

Clinical and Economic Impact of COVID-19 in Agricultural Workers, Guatemala

Appendix.

Appendix Table 1. Absenteeism characteristics for agricultural workers, Guatemala, August 31, 2020–February 19, 2021*

Characteristic	Workers with no absence, n = 695	Workers with any absence, n = 736	p value†
Worker demographics			
Age y, mean (SD)	32.7 (9.1)	30.0 (8.0)	<0.01
Sex, no. (%)			
M	611 (87.9)	593 (80.6)	<0.01
F	84 (12.1)	143 (19.4)	
Ladino ethnicity, no. (%)	312 (44.9)	315 (42.8)	0.82
Indigenous	47 (6.8)	50 (6.8)	
Other	1 (0.1)	2 (0.3)	
Do not know	335 (48.2)	369 (50.1)	
Worker health, no. (%)			
Asthma	1 (0.1)	7 (1.0)	0.04
Pulmonary disease	4 (0.6)	5 (0.7)	0.80
Kidney disease	27 (3.9)	22 (3.0)	0.35
Cardiovascular disease	10 (1.4)	10 (1.4)	0.90
Diabetes	13 (1.9)	7 (1.0)	0.14
Blood disorder (sickle cell disease)	8 (1.2)	14 (1.9)	0.25
Neurologic disease (stroke)	3 (0.4)	5 (0.7)	0.53
Liver disease	5 (0.7)	10 (1.4)	0.24
Obesity (BMI ≥ 30 kg/m ²), n = 773	67 (15.6)	15 (4.4)	<0.01
Taking medications	83 (11.9)	95 (12.9)	0.57
Ever received influenza vaccine	50 (7.2)	41 (5.6)	0.21
Work conditions			
No. absences/person, median (IQR)	0 (0–0)	5.3 (2–7)	<0.01
Type of work, no. (%)			<0.01
Administration	43 (6.2)	0 (0)	
Field worker	42 (66.5)	528 (71.7)	
Field manager	54 (7.8)	3 (0.4)	
Packer (factory worker)	120 (17.3)	205 (27.9)	
Factory manager	16 (2.3)	0 (0)	
How long worked at farm, y, no. (%)			<0.01
≤ 2	346 (49.8)	453 (61.5)	
3–4	104 (14.9)	113 (15.4)	
≥ 5	245 (35.3)	170 (23.1)	
Monthly income, \$USD, median (IQR)	337.2 (311.3–389.1)	337.2 (311.3–363.2)	<0.01
Household conditions, mean (SD)			
No. adults in house	3.2 (1.6)	3.4 (1.8)	0.01
No. children in house	2.3 (1.6)	2.5 (1.7)	<0.01
Concern about food insecurity in past year, no. (%)	401 (57.7)	464 (63.0)	0.04
Lacked money for food in the past 12 months, no. (%)	506 (72.8)	505 (68.6)	0.08
Household monthly income, \$USD, median (IQR)	363.2 (324.3–466.9)	376.1 (324.3–466.9)	0.06
\$USD spent in the past 7 d, median (IQR):			
Meat, fish, and seafood	22.7 (13.0–32.4)	19.5 (13.0–38.9)	0.68
Milk, eggs, and other dairy products	13.0 (9.1–24.9)	15.6 (9.7–25.9)	0.07
Greens, vegetables, and fruit	13.0 (6.5–19.5)	13.0 (6.5–19.5)	0.83
Alcoholic drinks and tobacco	0 (0–0)	0 (0–0)	0.16

*BMI, body mass index; IQR, interquartile range; \$USD, US dollars.

†By t-test for continuous variables and by χ^2 test for categorical variables.

Appendix Table 2. Comparison of self-reported outcomes for agricultural workers who had ILI versus asymptomatic control subjects, Guatemala*

Characteristic	Day 0 ILI, n = 169	Day 7 ILI, n = 157	Day 7 Control, n = 623	p-value†	Day 28 ILI, n = 149	Day 28 Control, n = 588	p value†
Clinical symptom, mean (SD)							
No. days of cough	3.5 (2.1)	5.3 (2.6)	3.4 (2.6)	0.05	5.0 (3.5)	3.7 (2.0)	0.32
No. days of fever	2.6 (1.8)	3.6 (2.6)	1.5 (0.6)	<0.01	2.6 (2.3)	3.5 (3.0)	0.55
Have you felt the following (past 24 h), no. (%)							
Fever	96 (57.5)	14 (9.0)	4 (0.7)	<0.01	8 (5.4)	3 (0.5)	<0.01
Nasal congestion	60 (35.9)	23 (14.7)	16 (2.7)	<0.01	9 (6.1)	6 (1.1)	<0.01
Myalgia	73 (43.7)	14 (9.0)	23 (3.9)	0.01	11 (7.5)	11 (2.0)	<0.01
Headache	89 (53.3)	37 (23.7)	22 (3.7)	<0.01	25 (17.0)	14 (2.5)	<0.01
Cough	69 (41.3)	22 (14.2)	2 (0.34)	<0.01	10 (6.8)	1 (0.2)	<0.01
Sore throat	66 (39.5)	20 (12.8)	7 (1.2)	<0.01	12 (8.2)	10 (1.8)	<0.01
Dysgeusia	51 (30.5)	15 (9.6)	2 (0.3)	<0.01	6 (4.1)	2 (0.4)	<0.01
Expectoration	62 (37.1)	30 (19.2)	4 (0.7)	<0.01	12 (8.2)	2 (0.4)	<0.01
Fatigue	58 (34.7)	19 (12.2)	18 (3.0)	<0.01	11 (7.5)	19 (3.4)	0.03
Anosmia	40 (24.0)	13 (8.3)	1 (0.2)	<0.01	6 (4.1)	2 (0.4)	<0.01
Loss of appetite	49 (29.3)	10 (6.4)	6 (1.0)	<0.01	3 (2.0)	7 (1.3)	0.44
Dyspnea	41 (24.7)	10 (6.4)	1 (0.2)	<0.01	5 (3.4)	1 (0.2)	<0.01
Neck pain	34 (20.5)	11 (7.1)	8 (1.3)	<0.01	8 (5.4)	8 (1.4)	<0.01
Interrupted sleep	33 (19.8)	15 (9.6)	7 (1.2)	<0.01	7 (4.8)	6 (1.1)	<0.01
Wheezing	19 (11.5)	6 (3.9)	1 (0.2)	<0.01	5 (3.4)	0 (0)	<0.01
Well-being							
Have you had difficulty with (past 24 h), no. (%)‡							
Getting out of bed	44 (26.4)	10 (6.4)	7 (1.2)	<0.01	7 (4.8)	6 (1.1)	<0.01
Preparing meals	18 (10.8)	4 (2.6)	3 (0.5)	0.04	4 (2.7)	1 (0.2)	0.01
Performing usual tasks	45 (27.0)	9 (5.8)	4 (0.7)	<0.01	6 (4.1)	2 (0.4)	<0.01
Leaving the home	27 (16.2)	6 (3.9)	2 (0.3)	<0.01	4 (2.7)	1 (0.2)	0.01
Concentrating	43 (25.8)	9 (5.8)	7 (1.2)	<0.01	7 (4.8)	1 (0.2)	<0.01
Taking care of things	31 (18.6)	4 (2.6)	3 (0.5)	0.04	6 (4.1)	1 (0.2)	<0.01
Leave the room	23 (13.8)	4 (2.6)	2 (0.3)	0.02	4 (2.7)	0 (0)	<0.01
Have you felt the following (past 24 h), no. (%)							
Irritable	66 (39.5)	13 (8.3)	10 (1.7)	<0.01	10 (6.8)	5 (0.9)	<0.01
Defenseless	40 (24.0)	12 (7.7)	9 (1.5)	<0.01	6 (4.1)	4 (0.7)	0.01
Worried	59 (35.3)	23 (14.7)	13 (2.2)	<0.01	15 (10.2)	20 (3.6)	<0.01
Frustrated	34 (20.4)	10 (6.4)	7 (1.2)	<0.01	7 (4.8)	8 (1.4)	0.01
People worrying	93 (55.7)	40 (25.6)	56 (9.4)	<0.01	29 (19.7)	69 (12.4)	0.02
Being a burden	47 (28.1)	20 (12.8)	12 (2.0)	<0.01	14 (9.5)	15 (2.7)	<0.01
People being concerned	38 (22.8)	16 (10.3)	16 (2.7)	<0.01	15 (10.2)	15 (2.7)	0.01
Dependent	42 (25.2)	19 (12.2)	20 (3.4)	<0.01	16 (10.9)	19 (3.4)	<0.01
People doing extra work	37 (22.2)	21 (13.5)	22 (3.7)	<0.01	16 (10.9)	20 (3.6)	<0.01
Flu-iiQ Severity scores							
Systemic score	0.60 (0.47)	0.14 (0.28)	0.02 (0.09)	<0.01	0.10 (0.28)	0.02 (0.07)	<0.01
Respiratory score	0.46 (0.44)	0.15 (0.11)	0.01 (0.07)	<0.01	0.09 (0.27)	0.01 (0.05)	<0.01
Impact on daily activities	0.28 (0.49)	0.05 (0.22)	0.01 (0.06)	0.01	0.04 (0.19)	0.004 (0.03)	0.02
Impact on emotions score	0.39 (0.51)	0.11 (0.28)	0.02 (0.09)	<0.01	0.07 (0.22)	0.02 (0.09)	<0.01
Impact on others score	0.49 (0.65)	0.21 (0.43)	0.06 (0.22)	<0.01	0.17 (0.41)	0.06 (0.19)	<0.01
Epidemiology							
No. in house with similar illness (past 2 weeks)	0.17 (0.45)	0.21 (0.52)	0.01 (0.10)	<0.01	0.12 (0.38)	0.01 (0.15)	<0.01
Index case in house, no. (%)							
Self	145 (86.8)	142 (91.0)	1 (14.3)	<0.01	135 (91.8)	3 (42.9)	<0.01
Spouse	5 (3.0)	2 (1.3)	2 (28.6)		2 (1.4)	1 (14.3)	
Parent	2 (1.2)	2 (1.3)	1 (14.3)		1 (0.7)	0 (0)	
Sibling	6 (3.6)	5 (3.2)	0 (0)		6 (4.1)	0 (0)	
Cousin	1 (0.6)	1 (0.6)	0 (0)		0 (0)	0 (0)	
Child	4 (2.4)	1 (0.6)	3 (42.9)		2 (1.4)	2 (28.6)	

*ILI, influenza-like illness.

†By t-test for continuous variables and by χ^2 test for categorical variables.

‡Items truncated per Flu-iiQ licensing agreement; full items available from the corresponding author.