

**Supplementary Material****Article Title**

The Association of Chronic Bronchitis and Airflow Obstruction with Lifetime and Current Farm Activities in a Sample of Rural Adults in Iowa

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**Supplemental Table 1.** Cut points and distribution for continuous exposure variables

<b>Variables</b>	<b>Median cut points</b>
<b>Hogs (years)</b>	High: > 28 Low: ≤ 28
<b>Chickens (years)</b>	High: > 10 Low: ≤ 10
<b>Cattle (years)</b>	High: > 15 Low: ≤ 15
<b>Horses (years)</b>	High: > 10 Low: ≤ 10
<b>Sheep (years)</b>	High: > 6 Low: ≤ 6
<b>Turkeys (years)</b>	High: > 3 Low: ≤ 3
<b>Goats (years)</b>	High: > 4 Low: ≤ 4
<b>Indoor animal chores (hours/week)</b>	High: > 28 Low: ≤ 28
<b>Outdoor animal chores (hours/week)</b>	High: > 28 Low: ≤ 28
<b>Equipment maintenance (hours/week)</b>	High: > 18 Low: ≤ 18
<b>Building maintenance (hours/week)</b>	High: > 8 Low: ≤ 8
<b>Field tasks w/o vehicle (hours/week)</b>	High: > 8 Low: ≤ 8
<b>Field tasks w/vehicle (hours/week)</b>	High: > 60 Low: ≤ 60
<b>Operate slow moving vehicle (hours/week)</b>	High: > 28 Low: ≤ 28
<b>Hog/chicken work (years)</b>	High: > 10 Low: ≤ 10

**Supplemental Table 2.** Multinomial logistic regression base model covariates

<b>Characteristic</b>	<b>Reference</b>	<b>Outcome</b>	<b>OR (95% CI)</b>	<b>p-value</b>
Age	continuous	Chronic bronchitis	1.02 (1.01, 1.04)	0.007
		Airflow obstruction	1.03 (1.01, 1.05)	0.003
Sex	Female	Chronic bronchitis	1.2 (0.8, 2.1)	0.39
		Airflow obstruction	1.2 (0.7, 2.2)	0.55
Smoking status, current	never smoker	Chronic bronchitis	3.3 (1.5, 7.3)	0.003
		Airflow obstruction	0.7 (0.2, 2.5)	0.58
Smoking status, former	never smoker	Chronic bronchitis	0.9 (0.4, 1.9)	0.75
		Airflow obstruction	0.3 (0.1, 1.1)	0.07
Cigarette pack-years	continuous	Chronic bronchitis	1.1 (0.9, 1.4)	0.27
		Airflow obstruction	2.3 (1.6, 3.3)	<0.0001
Asthma, yes	no	Chronic bronchitis	1.4 (0.6, 3.2)	0.45
		Airflow obstruction	5.1 (2.5, 10.3)	<0.0001
Farming status, former	current	Chronic bronchitis	0.7 (0.4, 1.2)	0.23
		Airflow obstruction	0.6 (0.4, 1.1)	0.11
Childhood farm work, ever	never	Chronic bronchitis	0.6 (0.4, 1.1)	0.08
		Airflow obstruction	0.9 (0.5, 1.7)	0.85

Chronic bronchitis is without airflow obstruction.

Airflow obstruction is with or without chronic bronchitis.

**Supplemental Table 3.** Crude frequency of chronic bronchitis cross-classified by different categories of fumigants/fungicides and crop storage insecticides, and ever smoked (no, yes)

Categories for fumigants/ fungicides, and crop storage insecticides	Never smoked			Ever smoked		
	N	Chronic bronchitis		N	Chronic bronchitis	
		n	%		n	%
<u>NEVER</u> either type of pesticide	659	26	3.9	407	38	9.3
Fumigants/fungicides, but <u>NO</u> crop storage insecticides	22	2	9.1	12	2	16.7
Crop storage insecticides, but <u>NO</u> fumigants/ fungicides	46	4	8.7	33	5	15.2
<u>BOTH</u> fumigants/ fungicides, and crop storage insecticides	26	5	19.2	29	4	13.8