



	Title	Re-analysis of workplace datasets to examine co-occurrence of lung and skin symptoms
	Year	2009
CREOD Investigators	Linn Holness, Victoria Arrandale	
CREOD Research Program	Occupational Skin and Respiratory Disease	
Research Theme	Occupational Skin and Respiratory Disease, Burden	
Funder	Ontario Ministry of Labour (original studies)	
Product Type	Research study – reanalysis	
Background	Both skin and lung disease may result from exposure to particular chemicals. Most research examines disease outcomes by system. There is some animal evidence and case report to suggest that in some instances, workers may develop both lung and skin problems related to common exposures.	
Study Focus (Research Question/Goals/Methods)	Four workplace based studies conducted previously were combined and reanalyzed to determine the occurrence of skin and lung symptoms in several populations of workers and determine how common it is to have co-existing lung and skin symptoms. The studies were of embalmer, soda ash workers (ammonia), softwood workers and cabinet makers.	
Key Findings	<ul style="list-style-type: none"> • 46% reported lung symptoms. • 27% reported skin rash. • 11% reported both lung and skin symptoms, however the percentage varied across the different exposure groups. • Only 2% reported both work-related lung and work-related skin symptoms. 	
Implications for Health/Labour Policy and Practice	Both lung and skin symptoms were common in these groups. The group with the highest percentage of co-occurrence of symptoms was embalmers. Further research is needed to further define this problem. Attention to both respiratory and dermal protection is required.	
Publication Information	<p><u>Publications</u></p> <ul style="list-style-type: none"> • Arrandale VH, Holness DL. Prevalence of co-existing skin and respiratory symptoms across four occupational populations. J Aller Clin Immunol 2008;121:S232. • Arrandale V, Holness DL. Co-existing skin and respiratory symptoms among four occupational groups. Am J Respir Crit Care Med 2008;127:A524. <p><u>Presentations</u></p> <ul style="list-style-type: none"> • Arrandale V, Holness DL. Revalence of co-existing skin and respiratory symptoms in four occupational populations. 2008 Annual Meeting of American Academy of Allergy, Asthma and Immunology. Philadelphia, March 2008. • Arrandale V, Holness DL. Co-existing skin and respiratory symptoms among four occupational groups. American Thoracic Society 2008 International Conference, Toronto, May 2008. 	