#### **WHO WEBINAR**

March | 19 | 2020

COVID-19 pandemy:

Experiences from the International Centre for Rural Health

**Prof. Claudio Colosio & ICRH TEAM** 









## Contents

- Background information
- Situation in Italy, Lombardy, Milan
- Hospitals: San Paolo and San Carlo
- Surveillance protocol, procedures
- Index cases presentation
- Data collection and preliminary results
- Conclusions

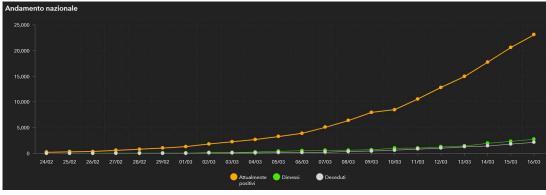
## International Centre for Rural Health

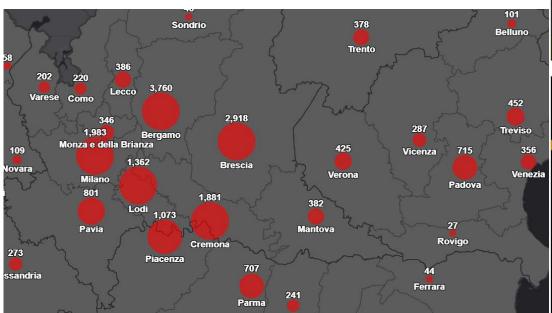
- International Centre for Rural Health (ICRH): created in 2007 at the San Paolo Hospital of Milan (scientific coordinator Prof. Claudio Colosio)
- Aim of the Centre: creating innovative experiences of health care delivery in rural areas and promoting activities addressed at rural health at the local, national and international level.
- It was designated as a WHO Collaborating Centre for Occupational Health in 2010
- <u>Terms of reference</u>: *ToR 1*) Development of diagnostic and exposure criteria for occupational diseases; *ToR 2*) Coordination of the work of the WHO collaborating centres for developing methods for early detection of priority occupational diseases; *ToR 3*) Advocate and raise awareness on provision of occupational health services in rural areas; *ToR 4*) Collection of good practices on improving occupational health and safety in hospitals

## International Centre for Rural Health

- Part of the public health system of the Region of Lombardy (annexed at the Occupational Health Unit of the University Hospital San Paolo of Milan)
- Acts in agreement with the University of Milan,
   Department of Health Sciences
- Serves specific projects of the Region of Lombardy (health surveillance of agricultural workers, risk assessment and prevention of pesticide use in agriculture)

## Situation report: Italy, Lombardy, Milan





LOMBARDIA	
Bergamo	3760
Brescia	2918
Como	220
Cremona	1881
Lecco	386
Lodi	1362
Monza Brianza	346
Milano	1983
Mantova	382
Pavia	801
Sondrio	46
Varese	202
in fase di verifica e aggiornamento	362
Totale	14649

			AGGIORNAM	RNAMENTO 16/03/2020 ORE 17.00					
Regione		POSITIVI AL nCoV							
	Ricoverati con sintomi	Terapia intensiva	Isolamento domiciliare	Totale attualmente positivi	DIMESSI/ GUARITI	DECEDUTI	CASI TOTALI	TAMPONI	
Lombardia	6171	823	3867	10861	2368	1420	14.649	43.565	
Emilia Romagna	1362	197	1529	3088	88	346	3.522	13.096	
Veneto	498	156	1620	2274	130	69	2.473	35.052	
Marche	528	110	547	1185		57	1.242	3.225	
Piemonte	1045	186	174	1405		111	1.516	5.588	
Toscana	175	107	559	841	11	14	866	5.910	
Liguria	255	73	247	575	42	50	667	2.189	
Lazio	267	31	174	472	32	19	523	9.330	
Campania	103	22	238	363	28	9	400	2.517	
Friuli V.G.	96	19	231	346	18	22	386	4.851	
Trento	73	19	275	367	5	6	378	1.006	
Bolzano	53	11	171	235		6	241	1.740	
Puglia	116	6	90	212	2	16	230	2.017	
Sicilia	75	20	108	203	8	2	213	2.653	
Umbria	30	15	114	159	4	1	164	1.093	
Abruzzo	71	37	57	165	7	4	176	1.533	
Calabria	36	7	44	87	1	1	89	1.030	
Sardegna	39		66	105		2	107	797	
Valle d'Aosta	28	5	70	103		2	105	287	
Molise	3	5	7	15	5	1	21	253	
Basilicata	1	2	9	12			12	230	
TOTALE	11.025	1.851	10.197	23.073	2.749	2.158	27,980	137.962	

## San Paolo and San Carlo Hospitals

- A total of 4142 workers employed in two public hospitals in south ovest Milan, operated by the National Health Service. They're also both university hospitals
- 70 % woman
- Mean age ca. 46 years
- What we have done:
  - Reduction or discontinuation of some medical practices
  - Restricting access and visiting hours
  - Preventive strategies according to WHO shared procedures



#### Surveillance protocol for healthcare professionals

 "Close contact" = healthcare professional who assisted a patient confirmed for COVID-19 without PPD or household contact with a person confirmed for COVID-19

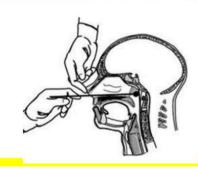
• Workers who have recently traveled from or live in an area with ongoing spread of COVID-19, are considered at higher risk

Protocol: Nasopharyngeal swab for real-time RT PCR (rRT-PCR) detection of

2019-Novel Coronavirus (2019-nCoV)

ANAMNESIS	MEASURES BEFORE SWAB APPLICATION OR RESULTS
ASYMPTOMATIC WORKER	Fitness for work

	HEALTH SURVEILLANCE FOR 14 DAYS
	ADMINISTRATION OF PHONE INTERVIEW
<b>NEGATIVE SWAB</b>	OR SELF ADMINISTERED
	QUESTIONNAIRE → Daily monitoring of
	workers' health – data collection sheet



## Surveillance protocol for healthcare professionals

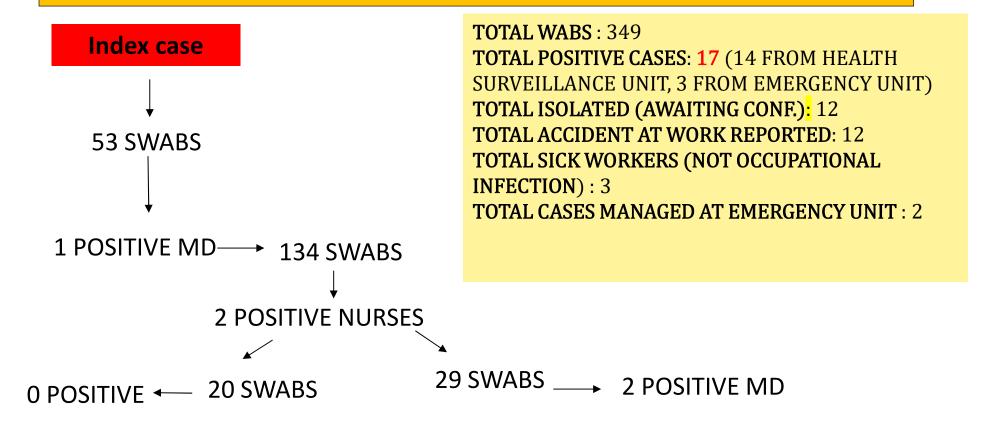
ANAMNESIS	MEASURES	RESPONSIBLE OF THE APPLICATION
ASYMPTOMATIC WORKER	nasopharingeal SWAB if the swab is positive: not fitness for work if the swab is negative: fitness for work	Hospital management supported by our Unit
ASYMPTOMATIC WORKER WITH HISTORY OF POSSIBLE CONTACT WITH POSITIVE CASE	nasopharingeal SWAB if the swab is positive: not fitness for work if the swab is negative: fitness for work with use of PPE (surgery mask) and monitoring of clinical symptoms	Hospital management supported by our Unit
ASYMPTOMATIC WORKER AND NO HISTORY OF POSSIBLE CONTACT WITH POSITIVE CASES	Fitness for work	Hospital management supported by our Unit

### Surveillance protocol for healthcare professionals

#### If COVID 19 infection is confirmed:

- Quarantine lock down after communication to health authority
- Legal requirement of occupational accident linked to health care work
- Return to work only after 2 negative nasopharingeal swab in 24 hours

## Index case: San Carlo Hospital



Case *IULIANO* (from emergency unit): absence from work cause of sickeness

(not accident at work)

40 swab →5 positive cases (MDs and nurses)

INVESTIGATION

IN PROGRESS

## Index case: San Paolo Hospital

We had different index cases from health care workers and patients

**TOTAL SWABS: 537** 

TOTAL POSITIVE CASES: 19 (14 FROM HEALTH SURVEILLANCE UNIT, 3

FROM EMERGENCY UNIT)

**TOTAL CASES MANAGED AT EMERGENCY UNIT: 2** 

SWABS PERFORMED BUT WAITING FOR RESULTS: 110

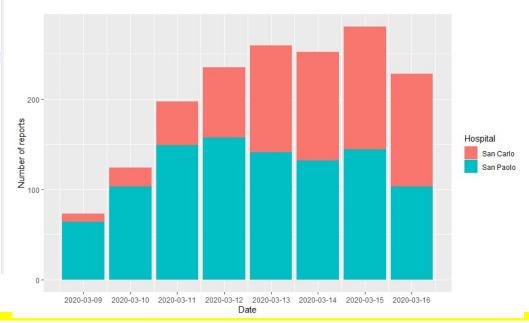
## Data collection



Questions Responses 1,795

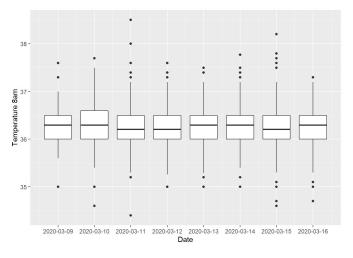
Data del report *				
Month, day, year				
Segni e/o sintomi *				
	Assente	Lieve	Moderato	Grave
Tosse	0	0	0	0
Dispnea	0	0	0	0
Malessere generale	0	0	0	0
Dolori muscolari	0	0	0	0
Cefalea	0	0	0	0
Mal di gola	0	0	0	0

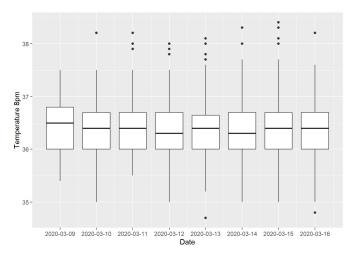
Altre annotazioni stato di salute	
Long answer text	
Temperatura h 8 *	
Short answer text	
Temperatura h 20 *	
Short answer text	



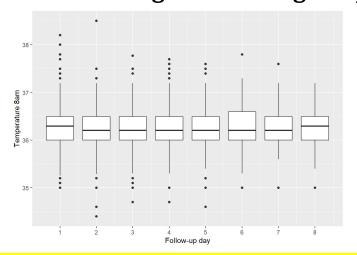
# Preliminary results: temperature (all)

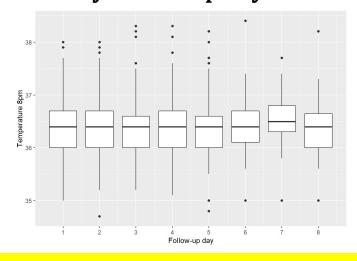
Morning and evening temperature: all workers under surveillance by date



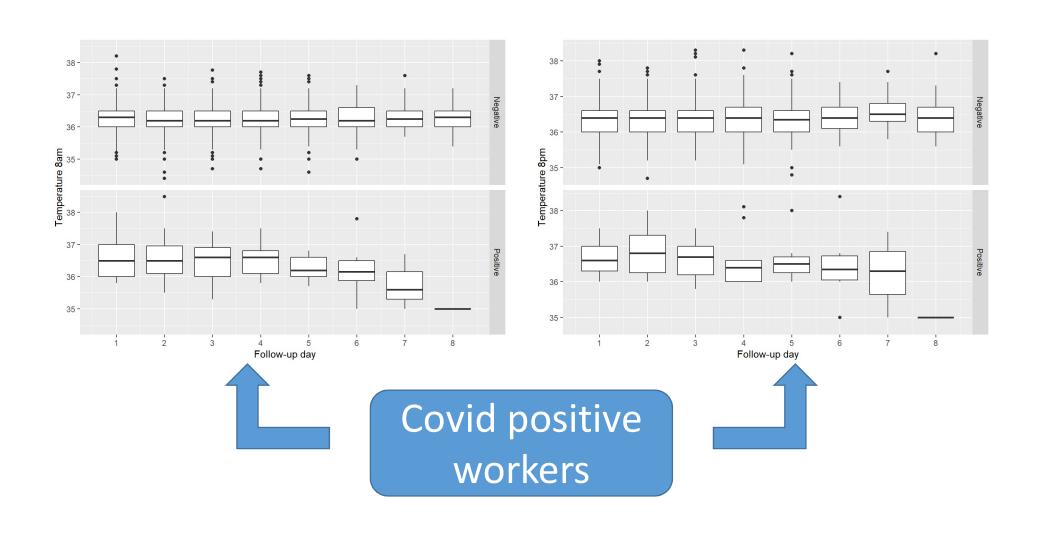


#### Morning and evening temperature: by follow-up day

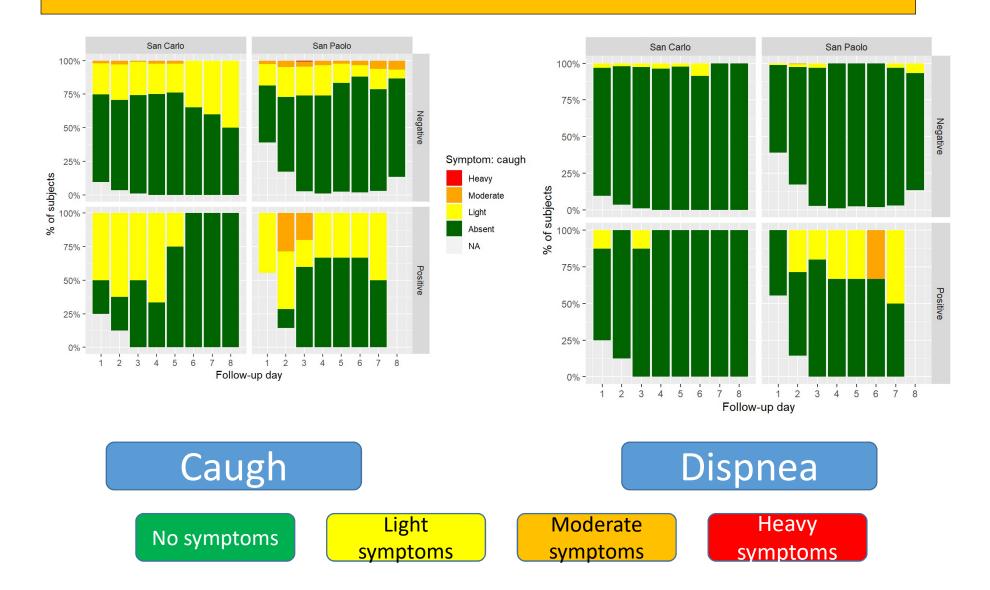




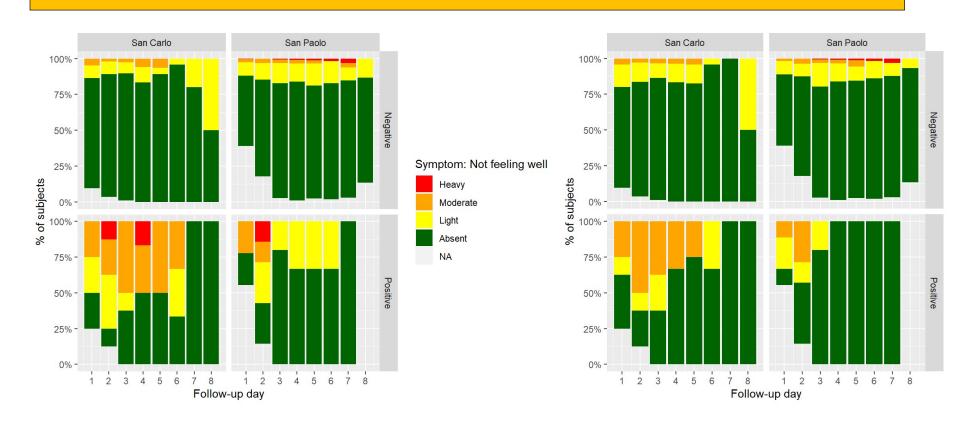
## Preliminary result: temperature by covid status



## Preliminary results: symptoms by covid status



### Preliminary results: symptoms by covid status



## Not feeling well

No symptoms

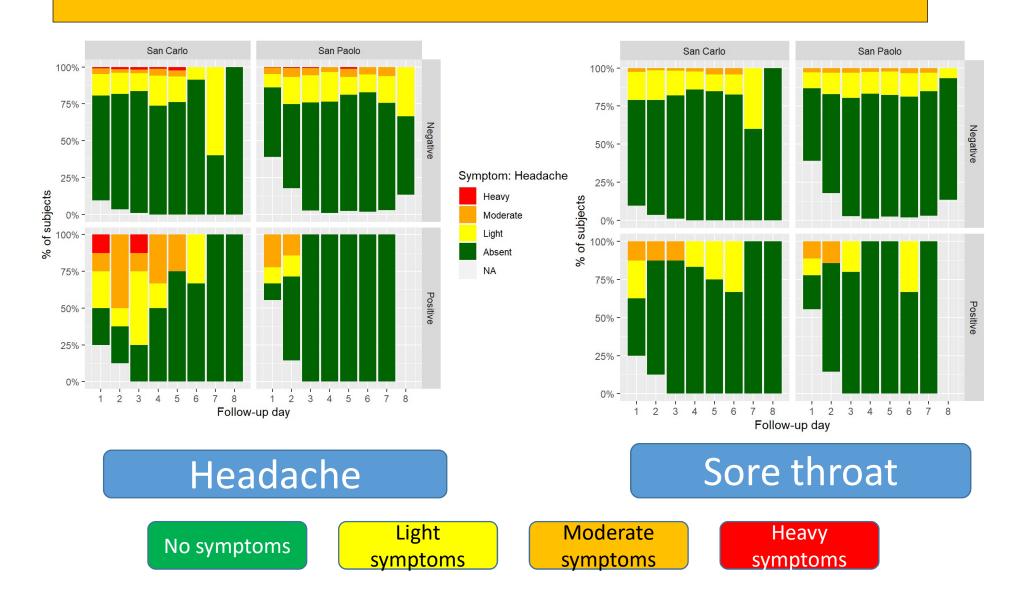
Light symptoms

### Muscle pain

Moderate symptoms

Heavy symptoms

## Preliminary results: symptoms by covid status



## Considerations

- 90% positive cases are asymptomatic
- General symptoms: Dry cough, dyspnea, sore throat, fever, diarrhea: **BUT also: anosmia, dysgeusia, conjunctival hyperemia**
- Our workers positive to COVD 19 did not need intensive therapy
   working age patients have not fatal outcome
- To avoid virus spreading is important to identify immediately the contacts and adopt preventive measures within 5 days:
  - no meetings
  - surgical mask
- FFP 2 e FFP3 
   only for operator protection during maneuvers that create aerosols (e.g. bronchoscopy)
- Surgical mask: stops inlet and outlet droplets

# Thank you for your attention

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