weight	Risk Ratio M-H, Random, 95%CI	Risk Ratio M-H, Random, 95%Cl
3.5.1 Outbreak - vac	nino mato	hina					
	cine matc	ning 154	1	63	1.9%	1.23 [0.13 , 11.58]	
Saah 1986b	3	244	8	214	5.1%	0.33 [0.09 , 1.22]	
Horman 1986	5	100	3	59	4.6%	0.98 [0.24 , 3.97]	
Fyson 1983b	3	53	0	118	1.1%	15.43 [0.81 , 293.46]	
Goodman 1982	0	36	9	84	1.3%	0.12 [0.01 , 2.02]	
Strassburg 1986	4	65	3	19	4.6%	0.39 [0.10 , 1.59]	
Patriarca 1985a	6	548	21	470	9.4%	0.25 [0.10 , 0.60]	
Fyson 1983a	4	321	5	224	5.2%	0.56 [0.15 , 2.06]	 -
Cartter 1990b	0	30	1	55	1.0%	0.60 [0.03 , 14.34]	 T
Cartter 1990c	3	332	2	126	3.0%	0.57 [0.10 , 3.37]	
Meiklejohn 1987	1	36	3	19	2.0%	0.18 [0.02 , 1.58]	
Cartter 1990a	2	96	0	46	1.1%	2.42 [0.12 , 49.46]	
Taylor 1992	0	45	1	52	1.0%	0.38 [0.02 , 9.20]	
Morens 1995	6	36	0	3	1.4%	1.41 [0.10 , 20.60]	
Monto 2001	60	1728	28	623	21.6%	0.77 [0.50 , 1.20]	
Murayama 1999	0	60	1	68	1.0%	0.77 [0.50 , 1.20]	*
Subtotal (95% CI)	U	3884	'	2243	65.3%		
Total events:	100	3004	86	2243	00.5%	0.00 [0.41 , 0.03]	▼
leterogeneity: Tau² =		= 15.62		= 0.41\	l ² = 4%		
Test for overall effect:				- U. 4 I),			
icat idi overali ellect.	∠ - J.U2 (F	- 0.003	'				
5.2 Outbreak - vac	cine matc	hing ab	sent or ur	known			
uben 1974	2	204	13	192	4.2%	0.14 [0.03, 0.63]	
aah 1986a	2	219	12	234	4.1%	0.18 [0.04, 0.79]	
Arroyo 1984	2	26	6	90	3.9%	1.15 [0.25 , 5.38]	
oles 1992	3	112	0	12	1.2%	0.81 [0.04 , 14.74]	
Subtotal (95% CI)		561		528	13.4%	0.34 [0.11 , 1.02]	
	9		31				
							I
Heterogeneity: Tau ² =	0.48; Chi ²		If = 3 (P =	0.18); P =	39%		
Heterogeneity: Tau ² =	0.48; Chi ²		lf = 3 (P =	0.18); l² =	= 39%		
leterogeneity: Tau ² =	0.48; Chi ² Z = 1.92 (F	P = 0.05)	If = 3 (P =	0.18); P =	= 39%		
Heterogeneity: Tau² = Test for overall effect: 3.5.3 No outbreak - v	0.48; Chi ² Z = 1.92 (F	e = 0.05)				0.18 (0.03 - 0.95)	
Heterogeneity: Tau² = Test for overall effect: 5.5.3 No outbreak - v Patriarca 1985b	0.48; Chi ² Z = 1.92 (F raccine m 2	e = 0.05) atching 339	4	119	3.3%	0.18 [0.03 , 0.95] 0.86 [0.08 , 9.38]	
Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994	0.48; Chi ² Z = 1.92 (F raccine m 2 2	atching 339 169	4	119 73	3.3% 1.7%	0.86 [0.08 , 9.38]	
Heterogeneity: Tau² = Fest for overall effect: Fest for overall effect:	0.48; Chi ² Z = 1.92 (F raccine m 2	atching 339 169 10739	4	119 73 11723	3.3% 1.7% 2.1%	0.86 [0.08 , 9.38] 0.22 [0.03 , 1.87]	
Heterogeneity: Tau² = Fest for overall effect: Fest for overall effect:	0.48; Chi ² Z = 1.92 (F raccine m 2 2	atching 339 169	4 1 5	119 73	3.3% 1.7%	0.86 [0.08 , 9.38] 0.22 [0.03 , 1.87]	•
Heterogeneity: Tau² = Fest for overall effect: . 5.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95%CI) Total events:	0.48; Chi ² Z = 1.92 (F raccine m 2 2 1	atching 339 169 10739 11247	4 1 5	119 73 11723 11915	3.3% 1.7% 2.1% 7.1%	0.86 [0.08 , 9.38] 0.22 [0.03 , 1.87]	-
Heterogeneity: Tau² = Fest for overall effect: 1.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95%CI) Total events: Heterogeneity: Tau² =	0.48; Chi ² Z = 1.92 (F raccine m 2 2 1 5 0.00; Chi ²	atching 339 169 10739 11247	4 1 5 10 If = 2 (P =	119 73 11723 11915	3.3% 1.7% 2.1% 7.1%	0.86 [0.08 , 9.38] 0.22 [0.03 , 1.87]	•
deterogeneity: Tau² = est for overall effect: 5.5.3 No outbreak - v. Patriarca 1985b Laminiti 1994 Leguchi 2001 Subtotal (95%Cl) Total events: deterogeneity: Tau² = est for overall effect: est for overall effect:	0.48; Chi ² Z = 1.92 (F raccine m 2 2 1 5 0.00; Chi ² Z = 2.20 (F	2 = 0.05) atching 339 169 10739 11247 = 1.20, c	4 1 5 10 1f = 2 (P =	119 73 11723 11915 0.55); F =	3.3% 1.7% 2.1% 7.1% = 0%	0.86 [0.08 , 9.38] 0.22 [0.03 , 1.87]	•
Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95% CI) Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.4 No outbreak - v	0.48; Chi ² Z = 1.92 (F **accine m 2 2 1 5 0.00; Chi ² Z = 2.20 (F **accine m	atching 339 169 10739 11247 = 1.20, c = 0.03) atching	4 1 5 10 If = 2 (P =	119 73 11723 11915 0.55); F =	3.3% 1.7% 2.1% 7.1% = 0%	0.86 [0.08 , 9.38] 0.22 [0.03 , 1.87] 0.27 [0.09 , 0.87]	•
Heterogeneity: Tau² = Test for overall effect: S.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95% CI) Total events: Heterogeneity: Tau² = Test for overall effect: S.5.4 No outbreak - v Howells 1975a	0.48; Chi² Z = 1.92 (F accine m 2 2 1 5 0.00; Chi² Z = 2.20 (F accine m	atching 339 169 10739 11247 = 1.20, c = 0.03) atching	4 1 5 10 If = 2 (P = 1	119 73 11723 11915 0.55); F =	3.3% 1.7% 2.1% 7.1% = 0%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87]	•
Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95%CI) Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.4 No outbreak - v Howells 1975a Howells 1975b	0.48; Chi² Z = 1.92 (F raccine m 2 2 1 5 0.00; Chi² Z = 2.20 (F raccine m 1 3	atching 339 169 10739 11247 = 1.20, c = 0.03) atching 134 123	4 1 5 10 If = 2 (P = 1	119 73 11723 11915 0.55); P = • unknow 356 267	3.3% 1.7% 2.1% 7.1% = 0% vn 2.4% 6.1%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97]	(o.
Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95% CI) Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.4 No outbreak - v Howells 1975b Howells 1975b	0.48; Chi² Z = 1.92 (F vaccine m 2 2 1 5 0.00; Chi² Z = 2.20 (F vaccine m	e = 0.05) atching 339 169 10739 11247 = 1.20, ce = 0.03) atching 134 123 183	4 1 5 10 If = 2 (P = 1 absent or 15 22 11	119 73 11723 11915 0.55); F = • unknov 356 267 287	3.3% 1.7% 2.1% 7.1% = 0% vn 2.4% 6.1% 1.2%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97] 0.07 [0.00, 1.15]	(0.4
deterogeneity: Tau² = est for overall effect: .5.3. No outbreak - v Patriarca 1985b Patriaria 1985b Patriaria 1985b Patriaria 1985b Patriaria 1994 Peguchi 2001 Subtotal (95%CI) Total events: deterogeneity: Tau² = 1 est for overall effect: .5.5.4 No outbreak - v -towells 1975a -towells 1975b -towells 1975b -towells 1975b -towells 1975b -towells 1975c -towells 1975c -towells 1975c -towells 1986c	0.48; Chi² Z = 1.92 (F raccine m 2 2 1 5 0.00; Chi² Z = 2.20 (F raccine m 1 3	P = 0.05) atching 339 169 10739 11247 = 1.20, c P = 0.03) atching 134 123 183 225	4 1 5 10 If = 2 (P = 1	119 73 11723 11915 0.55); P = • unknov 356 267 287 226	3.3% 1.7% 2.1% 7.1% = 0% vn 2.4% 6.1% 1.2% 4.5%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97] 0.07 [0.00, 1.15]	0.4
Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95% CI) Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.4 No outbreak - v Howells 1975a Howells 1975b Howells 1975c Saah 1986c Subtotal (95% CI)	0.48; Chi² Z = 1.92 (F **accine m 2 2 1 5 0.00; Chi² Z = 2.20 (F **accine m 1 3 0 3	e = 0.05) atching 339 169 10739 11247 = 1.20, ce = 0.03) atching 134 123 183	4 1 5 10 1f = 2 (P = 1 15 22 11 5	119 73 11723 11915 0.55); F = • unknov 356 267 287	3.3% 1.7% 2.1% 7.1% = 0% vn 2.4% 6.1% 1.2%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97] 0.07 [0.00, 1.15]	0.4
deterogeneity: Tau² = est for overall effect: . 5.5.3 No outbreak - v earliarca 1985b aminiti 1994 Deguchi 2001 Subtotal (95% CI) Total events: deterogeneity: Tau² = est for overall effect: . 5.5.4 No outbreak - v dowells 1975a bowells 1975b dowells 1975c saah 1986c Subtotal (95% CI) Total events:	0.48; Chi² Z = 1.92 (F accine m 2 2 1 5 0.00; Chi² Z = 2.20 (F accine m 1 3 0 3 7	P = 0.05) atching 339 169 10739 11247 = 1.20, cP = 0.03) atching 134 123 183 225 665	4 1 5 10 1f = 2 (P = 1 15 22 11 5	119 73 11723 11915 0.55); P = v unknov 356 267 287 226 1136	3.3% 1.7% 2.1% 7.1% 5.1% 6.1% 1.2% 4.5%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97] 0.07 [0.00, 1.15]	0.4
Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95%CI) Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.4 No outbreak - v Howells 1975b Howells 1975b Howells 1975c Subtotal (95%CI) Total events: Heterogeneity: Tau² =	0.48; Chi² Z = 1.92 (F **accine m 2 2 1 0.00; Chi² Z = 2.20 (F **accine m 1 3 0 3 7 0.00; Chi²	P = 0.05) atching 339 169 10739 11247 = 1.20, c P = 0.03) atching 134 123 183 225 665 = 2.44, c	4 1 5 10 If = 2 (P = 11 15 22 11 5 53 If = 3 (P = 11 15 15 15 15 15 15 15 15 15 15 15 15	119 73 11723 11915 0.55); P = v unknov 356 267 287 226 1136	3.3% 1.7% 2.1% 7.1% 5.1% 6.1% 1.2% 4.5%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97] 0.07 [0.00, 1.15]	0.4
Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Subtotal (95% CI) Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.4 No outbreak - v Howells 1975b Howells 1975c Saah 1986c Subtotal (95% CI) Total events: Heterogeneity: Tau² = Test for overall effect: Test for overall effect: Test for overall effect: Test for overall effect:	0.48; Chi² Z = 1.92 (F **accine m 2 2 1 0.00; Chi² Z = 2.20 (F **accine m 1 3 0 3 7 0.00; Chi²	P = 0.05) atching 339 169 10739 11247 = 1.20, c P = 0.03) atching 134 123 183 225 665 = 2.44, c P = 0.003	4 1 5 10 If = 2 (P = 11 15 22 11 5 53 If = 3 (P = 11 15 15 15 15 15 15 15 15 15 15 15 15	119 73 11723 11915 0.55); P = unknow 356 267 287 226 1136 0.49); P =	3.3% 1.7% 2.1% 7.1% = 0% vn 2.4% 6.1% 1.2% 4.5% 14.2%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97] 0.07 [0.00, 1.15] 0.60 [0.15, 2.49] 0.30 [0.14, 0.67]	0.4
Heterogeneity: Tau² = Test for overall effect: 6.5.3 No outbreak - v Patriarca 1985b Caminiti 1994 Deguchi 2001 Total events: Heterogeneity: Tau² = Test for overall effect: 6.5.4 No outbreak - v Howells 1975a Howells 1975b Howells 1975b Subtotal (95%CI) Total events: Heterogeneity: Tau² = Test for overall effect: Total (95%CI)	0.48; Chi² Z = 1.92 (F accine m 2 2 1 1 1 2 2 1 5 0.00; Chi² Z = 2.20 (F accine m 1 3 0 3 7 0.00; Chi² Z = 2.93 (F	P = 0.05) atching 339 169 10739 11247 = 1.20, c P = 0.03) atching 134 123 183 225 665 = 2.44, c	4 1 5 10 15 22 11 5 5 3 3 1f = 3 (P = 1)	119 73 11723 11915 0.55); P = unknow 356 267 287 226 1136 0.49); P =	3.3% 1.7% 2.1% 7.1% 5.1% 6.1% 1.2% 4.5%	0.86 [0.08, 9.38] 0.22 [0.03, 1.87] 0.27 [0.09, 0.87] 0.18 [0.02, 1.33] 0.30 [0.09, 0.97] 0.07 [0.00, 1.15] 0.60 [0.15, 2.49] 0.30 [0.14, 0.67]	0.4
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eterogeneity: Tau² = est for overall effect: .5.3 No outbreak - v atriarca 1985b aminiti 1994 eguchi 2001 uthotal (95%CI) otal events: eterogeneity: Tau² = est for overall effect: .5.4 No outbreak - v owells 1975a owells 1975a owells 1975c uthotal (95%CI) otal events: eterogeneity: Tau² = est for overall effect: .5.4 No outbreak - v outline 1975a owells 1975a est for overall effect: eterogeneity: Tau² = est for overall effect: otal (95%CI)	0.48; Chi² Z = 1.92 (F **accine m 2 2 1 0.00; Chi² Z = 2.20 (F **accine m 1 3 0 7 0.00; Chi² Z = 2.93 (F	2 = 0.05) atching 339 169 10739 11247 = 1.20, c 2 = 0.03) atching 134 123 183 225 665 = 2.44, c 2 = 0.003	4 1 5 10 1f = 2 (P = 1 absent of 15 22 11 5 5 3 3 (F = 1) 180 df = 26 (P	119 73 11723 11915 D.55); F = v unknov 356 267 287 226 1136 D.49); F = 15822	3.3% 1.7% 2.1% 7.1% = 0% vn 2.4% 6.1% 4.5% 14.2% = 0%	0.86 [0.08 , 9.38] 0.22 [0.05 , 1.87] 0.27 [0.09 , 0.87] 0.18 [0.02 , 1.33] 0.30 [0.09 , 0.97] 0.07 [0.00 , 1.15] 0.60 [0.15 , 2.49] 0.30 [0.14 , 0.67]	•









So why should healthcare workers get vaccinated?



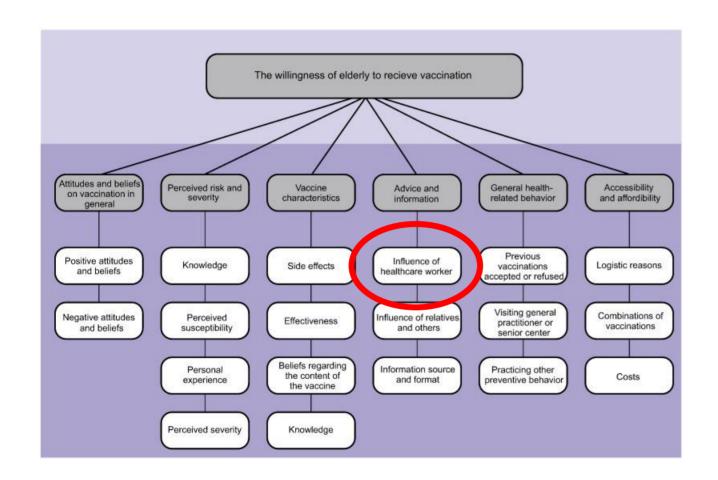


CONGRESSO NAZIONALE SIG





LA LONGEVITÀ DECLINATA AL FEMMINILE





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



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

R. Eilers a, b & M. P.F.M. Krabbe a, H.E. de Melker b

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

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

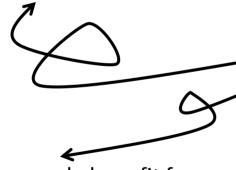




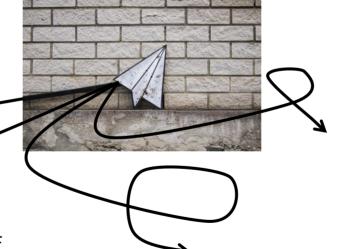


Take-home messages

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.



LA VACCINAZIONE DEL PERSONALE SANITARIO PER LA TUTELA DEGLI ANZIANI

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