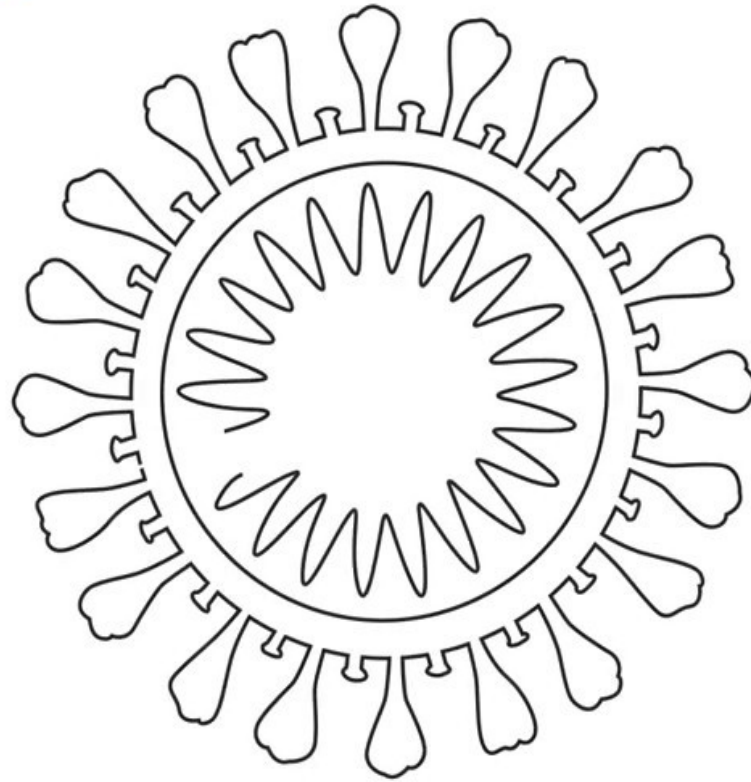


COVID-19

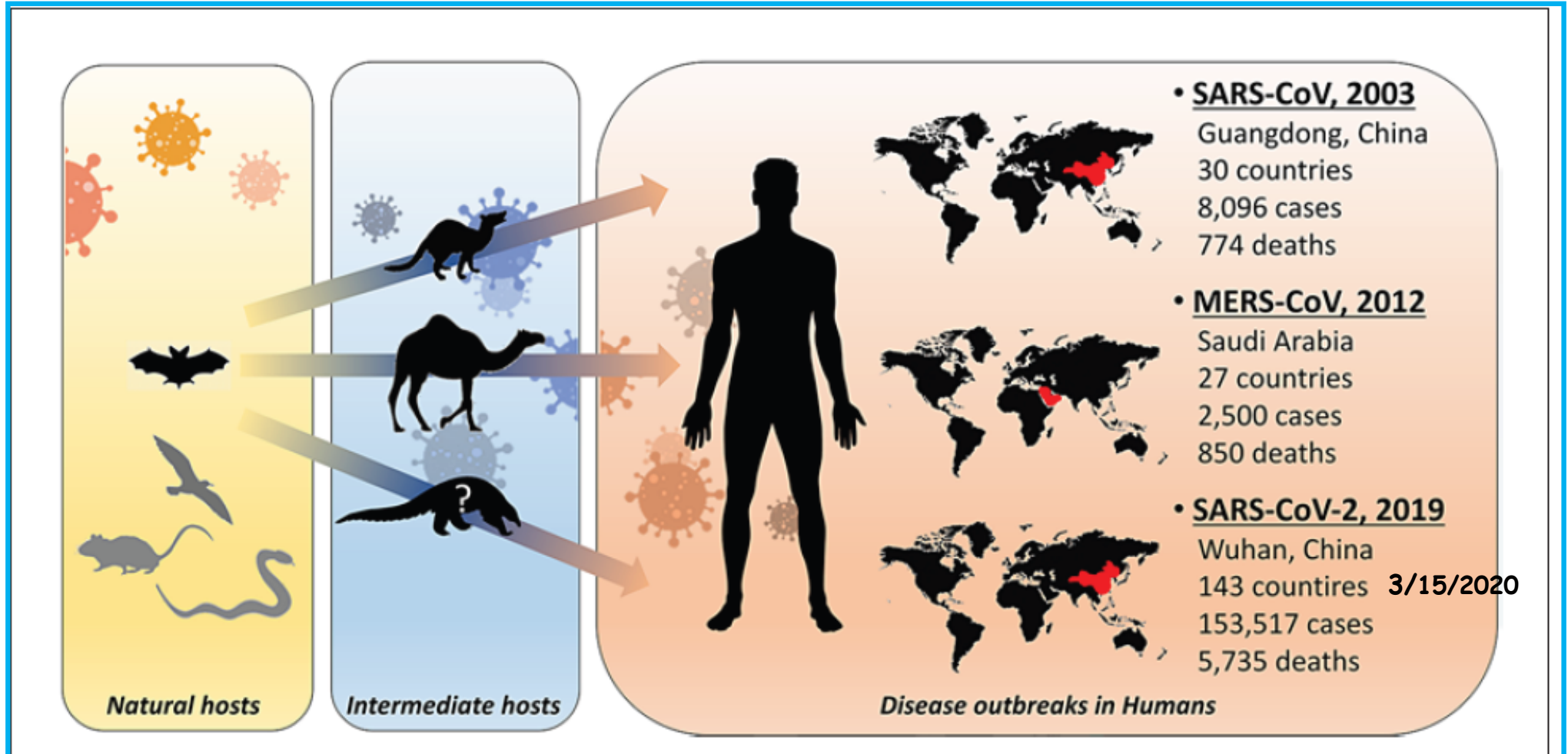


Giuliano Brunori, M.D.

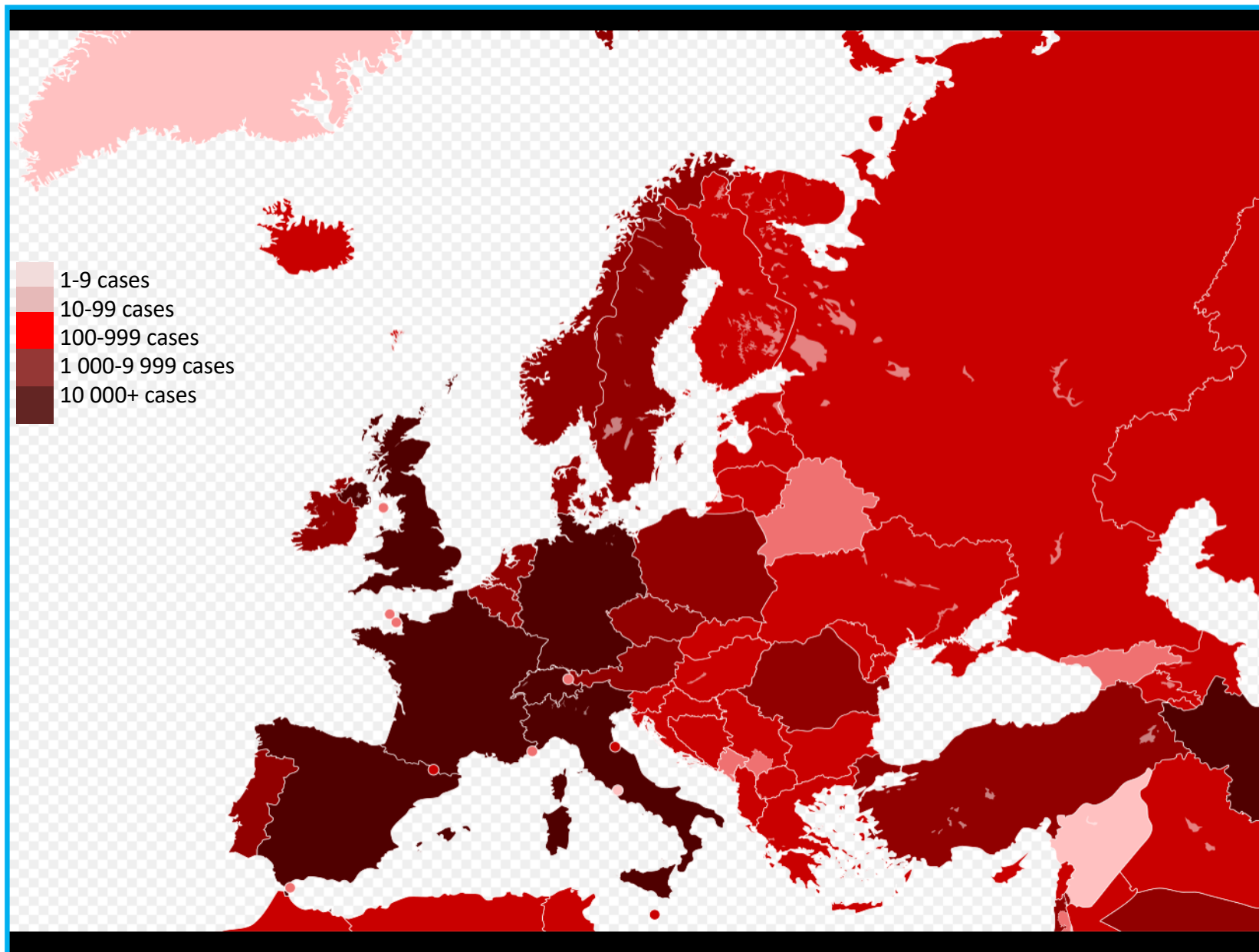
Chief Department of Specialized Medicine and Chief Division of Nephrology and Dialysis - Provincial Health System of Trento, Italy

President Italian Society of Nephrology

SARS-CoV-2 INFECTION



EUROPE

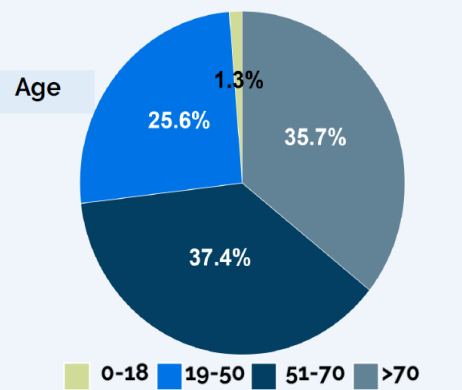


89,967 cases of COVID-19*
8,358 health-care workers[§]
9,220 associated deaths

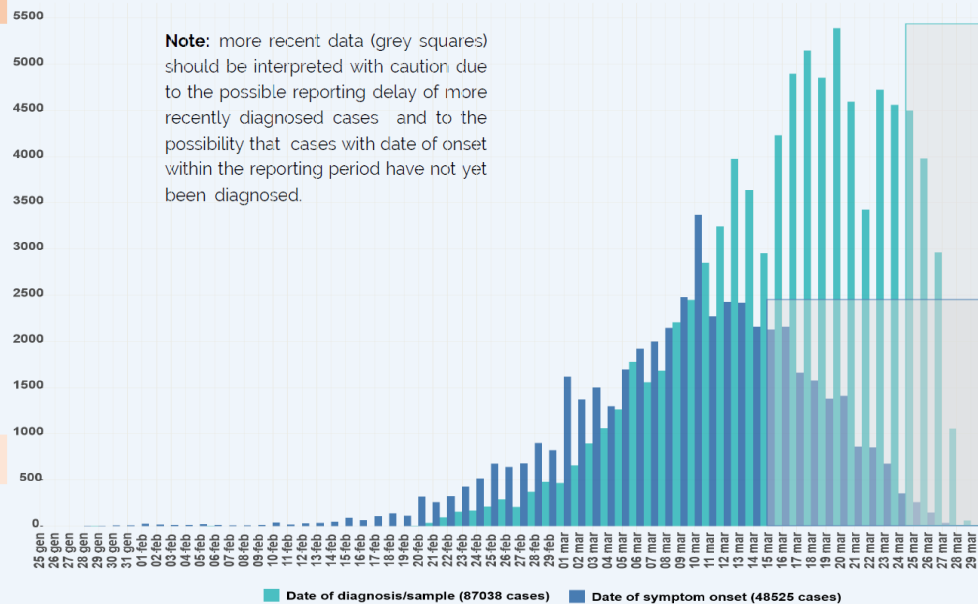
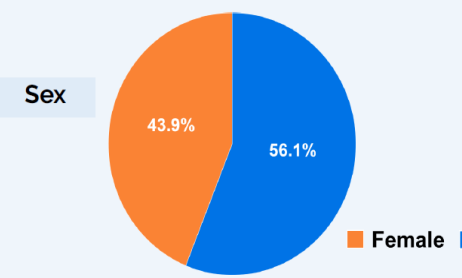
Integrated surveillance of COVID-19 in Italy

(Ordinanza n. 640 del 27/02/2020)

29 March 2020 UPDATE

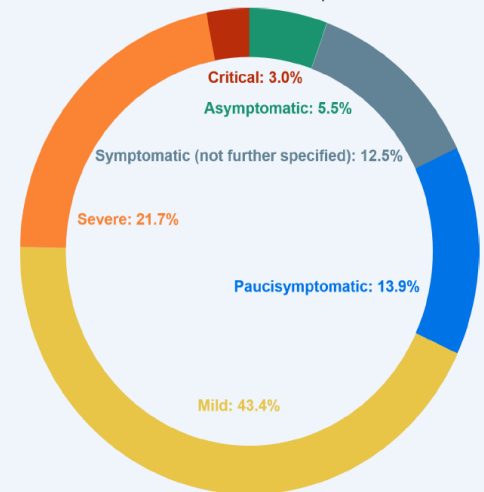


Median age of cases; **62 years**



Note: more recent data (grey squares) should be interpreted with caution due to the possible reporting delay of more recently diagnosed cases and to the possibility that cases with date of onset within the reporting period have not yet been diagnosed.

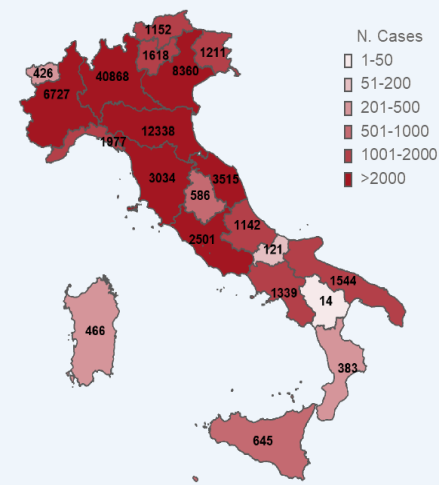
99% of the clinical samples processed were confirmed by the National Reference Laboratory at the Istituto Superiore di Sanità



Data available for **38,861** cases

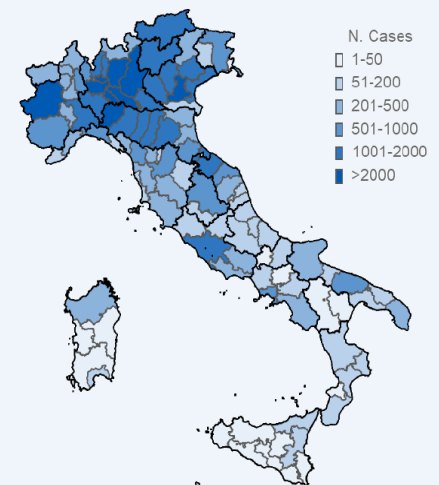
Total number of COVID-19 cases diagnosed by the Italian Regional Reference Laboratories

Age (years)	Deaths [n (%)]	CFR [§]
0-9	0 (0%)	0%
10-19	0 (0%)	0%
20-29	1 (0%)	0%
30-39	20 (0.2%)	0.3%
40-49	81 (0.9%)	0.7%
50-59	340 (3.7%)	1.9%
60-69	1073 (11.6%)	6.8%
70-79	3206 (34.8%)	19.1%
80-89	3652 (39.6%)	27.1%
>=90	845 (9.2%)	25.5%
Not reported	2 (0%)	0.9%
Total	9220 (100%)	10.2%



By Region/Autonomous Province of diagnosis

(data available for 89,967)



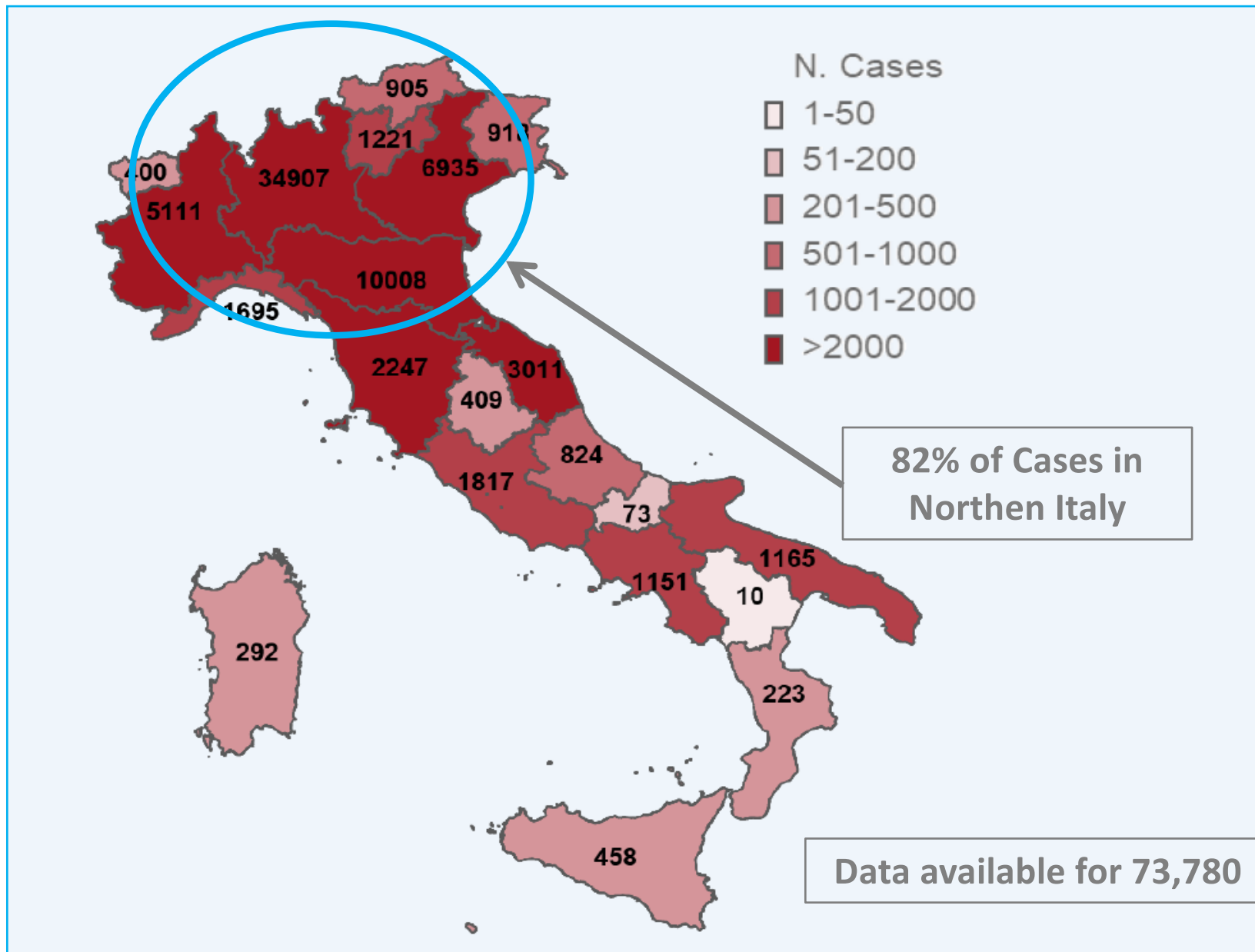
By province of residence

(data available for 86,434)

*The case definition considers as a confirmed case any person with laboratory confirmation of virus causing COVID-19 infection, irrespective of clinical signs and symptoms <https://www.ecdc.europa.eu/en/case-definition-and-european-surveillance-human-infection-novel-coronavirus-2019-ncov>

¹ISS collects data on cases that tested positive for SARS-COV-2 infection diagnosed by all Italian Regions/Autonomous Provinces. Data could differ from aggregated data from the Italian Ministry of Health and the Italian Civil Protection. [§]The term "health-care worker" is based on the occupation and not on the place of exposure. [§]Case Fatality Rate

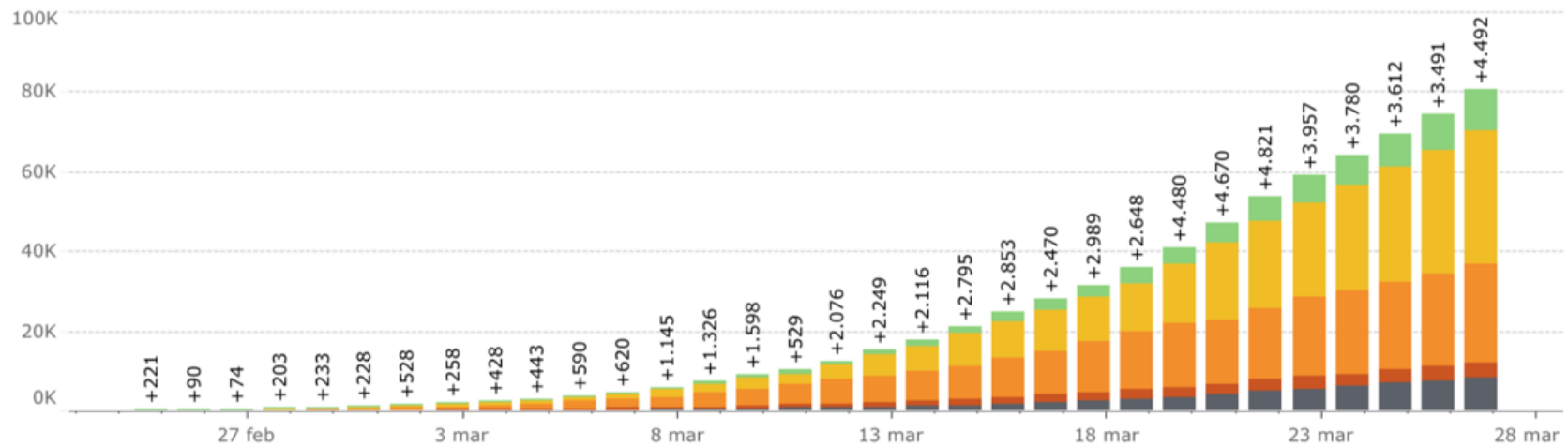
BY REGION/AUTONOMOUS PROVINCE OF DIAGNOSIS



COVID IN ITALY (FEB 25 - MARCH 27, 2020)



TREND OF INFECTION

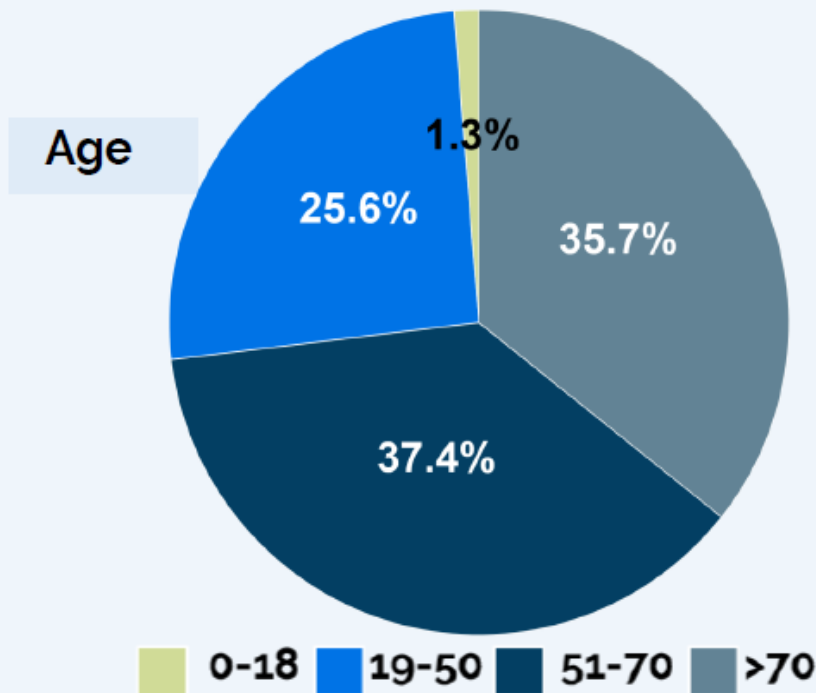


FOR AGE (MARCH 29, 2020 UPDATE)

89,967 cases of COVID-19*

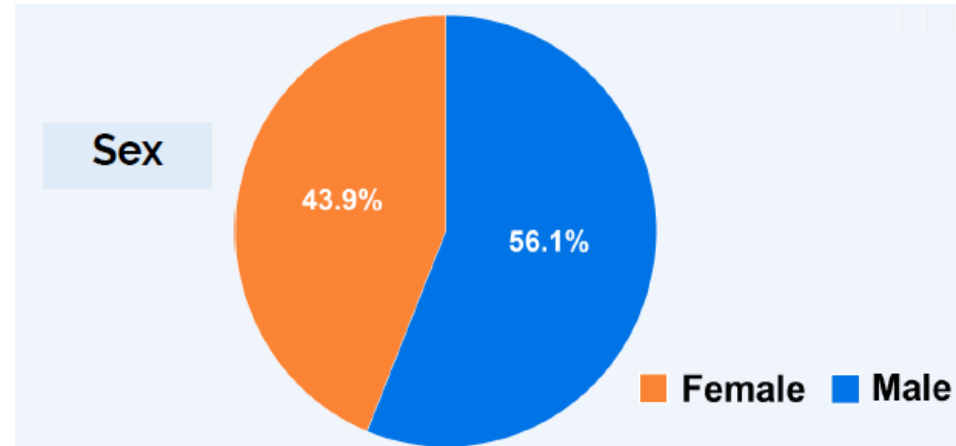
8,358 health-care workers^{\$}

9,220 associated deaths



Median age of cases; **62 years**

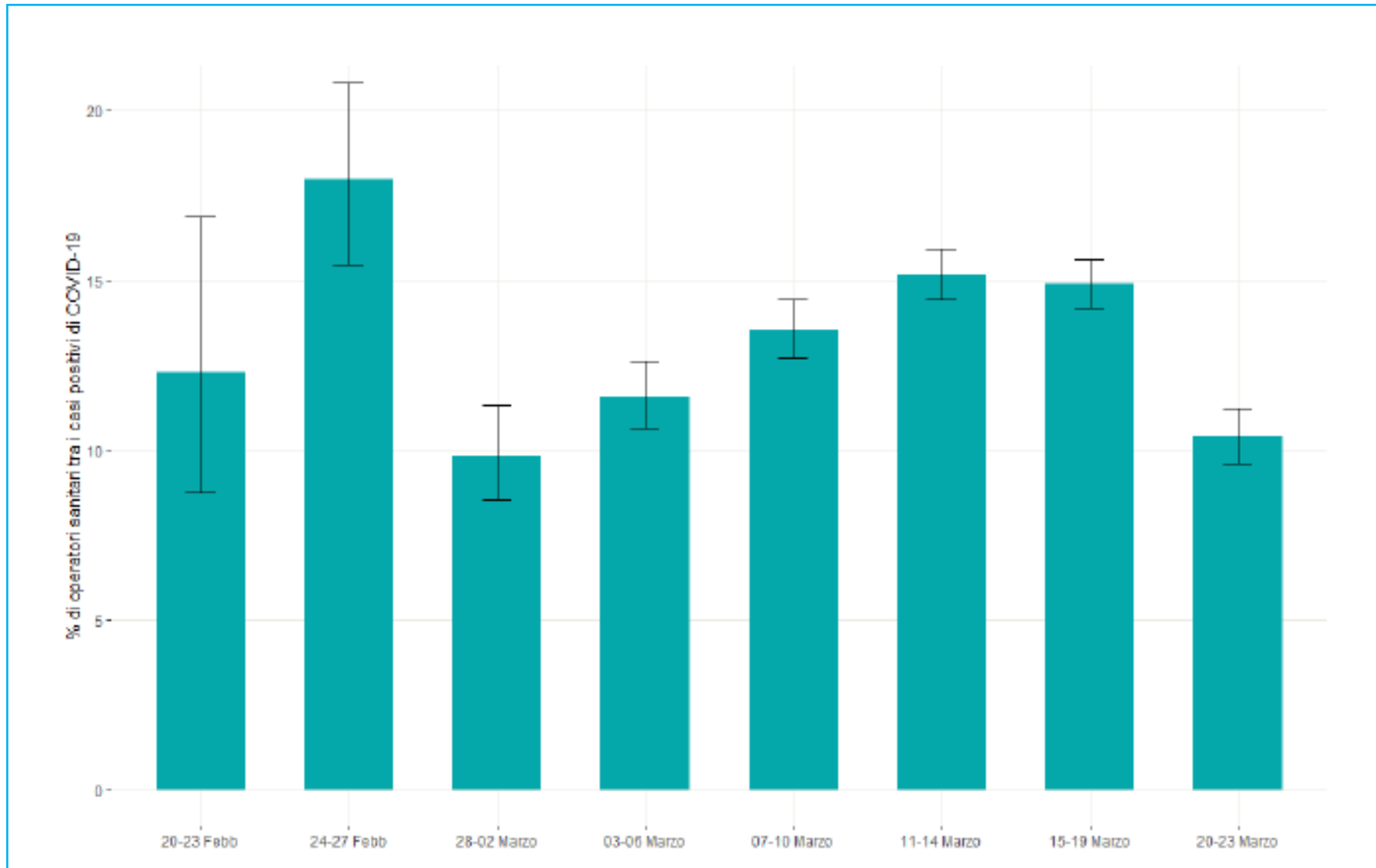
FOR SEX (MARCH 29, 2020 UPDATE)



Age (years)	Deaths [n (%)]	CFR ^s
0-9	0 (0%)	0%
10-19	0 (0%)	0%
20-29	1 (0%)	0%
30-39	20 (0.2%)	0.3%
40-49	81 (0.9%)	0.7%
50-59	340 (3.7%)	1.9%
60-69	1073 (11.6%)	6.8%
70-79	3206 (34.8%)	19.1%
80-89	3652 (39.6%)	27.1%
>=90	845 (9.2%)	25.5%
Not reported	2 (0%)	0.9%
Total	9220 (100%)	10.2%

84%

PERCENTAGE OF HEALTHCARE WORKERS COVID 19 (3 DAY INTERVAL)



DIALYSIS AND KIDNEY TX POPULATION IN ITALY

- Hemodialysis: **46,000** patients (<500 in home hemodialysis)
- Peritoneal dialysis: **4,500** patients (60% in CAPD, 40% in APD)
- Kidney Tx: **26,000** patients

More than **80%** of patients in HD are **treated in public**, non-profit hospital

20% of patients are **treated in private hospital** with SSN, National Health System

Peritoneal dialysis is done **ONLY** in public hospital (SSN, National Health System)

Dialysis and kidney transplant are **free of charge** for patients

COVID 19 IN DIALYSIS PATIENTS

Journal of Nephrology
<https://doi.org/10.1007/s40620-020-00727-y>

EDITORIAL



Practical indications for the prevention and management of SARS-CoV-2 in ambulatory dialysis patients: lessons from the first phase of the epidemics in Lombardy

Giuseppe Rombolà¹ · Marco Hedemperger² · Luciano Pedrini³ · Marco Farina⁴ · Filippo Aucella⁵ · Piergiorgio Messa⁶ · Giuliano Brunori⁷



COVID 19 IN DIALYSIS PATIENTS (SERIATE AND LODI)

SERIATE

- 1 main center and 3 LCU (215 pts);
- LCU Sarnico (Iseo lake): 18 out of 60 pts were infected;
- 1 week between the first pt and the eighteenth;
- All the positive pts transferred in the Nephrology Unit, transformed in a COVID area;
- 1 pt in critical condition, the others with mild symptoms

LODI

- 1 main center and 2 LCU (170 pts);
- 4 out of 170 pts were infected;
- Dialysis in a small dedicate ward

COVID-19 LOMBARDY DATA*

HD

Pts on HD: 3318

HD Pts COVID 19 +: 260 (8%)

+ Pts treated in isolated room: 206

+ Pts treated in Semi-intensive/ICU 54

+ Deaths: 62 (1,8%)

Staff COVID 19 positive: 84

PD

Pts on PD: 713

PD Pts COVID 19 +: 7 (1%)

+ Pts treated in isolated room: 0

+ Pts treated in Semi-intensive/ICU: 0

Deaths: 2 (0,2%)

Staff COVID 19 positive: 0

* = 75% of total dialysis population

COVID 19 IN DIALYSIS PATIENTS

REMEMBER

YOU CAN NOT AVOID INFECTION OUTSIDE DIALYSIS FACILITIES

BUT

YOU CAN AVOID INFECTIONS IN DIALYSIS FACILITIES

THREE MAIN GOALS

Action 1 Protect patients

Systematic use of surgical mask and use of alcoholic solution for hands and fistula arm

Action 2 Protect the team

Nurses have to wear surgical mask and protective glasses. Wash hands with soap and water, use disposable gloves

Action 3 Protect the dialysis ward

Keep positive patients out of the dialysis ward as much as possible
Treat positive pts in a separate area

PROTECT PATIENTS

1. SARS-CoV-2 can affect dialysis patients.
2. The clinical picture may be non-specific, due to uremia related immune-suppression.
3. Prompt diagnosis is a protection for the whole dialysis ward (staff and other patients)

OUR SUGGESTIONS - 1

All the patients need to be informed about symptoms: low fever, general malaise, cold or flu-like symptoms (at least in the early stage of the disease can be subtle)

- **Prepare** a letter with all the phone numbers necessary for contact and give it every week at patients
- **Inform** the patient to call in dialysis before leaving home if one of the symptoms is present;
- **Define** what patient with symptoms have to do;
- **Use** during transport and dialysis session surgical mask
- **Suggest** individual transport. In case of collective transport space between one patient and another must be guaranteed.

OUR SUGGESTIONS - 2

Implement **triage protocol** before entering dialysis room:

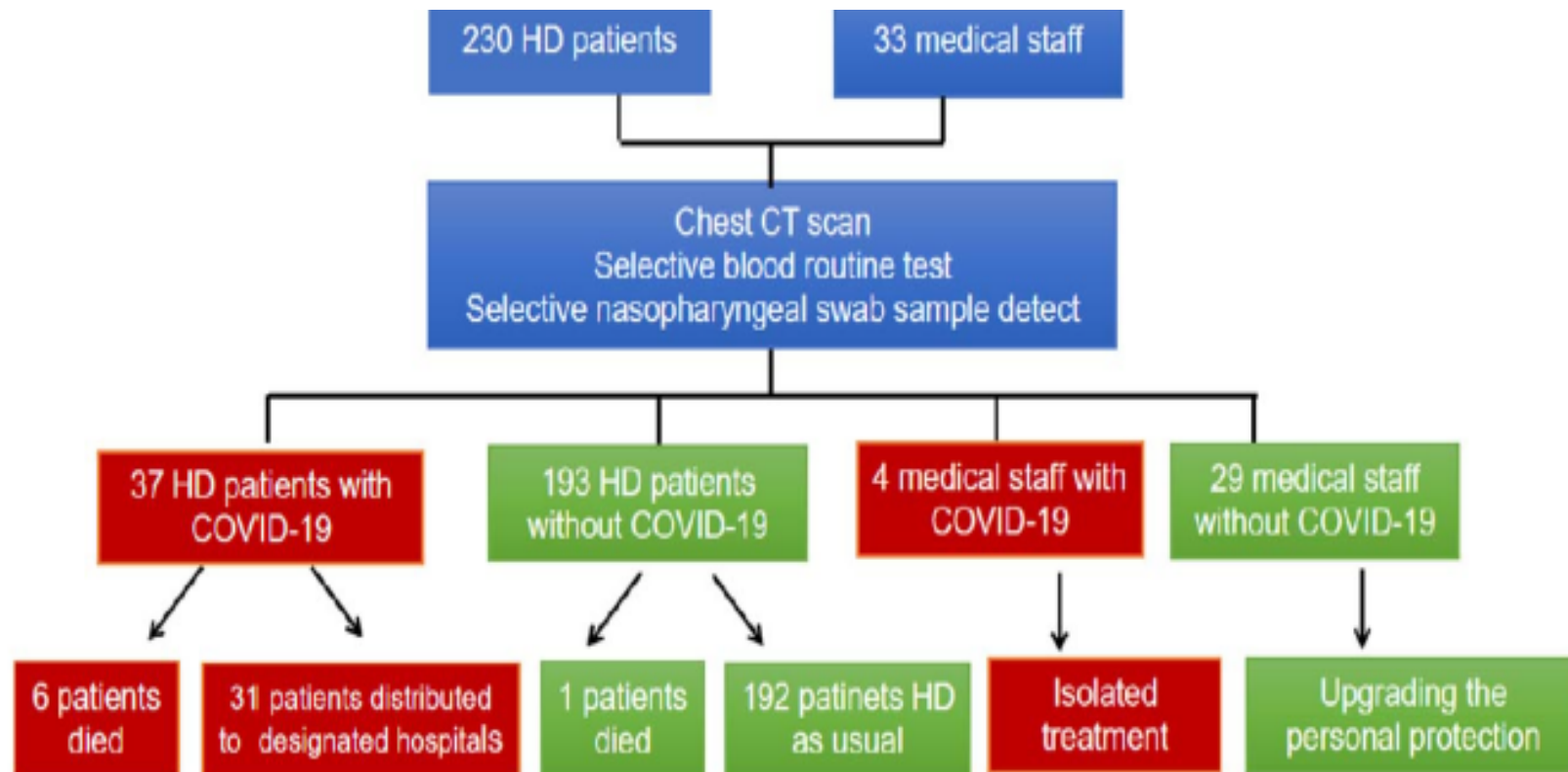
- **body temperature** (scanner or tympanic temperature);
- **questionnaire** with two questions:
 - Flu-like symptoms (diarrhea, cough, nausea, headache)
 - Contact with suspected COVID-19 patient

If one answer is YES, or $t > 37\text{ }^{\circ}\text{C}$ ($98.6\text{ }^{\circ}\text{F}$) patient is **NOT** admitted to dialysis room with other pts

DATA

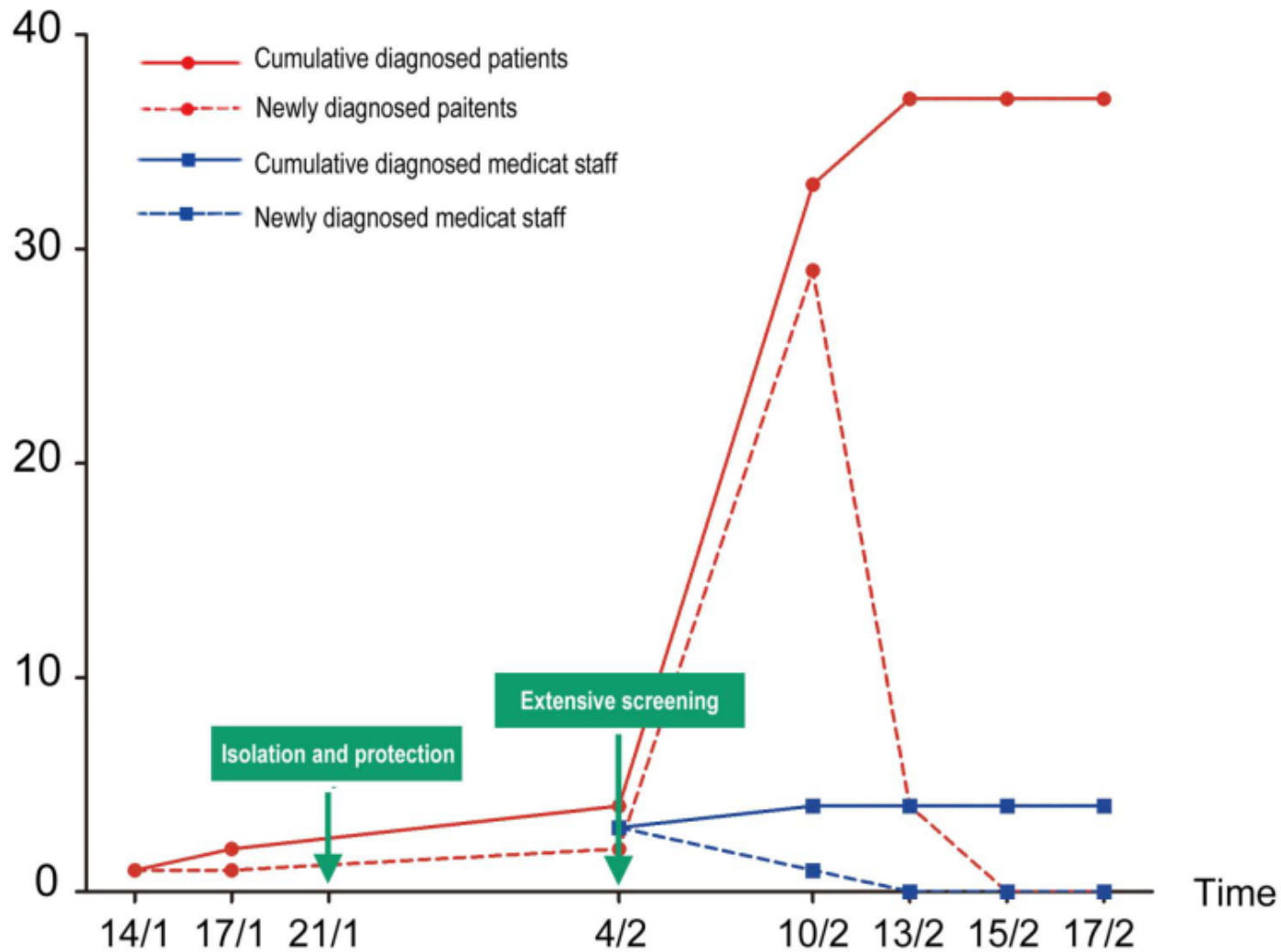
2019 novel Coronavirus disease in hemodialysis (HD) patients: Report from one HD Center in Wuhan, Cina

Yiqiong Ma^{1,#}, Bo Diao^{2,#}, Xifeng Lv^{1,#}, Jili Zhu¹, Wei Liang¹, Lei Liu¹, Wenduo Bu¹, Huiling Cheng¹, Sihao Zhang¹, Lianhua Yang¹, Ming Shi¹, Guohua Ding¹, Bo Shen^{3,*}, Huiming Wang^{1,*}



DATA

No. of cases



OUR SUGGESTIONS - 3

In case of suspected COVID-19, if possible, **postpone** the dialysis treatment and perform **nasopharynx swabs**.

Separate room for dialysis for suspected COVID-19 pt(s) or treat patient(s) in the last shift of the day.

If separate room is not available, treat the pt(s) at a corner or end of row station. At least **6-feet from nearest pt** in all direction is mandatory.

A **selected and well trained group of HCW** should be assigned to treat suspected pt(s)

OUR SUGGESTIONS - 4

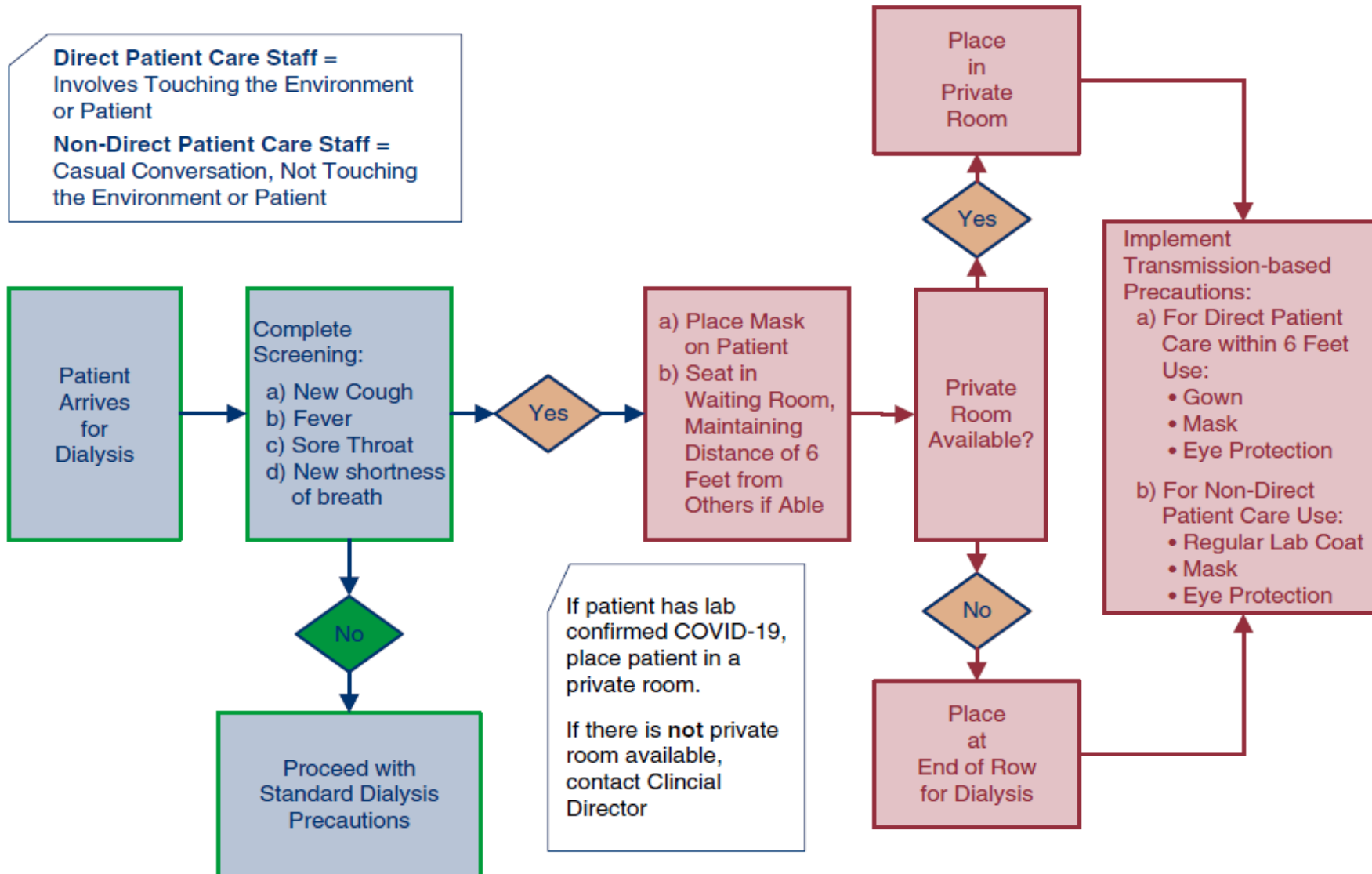
Pt(s) with confirmed COVID-19 infection should be admitted to an airborne infection isolation room.

Do not dialyze in outpatient dialysis facility unless an air bone infection isolation room is available.

Pt(s) at home need to check °t and O2 saturation in the morning and evening .

Transport from home to hospital and vice versa requires a dedicated vehicle. Caregiver need to wear full protection

PATIENS SCREENING FOR COVID -19



OUR SUGGESTIONS - 5

In our Division, there are **3 dedicated rooms** (6 beds) for COVID-19 positive dialysis pts.

At March 30: 3 HD pts COVID 19 positive, out of 272 dialysis pts: **1,1%**
1 nurse out of 122 (dialysis, peritoneal dialysis, ward): **0,8%**

Pts **admitted to ward** in order to avoid transport, contact with family members, etc.

One room equipped with portable osmosis and dialysis monitor

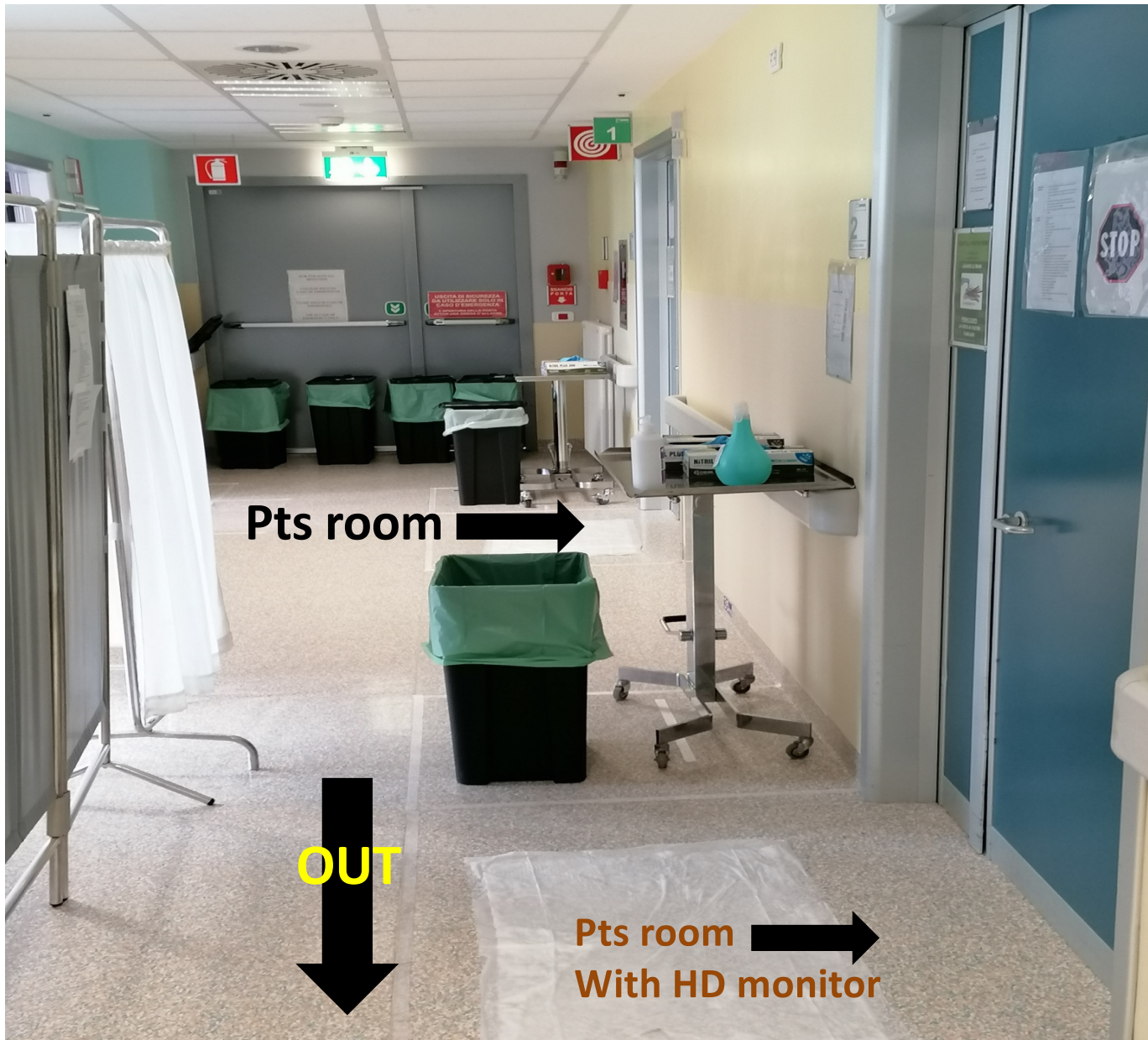
Only HCWs assigned to COVID-19 positive enter the isolation room

Utilization of the **intercom system** for communication (HCWs during dialysis session, pt and ward staff, etc).

LOGISTIC



LOGISTIC



SUMMARY

Recommendations for the prevention, mitigation and containment of the emerging SARS-CoV-2 (COVID-19) pandemic in Haemodialysis Centre

How can we reduce transmission of COVID-19 in haemodialysis centres?

This review from the Eudial Working Group of ERA–EDTA provides recommendations for the prevention, mitigation and containment of the emerging SARS-CoV-2 (COVID-19) pandemic in haemodialysis centres

Recommendations for the healthcare team



Be trained in use of personal protective equipment



Inform your team leader if symptomatic or in contact with a case



Stay home if unwell



Use full personal protective equipment when caring for confirmed cases

Recommendations for dialysis patients



Be provided with clear instructions on appropriate hand and respiratory hygiene



Should perform hand hygiene on arrival and departure from the dialysis unit



Body temperature should be checked before the start and end of dialysis sessions



Should inform staff of symptoms in advance of arrival at the dialysis unit



Should be instructed to self-isolate



Symptomatic patients should be dialyzed in a separate isolation room

In memoria di Roberto Stella e degli altri medici caduti durante l'epidemia di Covid-19



FNOMCeO

Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri

Contatti

Redazione

Area
ORDINI



Anagrafica Federazione Legislazione Ordini provinciali Esteri News La Professione #sivaccini Agenda eventi

63 colleagues died during COVID 19 pandemia (data at March 30)



<https://portale.fnomceo.it/covid-19/>



+
f
in
Twitter
2K SHARES