

### Appendix 3: Vaccination studies with mixed absenteeism rates in vaccinated group (mixed studies)

Author/s	Bridges et al.	Nichol et al.	Campbell and Rumley
Publication year	2000	1999	1997
Study location	USA	USA	USA
Sample population	1184 (1997-8 season) and 1191 (1998-9 season) manufacturing company employees	4561 employees from 13 sites	262 textile plant employees across 6 plants in North Carolina
Study type	RCT	RCT	Prospective/observational
Study duration	1 <sup>st</sup> flu season: Nov 1997 – Mar 1998 2 <sup>nd</sup> flu season: Nov 1998 – Mar 1999	Sept 1997 – Mar 1998 (flu season only)	Nov1992-Apr 1993 (flu season only)
Intervention (n)	Influenza vaccine (1 <sup>st</sup> season: 595, 2 <sup>nd</sup> season: 587)	Influenza vaccine (3041)	Influenza vaccine (131)
Control (n)	Sterile saline placebo (1 <sup>st</sup> season: 589, 2 <sup>nd</sup> season: 604)	Vaccine diluent (1520)	None (131)
Absence outcome in vaccinated group	1 <sup>st</sup> season: 2.2% lower (NS) 2 <sup>nd</sup> season: 32% lower (p= 0.002)	13.1% to 28.4% reduction in lost work days (NS for febrile illnesses; p≤0.01 for all others)	54% reduction in total lost workdays due to ILI (p = 0.00004) 2% fewer lost workdays due to URI (NS)
Other outcomes in vaccinated group	2 <sup>nd</sup> season: 34% lower ILI incidence (p< 0.001)	10% lower febrile illness incidence (NS) 18.8% lower severe febrile illness incidence (p= 0.002) 23.6% lower febrile URI illness (p< 0.001)	6% lower URI incidence (NS) 29% lower ILI incidence (p < 0.00001)
Net savings/costs	1 <sup>st</sup> season: cost of \$65.59USD per vaccinated employee 2 <sup>nd</sup> season: cost of \$11.17USD per vaccinated employee	The mean break even cost for vaccine and its administration was \$43.07USD*	Saving of \$22.36USD per lost workday  Savings of \$2.58 per dollar invested in vaccination program
Randomisation	Yes	Yes	No
Blinding	Yes	Yes	No
Data collection method	Self-report twice monthly	Self-report daily	Self-reported fortnightly
Limitations	Limited duration  Sample size not calculated	Limited duration	Limited duration

RCT = Randomised controlled trial; URI = Upper respiratory infection; ILI = Influenza like illness; USD =US dollars; NS = non-significant

\* Calculated in later study (Nichol et al., 2003)