

PNEUMOCOCCAL VACCINATION AND RELATED OUTCOMES IN PATIENTS ON DIALYSIS.

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Pneumococcal vaccination is recommended every 3-5 years by the National Kidney Foundation for patients with chronic kidney disease. The USRDS has reported pneumococcal vaccination rates in ESRD patients, but there is little information on associated outcomes. Using Medicare claims data on patients receiving dialysis, we assessed the association between pneumococcal vaccination, and the outcomes of all-cause mortality and pneumonia hospitalization.

The cohort included prevalent dialysis patients who initiated dialysis therapy at least 90 days before November 1, 2003, had Medicare Part A and Part B program coverage, and were aged 18 years and older, alive, and on Medicare through October 31, 2005. Proportional hazards models were used to assess the impact of vaccination on subsequent hospitalization and mortality, adjusting for patient demographics and comorbidity.

The cohort of 118,533 patients had the following characteristics: 17% ≥ 75 yrs, 47% female, 50% white, 40% with diabetes as cause of renal failure, 45% on dialysis for ≥ 5 years. 21% received a pneumococcal vaccination during the 2-year period from Oct 31, 2003 through Oct 31, 2005, and vaccination was associated with a decreased hazard for mortality, but had no statistical association with pneumonia hospitalization.

These results may suggest a modest protective effect of pneumococcal vaccination, but further research is needed to determine if pneumococcal vaccination is associated with a decreased risk of other cause-specific hospitalization, and to determine if frequency of immunization is associated improved outcomes.

	Pneumonia Hospitalization			Mortality		
	Hazard Ratio	95% Conf Int		Hazard Ratio	95% Conf Int	
		Lower	Upper		Lower	Upper
Not vaccinated	1	-	-	1	-	-
Received pneum vacc.	0.97	0.93	1.01	0.94	0.91	0.97