

Table SI. Primer sets used for one-step RT-qPCR for human influenza surveillance (London WHO CC; July 2017)^a.

Type/subtype	Gene fragment	Primer	Sequence	PCR product size (bp)
Influenza A (H1N1)pdm09	HA-5'(H1)	H1F1	AGCAAAAAGCAGGGGAAAATAAAAAGCCCTACTGCT	1,264
		H1R1264	GTGAACTGTGTATTC	
	HA-3'(H1)	HAFA	GGGAGAATGAACTATTACTGG	979
		HARe	AGTAGAAACAAGGGTGTTTTT	
	NA-5'(N1)	N1F1	AGCAAAAAGCAGGAGTTTAAAATG	1,099
		N1R1099	CCTATCCAAACACCATTGCCGTAT	
Influenza A (H3N2)	NA-3'(N1)	N1F401	GGAATGCAGAACCTTCTTCTTGAC	1,073
		NARUc	ATATGGTCTCGTATTAGTAGAAACAAGGAGTTTTTT	
	HA-5'(H3)	H3A1F6	AAGCAGGGGATAATTCTATTAACC	1,127
		H3A1R1	GTCTATCATTCCCTCCCAACCATT	
	HA-3'(H3)	H3A1F3	TGCATCACTCCAAATGGAAGCATT	863
		HARUc	ATATCGTCTCGTATTAGTAGAAACAAGGGTGTTTTT	
Influenza A matrix	NA-5'(N2)	NAFUc	TATTGGTCTCAGGGAGCAAAAGCAGGAGT	1,095
		H3N2R1095	TCATTTCCATCATCRAAGGCCCA	
	NA-3'(N2)	N2F387	CATGCGATCCTGACAAGTGTTATC	1,082
		NARUc	ATATGGTCTCGTATTAGTAGAAACAAGGAGTTTTTT	
	Full gene	MF1	AGCAAAAAGCAGGTAGATATTGAAAGA	1,027
		MR1027	AGTAGAAACAAGGTAGTTTTTTACTC	
Influenza B ^b	HA-5'	BHAF1u	TATTCGTCTCAGGGAGCAGAAGCAGAGCATTTTC	1,361
		TAATATC		
	HA-3'	BHAR1341	TTCGTTGTGGAGTTCATCCAT	
		BHAF458	AGAAAAGGCACCAGGAGGACCCTA	1,391
	NA-5'	BHAREU*	ATATCGTCTCGTATTAGTAGTAACAAGAGCATTTTT	
		BNAF1u	TATTCGTCTCAGGGAGCAGAAGCAGAGCATCTTCTCA	1,130
Former seasonal influenza A (H1N1)	NA-3'	BNAR2	GATGGACAAATCCTCCCTTGATGC	
		BNAF2	GCACTCCTAATTAGCCCTCATAGA	1,182
	HA-5'(H1)	BNAR1487	TAAGGACAATTGTTCAAAC	
		THAF2	GCAGGGGAAAATAAAAACAACC	990
	HA-3'(H1)	SPHAR11	TATTTTGGGCACTCTCCTATTG	
		H1HAF552	TACCCAAACCTGAGCAAGTCCTAT	1,239
Former seasonal influenza A (H1N1)	NA-5'(N1)	HARUc	ATATCGTCTCGTATTAGTAGAAACAAGGGTGTTTTT	
		H1N1F6	AGCAGGAGATTAAAATGAATCCAA	1,097
	NA-3'(N1)	NASPR10	CCTTCCTATCCAAACACCATT	
		N1F741	ATAATGACCGATGGCCCGAGTAAT	737
		NARUc	ATATGGTCTCGTATTAGTAGAAACAAGGAGTTTTTT	

HA and NA genes are amplified as overlapping halves with the primer sets indicated. Generated products can be used for diagnosis of influenza and sequencing studies. ^aWorld Health Organization: WHO information for the molecular detection of influenza viruses (5th revision). November, 2018. https://cdn.who.int/media/docs/default-source/influenza/molecular-detection-of-influenza-viruses/protocols_influenza_virus_detection_feb_2021.pdf. ^bPrimers updated in January, 2020.

Table SII. Frequency of influenza-infected patients per age group included in the present study (2009-2014).

Age group, years	Frequency	Percentage	Ambulatory	Percentage	Hospitalized	Percentage
<1	85	2.4	48	1.8	37	4.2
1-4	342	9.8	239	9.2	103	11.8
5-14	590	16.9	522	20	68	7.8
15-24	555	15.9	487	18.7	68	7.8
25-44	1,077	30.9	811	31.1	266	30.5
45-64	635	18.2	407	15.6	228	26.2
>65	198	5.7	97	3.7	101	11.6
Total	3,482	100.0	2,611	100	871	100

Table SIII. Different clinical features exhibited by patients infected with different influenza subtypes in Nuevo León, Mexico.

Symptom	Influenza subtype, n (%)				P-value ^a
	AH3N2 (n=929)	B (n=430)	AH1N1 PDM (n=1,797)	A N/S (n=326)	
Fever	889 (96)	415 (97)	1672 (94)	119 (90)	0.007
Cough	892 (96)	404 (94)	1634 (96)	118 (89)	<0.001
Odynophagia	539 (59)	236 (55)	975 (58)	59 (45)	0.022
Dyspnea	318 (34)	127 (30)	711 (42)	55 (41)	<0.001
Irritability	258 (28)	114 (27)	368 (22)	45 (34)	<0.001
Diarrhea	91 (10)	47 (11)	197 (12)	22 (17)	0.107
Thoracic pain	335 (37)	145 (34)	703 (42)	51 (39)	0.009
Chills	654 (72)	290 (69)	1216 (72)	77 (58)	0.004
Headache	760 (83)	362 (85)	1477 (87)	95 (73)	<0.001
Myalgia	671 (74)	330 (77)	1299 (77)	81 (63)	0.001
Arthralgia	634 (70)	293 (69)	1232 (73)	79 (61)	0.005
Malaise	732 (79)	318 (74)	1432 (84)	92 (70)	<0.001
Rhinorrhea	771 (83)	333 (78)	1246 (74)	93 (70)	<0.001
Polypnea	148 (16)	51 (12)	337 (20)	38 (29)	<0.001
Vomiting	147 (17)	73 (18)	174 (14)	28 (22)	0.066
Abdominal pain	167 (18)	81 (19)	371 (22)	18 (14)	0.024
Conjunctivitis	224 (24)	94 (22)	364 (22)	26 (20)	0.341
Cyanosis	31 (3)	11 (3)	90 (5)	9 (7)	0.013
Sudden onset	651 (71)	323 (75)	1323 (78)	79 (60)	<0.001
Vaccination	279 (30)	82 (19)	271 (15)	101 (31)	<0.001
ILI	756 (81)	352 (82)	1263 (70)	240 (74)	<0.001
SARI	173 (19)	78 (18)	534 (30)	86 (27)	<0.001

^aData were analyzed using the Chi-squared test. ILI, Influenza like infection, ambulatory treatment; SARI, Severe acute respiratory infection, Hospitalization required. The percentage was calculated considering the total of patients per season (please see Table SIV).

Table SIV. No. of patients infected with different influenza subtypes in Nuevo León, Mexico (2009-2014).

	Influenza subtype, n (%)				Total
	AH3N2	B	AH1N1 PDM	A N/S	
No. of patients	929 (26.70)	430 (12.34)	1,797 (51.60)	326 (9.36)	3,482 (100)

The percentage (%) was calculated considering the total of patients in the present study (3,482).

Table SV. No. of patients stratified by sex and type of treatment (2009-2014).

Treatment type	Sex		Total
	Male	Female	
Ambulatory	1,195	1,416	2,611
Hospitalized	413	458	871