Ministry of Health, National Institute of Health
Control room pursuant to the Health Ministerial Decree of 30 April 2020

Phase 2 monitoring Weekly report

Report 112
National summary

Phase 2 Monitoring (DM Health 30 April 2020)
Data for week 27/06 / 2022-03 / 07/2022 (updated on 06/07/2022)

Update 6 July 2022 - Reference period: 27/6 / 2022-3 / 7/2022

Headline of the week:

A worsening of the epidemic continues to be recorded, despite the summer period in which many activities are carried out outdoors. An acute epidemic phase is confirmed characterized by a strong increase in incidence, by a transmissibility (both calculated on symptomatic cases and on hospitalized cases) above the epidemic threshold and by an increase in the occupancy rates of beds in the area medical and intensive care.

In this phase, the need is reiterated to continue to adopt the individual and collective behavioral measures envisaged / recommended, the use of a mask, ventilation of the premises, hand hygiene and paying attention to gathering situations.

The high vaccination coverage, the completion of vaccination cycles and the maintenance of a high immune response through the booster dose, with particular regard to the categories indicated by the ministerial provisions, are necessary tools to mitigate the clinical impact of the epidemic.

Key points:

- Below is an analysis of the data relating to the period 27 June - 3 July 2022 pursuant to the Health Ministerial Decree of 30 April 2020 and the period 1-7 July 2022 on the basis of aggregate data collected by the Ministry of Health. For the time elapsing between exposure to the pathogen and the development of symptoms and between these and the diagnosis and subsequent notification, probably many of the cases notified in the week of June 27 - July 3, 2022, they contracted the infection in the second decade of June 2022.

- **Incidence still increases:** The data of the ISS flow in the period 27/06 / 2022-03 / 07/2022 show an incidence still increasing and equal to 879 per 100,000 inhabitants, compared to the previous week which was 586 per 100,000 inhabitants in period 06/20/2022-26/06/2022). The same trend is observed in the most recent period recorded in the aggregate data collected by the Ministry of Health (1071 per 100,000 inhabitants in the period 1/7 / 2022-7 / 7/2022 vs 763 per 100,000 inhabitants in the period 24/06 / 2022-30 / 06/2022).

- The age group with the highest weekly incidence rate per 100,000 inhabitants is the 30-39 age group with an incidence of 1,071 cases per 100,000 inhabitants, an increase compared to the previous week. At the moment, the lowest incidence is found in age group> 90 years with an incidence of 519 cases per 100,000 inhabitants, an increase compared to the previous week.

- In the period 15 June - 28 June 2022, the mean Rt calculated on symptomatic cases was equal to **1.40 (range 1.36-1.46), increasing compared to the previous week and beyond the epidemic threshold.** The transmissibility index based on cases with hospitalization is slightly increasing and also above the epidemic threshold: Rt = 1.24 (1.21-1.28) at 06/28/2022 vs Rt = 1.22 (1.18-1.26) as of 06/20/2022. For details on the methods of calculation and interpretation of the reported RT, please refer to the in-depth analysis available on the website of the Istituto Superiore di Sanità (https:// www.iss.it/primo-piano/-/asset_publisher/o4oGR9qmvUz9/content/id / 5477037).

- **The occupancy rate of the beds in intensive care is increased, calculated in accordance with the Ministerial Decree of 30 April 2020** that is in place at 3.5% (323 / 9.194) on 05/07/2022, compared to 2.5% (234 / 9.203) on 27/06/2022. The absolute number of people admitted to intensive care increased from 234 (27/06/2022) to 323 (05/07/2022), with a relative increase of 38%.

- **The employment rate in COVID-19 medical areas increases nationwide:** it was 12.5% (8,003 / 64,182) on the day 07/05/2022, compared to 9.2% (5,873 / 64,101) on 06/27/2022. The number of people hospitalized in these areas increased from 5,873 (06/27/2022) to 8,003 (07/05/2022) with a relative increase of about 36.3%.

- **No Region / PA is classified as low risk. 12 Regions / PPAAs are classified at moderate risk pursuant to the Ministerial Decree of 30 April 2020 (2 of these with a high probability of progression), while 9 Regions / PPAAs are classified at high risk due to the presence of multiple resilience alerts and one for not having reached the minimum quality threshold of the data transmitted to the ISS.**

- **Twenty** Regions / PPAAs report at least one resilience alert. **Nine** Regions / PPAAs report multiple resilience alerts.

- The **percentage of cases detected through contact tracing activity is slightly up** (10% vs 9% last week). The percentage of cases detected through the appearance of symptoms decreased (41% vs 44%), and the percentage of cases diagnosed through screening activities increased (49% vs 47%). The current situation characterized by high incidence **does not allow a precise mapping of the contacts of the cases,** as evidenced by the low percentage of cases detected through the tracing activity.

- A worsening of the epidemic continues to be recorded, despite the summer period in which many activities are carried out outdoors. An acute epidemic phase is confirmed characterized by a strong increase in incidence, by a transmissibility (both calculated on symptomatic cases and on hospitalized cases) above the epidemic threshold and by an increase in the occupancy rates of beds in the area medical and intensive care.

- In this phase, the need is reiterated to continue to respect the individual and collective behavioral measures provided / recommended, the use of a mask, ventilation of the premises, hand hygiene and paying attention to gathering situations.

- **The high vaccination coverage, the completion of vaccination cycles and the maintenance of a high immune response through the booster dose, with particular regard to the categories indicated by the ministerial provisions,** are necessary tools to mitigate the especially clinical impact of the epidemic .

Summary

1. Risk assessment

Risk Assessment - Diffusion probability assessment

Probability assessment algorithm and relevant indicators by reference phase

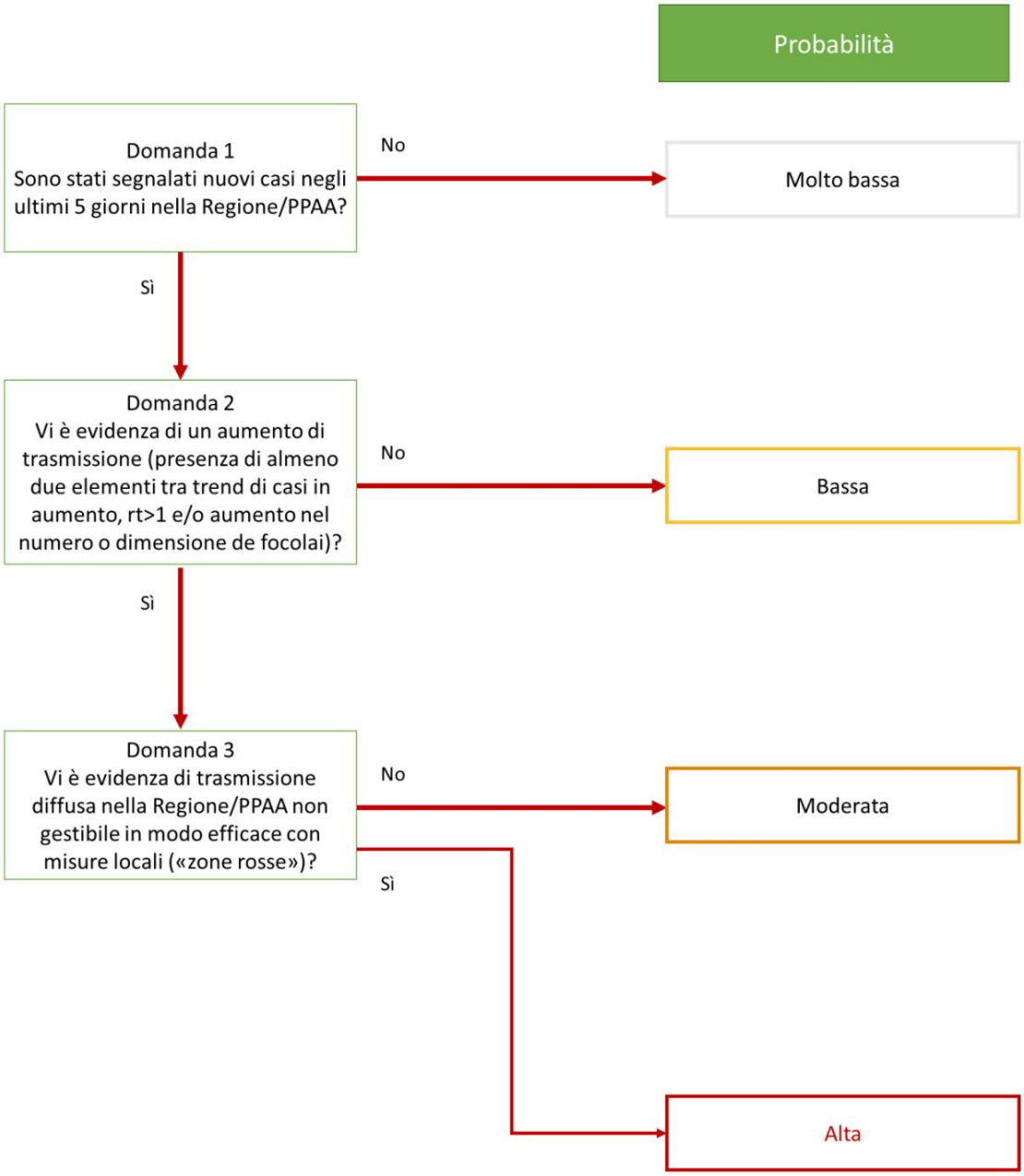

Table 1 - Evaluation of the probability of diffusionaccording to the evaluation algorithm of the DM Health April 30, 2020, data as of July 6 2022 relating to the week 27/6 / 2022-3 / 7/2022

Region.PA	Completeness of the data above the threshold (Appendix table 2)?	Request 1	Question 2				Question 3	Probability assessment
		New cases reported in the last 5 days?	Case trend (Ind3.1)	Case trend (Ind3.4)	Rt punctual above one?	Trend outbreaks	Transmission declared not manageable effectively with local measures (red zones)? *	
Abruzzo	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Basilicata	Yup	Yup	ÿ	ÿ	Yup	=	No	**Moderate**
Calabria	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Campania	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Emilia Romagna	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
FVG	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Lazio	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Liguria	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Lombardy	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Marche	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Molise	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Piedmont	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
PA Bolzano / Bozen	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
PA Trento	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Puglia	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Sardinia	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Sicily	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Tuscany	**No**	-	-	-	-	-	-	**Not evaluable (equated to high risk)**
Umbria	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**
Vd'Aosta / Vd'Aoste	Yup	Yup	ÿ	ÿ	No	ÿ	No	**Moderate**
Veneto	Yup	Yup	ÿ	ÿ	Yup	ÿ	No	**Moderate**

Impact assessment algorithm and relevant indicators by reference phase

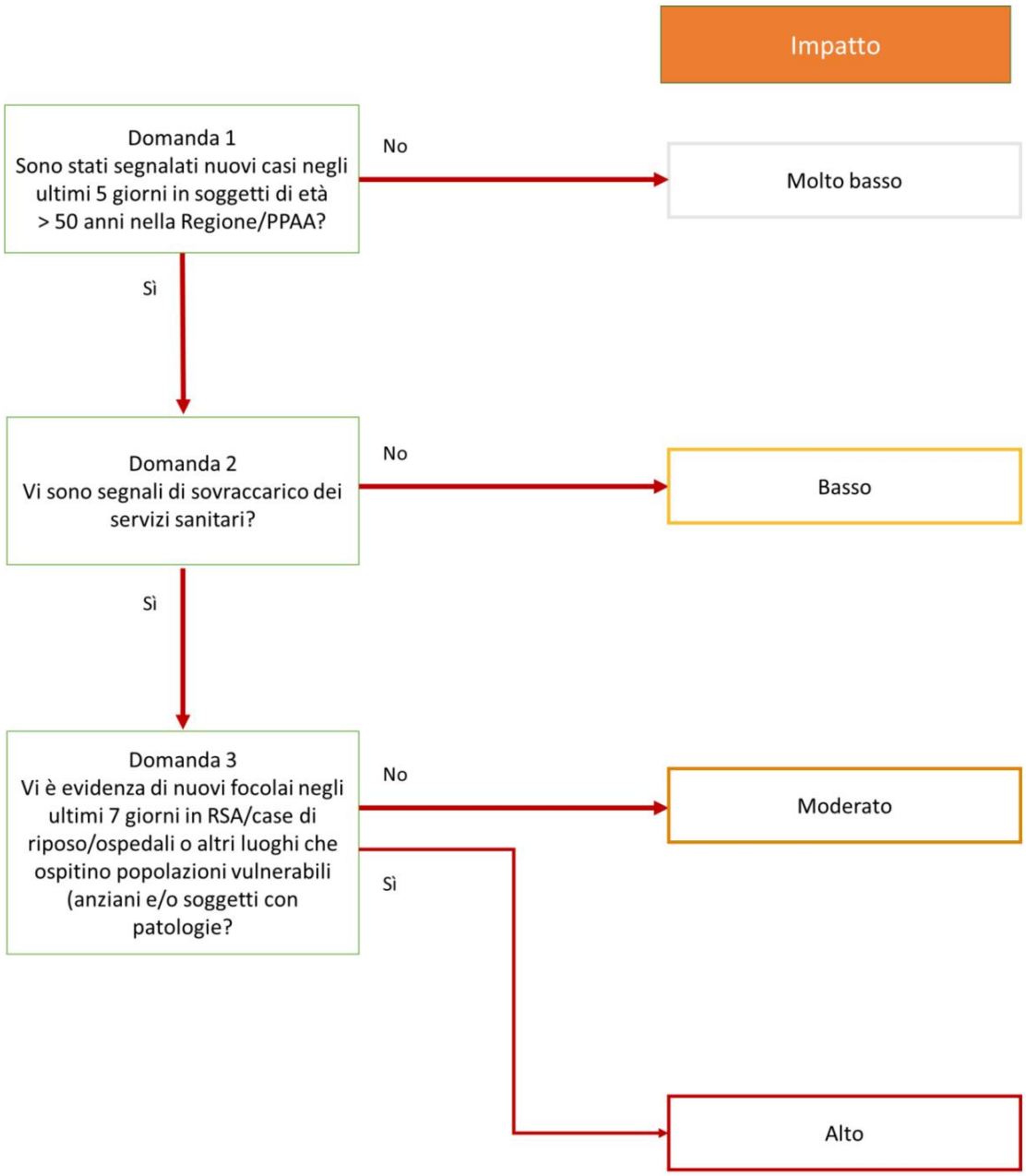

Table 2 - Impact evaluation according to the evaluation algorithm of the DM Health April 30, data as of July 6, 2022 for week 27/6 / 2022-3 / 7/2022

Region.PA	Question 1	Question 2 (latest data available *)		Question 3	Impact assessment
	New cases reported in the last 5 days in subjects> 50 years of age?	Overload in ICU (Ind3.8 above 30%)?	Overload in medical areas (Ind3.9 above 40%)?	Evidence of new outbreaks in the last 7 days in nursing homes / nursing homes / hospitals or other places hosting vulnerable populations (elderly and / or people with pathologies)?	
Abruzzo	Yup	No	No	-	Low
Basilicata	Yup	No	No	-	Low
Calabria	Yup	No	No	-	Low
Campania	Yup	No	No	-	Low
Emilia Romagna	Yup	No	No	-	Low
FVG	Yup	No	No	-	Low
Lazio	Yup	No	No	-	Low
Liguria	Yup	No	No	-	Low
Lombardy	Yup	No	No	-	Low
Marche	Yup	No	No	-	Low
Molise	Yup	No	No	-	Low
Piedmont	Yup	No	No	-	Low
PA Bolzano / Bozen	Yup	No	No	-	Low
PA Trento	Yup	No	No	-	Low
Puglia	Yup	No	No	-	Low
Sardinia	Yup	No	No	-	Low
Sicily	Yup	No	No	-	Low
Tuscany	Yup	No	No	-	Low
Umbria	Yup	No	No	-	Low
Vd'Aosta / Vd'Aoste	Yup	No	No	-	Low
Veneto	Yup	No	No	-	Low

* updated on 05/07/2022

Risk assessment - Overall risk classification

Risk attribution matrix based on probability and impact assessment algorithms

Probabilità / Impatto	Molto Bassa	Bassa	Moderata	Alta
Molto Basso	Rischio Molto basso	Rischio Basso	Rischio Basso	Rischio Moderato
Basso	Rischio Basso	Rischio Basso	Rischio Moderato	Rischio Moderato
Moderato	Rischio Basso	Rischio Moderato	Rischio Moderato	Rischio Alto
Alto	Rischio Moderato	Rischio Moderato	Rischio Alto	Rischio Molto Alto

\+ Resilienza territoriale = Classificazione del rischio complessiva

Notes: As reported in the Health Ministerial Decree of 30 April 2020: "If *the non-optional process indicators on the capacity for diagnostic assessment, investigation and contact management cannot be evaluated or give multiple warning signals, the risk calculated in this way must be re-evaluated at the of immediately higher risk. "*

NB Since pursuant to the document "Prevention and response to COVID-19: evolution of strategy and planning in the transition phase for the autumn-winter period" and current legislation, the response measures do not differ for the "low" risk classification and “very low” and due to the risk classification of “high” and “very high”, this distinction is not reported in this report.

Table 3 - Overall risk assessment according to the risk matrix of the DM Health 30 April the And on the probability of reaching critical employment thresholds of the PL in the medical area in the next 30 days, data as of 6 July 2022 relating to and week 27/6 / 2022-3 / 7/2022 Intensive care

Region.PA	Probability assessment	Impact assessment	Multiple resilience alerts? (Appendix table 4)	Probability of an escalation in the next 30 days (projections as of 05/08/2022 of the probability of exceeding the employment thresholds of PLs)% probability of reaching employment in medical areas		Overall risk classification
				% probability of reaching employment TI 30%	40%	
Abruzzo	Moderate	Low	Yup	from 5 to 50%	> 50%	High #
Basilicata	Moderate	Low	No	<5%	<5%	Moderate
Calabria	Moderate	Low	No	<5%	from 5 to 50%	Moderate
Campania	Moderate	Low	No	> 50%	> 50%	Moderate (with a high probability of progression)
Emilia Romagna	Moderate	Low	Yup	<5%	> 50%	High #
FVG	Moderate	Low	No	<5%	from 5 to 50%	Moderate
Lazio	Moderate	Low	Yup	<5%	<5%	High #
Liguria	Moderate	Low	Yup	<5%	> 50%	High #
Lombardy	Moderate	Low	No	<5%	from 5 to 50%	Moderate
Marche	Moderate	Low	Yup	<5%	> 50%	High #
Molise	Moderate	Low	No	<5%	from 5 to 50%	Moderate
Piedmont	Moderate	Low	No	<5%	<5%	Moderate
PA Bolzano / Bozen	Moderate	Low	No	<5%	from 5 to 50%	Moderate
PA Trento	Moderate	Low	No	<5%	<5%	Moderate
Puglia	Moderate	Low	Yup	from 5 to 50%	> 50%	High #
Sardinia	Moderate	Low	No	from 5 to 50%	from 5 to 50%	Moderate
Sicily	Moderate	Low	No	<5%	> 50%	Moderate (with a high probability of progression)
Tuscany	Not evaluable (equated to high risk)	Low	Yup	from 5 to 50%	> 50%	Not evaluable (equated to high risk) ##
Umbria	Moderate	Low	Yup	from 5 to 50%	> 50%	High #
Vd'Aosta / Vd'Aoste	Moderate	Low	No	<5%	<5%	Moderate
Veneto	Moderate	Low	Yup	<5%	from 5 to 50%	High #

The projections are "hospital" based. Hospitalizations in the medical area. Given [illegible] decreased from 14.5 to 11.8 days.

[illegible] 90 values. Rt [illegible] to hospitalization times

It is possible that as vaccinations progress, ICU admissions will follow rules to be interpreted with extreme caution. Further [illegible] on public) provided by the doctors interviewed from the Epidemiological [illegible] Am J Epidemiol. 2021. doi: 10.1093 / aje / kwab252 [illegible]

Rt different from that of a [illegible] based [illegible] In hospital in The times of

#The overall risk rating is increased by one is ## Not assessable assessment [illegible] level when multiple resilience alerts have been recorded (see table 4 in appendix) high risk according to the Ministerial Decree of 30 April 2020.

2. Appendix - Indicators for risk assessment

Appendix - Table 1 - Synthetic framework with the main indicators of planning monitoring in the And compatibility the with the Rt punctual with the document of 6 July 2022 relating to the week 27/6/2022-3/7/2022 reply COVID-19: evolution of the strategy a And transition phase for period autumn-winter ",

Region.PA	New cases reported in the week	Weekly trend COVID-19		Timely Rt estimate (calculated as of 06/22/2022)	Transmission declared not manageable effectively with local measures (red zones)	Probability assessment	Evaluation of impact	Alerts relating to the resilience of local health services	Compatibility Rt symptoms punctual with the transmission scenarios one *	Overall risk classification	Classification High and / or equivalent to High for 3 or more consecutive weeks
		Cases (Source ISS)	Outbreaks								
Abruzzo	13707	64.4	191	1.26 (CI: 1.17-1.33)	No	**Moderate**	Low	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold	2	**High #**	No
Basilicata	4484	50.7	0	1.83 (CI: 1.47-2.2)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	3	**Moderate**	No
Calabria	7913	1.6	35	1.23 (CI: 1.11-1.36)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	2	**Moderate**	No
Campania	65892	81.4	2357	1.41 (CI: 1.39-1.44)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	3	**Moderate (with a high probability of progression)**	No
Emilia Romagna	41071	42.0	13	1.34 (CI: 1.31-1.37)	No	**Moderate**	Low	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold	3	**High #**	Yup
FVG	8385	15.1	619	1.46 (CI: 1.43-1.5)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	3	**Moderate**	No
Lazio	67190	34.4	1263	1.2 (CI: 1.15-1.26)	No	**Moderate**	Low	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold	2	**High #**	Yup

Region.PA	New cases reported in the week	Weekly trend COVID-19		Estimate of Rt punctual (calculated as of 06/22/2022)	Transmission declared not manageable effectively with local measures (red zones)	Probability assessment	Evaluation of impact	Alerts relating to the resilience of local health services	Compatibility Rt symptoms punctual with the broadcast scenarios one *	Overall risk classification	Classification High and / or equivalent to High for 3 or more consecutive weeks
		Cases (Source ISS)	Outbreaks								
Liguria	11782	47.7	1084	1.56 (CI: 1.53-1.6)	No	**Moderate**	Low	**2 resilience alerts.** Ind 2.1 on the rise and total human resources below the threshold	4	**High #**	Yup
Lombardy	74823	37.3	429	1.45 (CI: 1.44-1.47)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	3	**Moderate**	No
Marche	12860	58.5	133	1.68 (CI: 1.59-1.78)	No	**Moderate**	Low	**2 resilience alerts.** Ind 2.1 on the rise and total human resources below the threshold	4	**High #**	Yup
Molise	2486	39.0	-3	1.4 (CI: 0.76-2.08)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	1	**Moderate**	No
Piedmont	22659	55.6	1839	1.27 (CI: 1.16-1.4)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	2	**Moderate**	No
PA Bolzano / Bozen	3764	36.4	470	1.17 (CI: 1.11-1.22)	No	**Moderate**	Low	0 resilience alerts	2	**Moderate**	No
PA Trento	3496	47.7	341	1.51 (CI: 1.43-1.58)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	3	**Moderate**	No
Puglia	40891	77.6	79	1.5 (CI: 1.46-1.54)	No	**Moderate**	Low	**3 resilience alerts.** Ind 2.1 increasing, total human resources below the threshold and ind 2.6 below the threshold	3	**High #**	Yup

Region.PA	New cases reported in the week	Weekly trend COVID-19		Estimate of Rt punctual (calculated as of 06/22/2022)	Transmission declared not manageable effectively with local measures (red zones)	Probability assessment	Evaluation of impact	Alerts relating to the resilience of local health services	Compatibility Rt symptoms punctual with the broadcast scenarios one *	Overall risk classification	Classification High and / or equivalent to High for 3 or more consecutive weeks
		Cases (Source ISS)	Outbreaks								
Sardinia	15950	29.3	682	1.55 (CI: 1.48-1.61)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	3	**Moderate**	No
Sicily	32440	5.2	1539	1.17 (CI: 1.15-1.2)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	2	**Moderate (with a high probability of progression)**	No
Tuscany	27269	19.1	-2	1.34 (CI: 1.31-1.35)	No	**Not evaluable (equated to high risk)**	Low	**2 resilience alerts.** Ind 2.1 on the rise and total human resources below the threshold	3	**Not evaluable (equated to high risk) ##**	Yup
Umbria	9550	57.0	4	1.45 (CI: 1.33-1.58)	No	**Moderate**	Low	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold	3	**High #**	Yup
Vd'Aosta / Vd'Aoste	537	34.7	18	0.96 (CI: 0.79-1.16)	No	**Moderate**	Low	**1 resilience alert.** Ind 2.1 on the rise	1	**Moderate**	No
Veneto	51120	40.3	2667	1.44 (CI: 1.43-1.46)	No	**Moderate**	Low	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold	3	**High #**	Yup

PA: Autonomous Province; days: days

resilience COVID-19: evolution of the strategy a planning the autumn-winter period in the transition phase ";

response;

There Do not is at the High risk assessment according to the of April equivalent to DM 30 2020.

Dimension 1 - completeness of data

Process indicators on monitoring capacity:

Sector	No.	Indicator	Theshold	Alert	Alert
Monitoring capacity (quality indicators of surveillance systems with data collection at national level)	1.1	Number of symptomatic cases reported per month in which the symptomatic start date is indicated / total of symptomatic cases reported to the surveillance system in the same period	At least 60% with an improving trend A value of at least 50% with an improving trend will be considered acceptable in the first 3 weeks from 4 May 2020	<60%	Integrated national surveillance
	1.2	Number of cases reported per month with a history of hospital admission (in wards other than IT) indicating the date of admission / total of cases with a history of hospital admission (in wards other than IT) reported to the surveillance system in the same period			
	1.3	Number of cases reported per month with a history of transfer / admission to the intensive care unit (ICU) indicating the date of transfer or admission to ICT / total of cases with a history of transfer / ICU admission reported to the surveillance system in the same period			
	1.4	Number of cases notified per month in which the municipality of domicile or residence is reported / total of cases notified to the surveillance system in the same period			

Appendix - Table 2 - Indicators of on-monitoring, monitoring process for capacity Region, data as of 6 July 2022 for the week 27/6 / 2022-3 / 7/2022

Region.PA	Ind1.1 previous week (%)	Ind1.1 reference week (%)	Variation	Ind1.2 (%)	Ind1.3 (%)	Ind1.4 (%)
Abruzzo	92.7	91.4	Stable above the threshold	99.1	100	96.0
Basilicata	100.0	100.0	Stable above the threshold	100.0	100	100.0
Calabria	98.8	99.1	Stable above the threshold	100.0	100	100.0
Campania	100.0	100.0	Stable above the threshold	100.0	100	99.6
Emilia Romagna	100.0	100.0	Stable above the threshold	100.0	100	97.4
FVG	99.9	99.9	Stable above the threshold	100.0	100	99.9
Lazio	96.8	97.2	Stable above the threshold	100.0	100	97.5
Liguria	79.3	86.3	Stable above the threshold	100.0	100	94.1
Lombardy	94.9	95.6	Stable above the threshold	100.0	100	96.5
Marche	100.0	100.0	Stable above the threshold	100.0	100	100.0
Molise	100.0	100.0	Stable above the threshold	100.0	100	100.0
Piedmont	70.1	69.2	Stable above the threshold	99.6	100	96.0
PA Bolzano / Bozen	99.2	99.0	Stable above the threshold	100.0	100	96.7
PA Trento	100.0	100.0	Stable above the threshold	100.0	100	92.5
Puglia	100.0	100.0	Stable above the threshold	100.0	100	100.0
Sardinia	98.4	98.3	Stable above the threshold	100.0	100	100.0
Sicily	98.5	98.5	Stable above the threshold	99.9	100	99.8
Tuscany	69.2	**57.4**	**Sub-threshold**	100.0	100	99.8
Umbria	62.9	63.5	Over-threshold	100.0	100	99.7
Vd'Aosta / Vd'Aoste	99.7	99.6	Stable above the threshold	100.0	100	99.9
Veneto	78.6	76.1	Stable above the threshold	100.0	100	100.0

Dimension 2 - the classification of transmission and impact

Result indicators relating to transmission stability

Sector	No.	Indicator	Theshold	Alert	Data source
Transmission stability	3.1	Number of cases reported to civil protection in the last 14 days	Number of cases with decreasing or stable weekly trend	Cases increasing in the last 5 days (% of weekly increase with standard thresholds to be used as "information dashboard")	Ministry of Health
	3.2	Rt calculated on the basis of ISS integrated surveillance (We will use two indicators, based on symptom onset date and date of hospitalization)	Calculated regional Rt and ÿ1 in all Regions / PPAA in phase 2 A	Rt> 1 or not calculable	ISS database developed by FBK
	3.4	Number of cases by diagnosis date and symptom onset date reported to integrated COVID-19 surveillance per day	Decreasing or stable weekly trend	Cases increasing in the last week (% of weekly increase with standard thresholds to be used as "dashboard informative ")	ISS - System of Integrated surveillance COVID-19
	3.5	Number of new transmission outbreaks (2 or more epidemiologically linked cases or an unexpected increase in the number of cases in a defined time and place)	Failure to increase the number of active transmission outbreaks in the Region Absence of transmission outbreaks on the regional territory for which a risk assessment was not quickly carried out and the opportunity to establish a "zone red "sub-regional	Evidence of new outbreaks in the last 7 days especially if in nursing homes / retirement homes / hospitals or other places hosting vulnerable populations. The presence of new outbreaks in the Region requires an ad hoc risk assessment that defines if there is a sustained and widespread transmission in the region such as to require a return to phase 1	ISS - Monitoring of outbreaks and red areas with survey cards
	3.6	Number of new cases of confirmed infection by SARS-CoV-2 by Region not associated with known transmission chains	In case there are new outbreaks declared, the indicator can monitor the quality of contact-tracing, if there are no transmission outbreaks the presence of cases not connected to transmission chains could be compatible with a low transmission scenario in which only sporadic cases are observed (considering a share of circulation not visible in paucis-symptomatic subjects)	In the presence of outbreaks, the presence of new cases of infection not traced to known chains of contagion requires an *ad hoc* risk assessment that defines whether there is a sustained and widespread transmission in the region such as to require a return to phase 1	Periodic evaluation weekly
Services health care and non welfare overloads	3.8	Seat occupancy rate total ICU bed (code 49) for patients COVID-19	ÿ 30%	> 30%	Platform daily survey of MdS beds.
	3.9	Seat occupancy rate total medical area bed for patients COVID-19	ÿ 40%	> 40%	

Methodological Note

NB Classifications that cannot be evaluated in the current situation are to be considered comparable to high / very high risk classifications

Estimation of Rt: The renewal equation underlying the method for calculating Rt considers "the number of new local cases with beginning symptoms on day t" (x) transmitted by "cases with beginning symptoms in the previous days" (y) . When we have imported cases, they are counted together with all other cases in y, as potential “infectors” of new local cases, but not in x, as infections that have been transmitted elsewhere. From the computational point of view it is sufficient for the regions to continue to use the scripts based on the EpiEstim software, taking care to insert in the third column of the input file the correct number of daily cases that have been imported from another region or from the 'abroad.

Risk Assessment: in the event that an increase is found in both surveillance flows but this is attributable exclusively to imported cases and immediately isolated upon their arrival on the regional territory, this does not automatically lead to an increase in the level of risk.

Data on outbreaks: the consolidation of the data on outbreaks reported by each Region / PA has now been ascertained, the trend in the number of outbreaks per week is used by report number 12 in the risk assessment in line with what is reported in Figure 1 of the Health Ministerial Decree of 30 April 2020.

Imported cases: The completeness of the data on the origin of the cases (autochthonous, imported from another Region, imported from a foreign state) is considered sufficient and is therefore taken into account in the calculation of the RT and in the risk assessment (interpretation of indicator 3.4) .

Weekly scenario of reference: the analysis of the weekly scenario is introduced on the basis of the Rt symptoms data (timely) based on what is defined in the document Prevention and response to Covid-19: evolution of strategy and planning in the transition phase for the autumn-winter period :

- **Compatible with Scenario 1:** regional Rt above threshold for limited periods (less than 1 month)
- **Compatible with Scenario 2:** Regional Rt significantly between Rt = 1 and Rt = 1.25
- **Compatible with Scenario 3:** Regional Rt significantly between Rt = 1.25 and Rt = 1.5
- **Compatible with Scenario 4:** Regional Rt significantly greater than 1.5

Probability of reaching bed occupancy thresholds: The **estimated** data at 1 month based on the Rt of hospitalization (in the medical area and in intensive care) is introduced on the probability of reaching the thresholds provided for in indicators 3.8 and 3.9 relating to the employment rate of the beds **if the conditions observed in the current monitoring week are maintained.**
The data categorized as follows is provided: <5%, 5-50%,> 50%. The beds that can be activated in the period compatible with the estimate are integrated into the projection estimates.

Occupancy of beds: this report shows the most recent data transmitted by the Regions / PA to the Programming DG of the Ministry of Health. The occupancy rate is calculated from the month of May taking into account only the active beds at the time of the survey.

Appendix - Table 3 - Relative result indicatorsdata stability as at 6 July 2022 relating to week transmission, 27/6 / 2022-3 / 7/2022

Region.PA	Ind3.1	Trend 3.1 (% weekly change)	Trend 3.4 (% weekly change)	Ind3.2 (Rt punctual)	Ind3.5	Ind3.6	Ind3.8 *	Ind3.9 *
Abruzzo	21788	71.9	64.4	1.26 (CI: 1.17-1.33)	549	8826	3%	13%
Basilicata	6928	49.7	50.7	1.83 (CI: 1.47-2.2)	5	175	3%	17%
Calabria	20848	58.0	1.6 #	1.23 (CI: 1.11-1.36)	68	1277	4%	24%
Campania	98775	82.3	81.4	1.41 (CI: 1.39-1.44)	5394	20977	6%	15%
Emilia Romagna	67300	42.6	42.0	1.34 (CI: 1.31-1.37)	0	38490	3%	13%
FVG	17688	29.5	15.1 #	1.46 (CI: 1.43-1.5)	1124	7789	4%	13%
Lazio	107350	41.9	34.4	1.2 (CI: 1.15-1.26)	1732	462	7%	11%
Liguria	19508	47.8	47.7	1.56 (CI: 1.53-1.6)	2045	1863	3%	16%
Lombardy	127362	40.4	37.3	1.45 (CI: 1.44-1.47)	1956	57110	1%	11%
Marche	21499	67.8	58.5	1.68 (CI: 1.59-1.78)	498	5219	3%	14%
Molise	4097	37.8	39.0	1.4 (CI: 0.76-2.08)	13	0	3%	7%
Piedmont	42182	63.4	55.6	1.27 (CI: 1.16-1.4)	3005	14111	1%	7%
PA Bolzano / Bozen	6430	36.3	36.4	1.17 (CI: 1.11-1.22)	500	1722	3%	12%
PA Trento	5706	48.6	47.7	1.51 (CI: 1.43-1.58)	508	1452	1%	12%
Puglia	62432	76.3	77.6	1.5 (CI: 1.46-1.54)	38	38066	4%	14%
Sardinia	28458	32.8	29.3	1.55 (CI: 1.48-1.61)	1063	7904	5%	9%
Sicily	78613	39.3	5.2 #	1.17 (CI: 1.15-1.2)	3608	33374	5%	25%
Tuscany	49650	45.9	19.1	1.34 (CI: 1.31-1.35)	690	30119	4%	12%
Umbria	15187	60.8	57.0	1.45 (CI: 1.33-1.58)	5	7223	8%	32%
Vd'Aosta / Vd'Aoste	931	34.5	34.7	0.96 (CI: 0.79-1.16)	45	462	0%	20%
Veneto	86979	43.8	40.3	1.44 (CI: 1.43-1.46)	3306	22612	3%	9%

* data updated on 05/07/2022 (denominator of active beds that can be activated within 24 hours).

and # Regions / PPAA in coordination with the Ministry of Health have decided to report to what is contextually reported by the same Region / PA to the coordinated aggregate flow

In particular, the following misalignments are noted in the flow of aggregate data: Calabria 38.7%; Sicily 29.1% FVG 15.9%.

Dimension 3 - Resilience of health services in the event of a resurgence of the COVID-19 epidemic

Process indicators on the ability to diagnose, investigate and manage contacts

Sector		Indicator %	Theshold	Alert	Data source
Ability to promptly test all cases **Suspicious**	**N** 2.1	of positive swabs excluding as far as possible all screening activities and the "re-testing" of the same subjects, overall and by macro-setting (territorial, PS / Hospital, other) per month * * The calculation of this indicator, without changing its definition, will be revalued in collaboration with the Regions / PA in light of the changes provided for in the international case definition for aspects related to the diagnostic assessment of COVID-19 cases	Decreasing trend in hospital / PS settings Positive Predictive Value (PPV) of stable test or in decrease	Increasing trend in hospital settings / PS. VPP in increase to	Periodic evaluation weekly
	2.2	Time between symptom onset date and diagnosis date	Weekly median ÿ 5 days	Median weekly> 5 days	ISS - System of Integrated surveillance COVID-19
	2.3 (optional)	Time between symptom onset date and isolation date	Weekly median ÿ 3 days	Weekly median> 3 days	ISS - System of Integrated surveillance COVID-19 with integration of this variable
Possibility to guarantee adequate resources for contact-tracing, isolation and quarantine	2.4	Number, type of professional figures and time / person dedicated to contact-tracing in each territorial service	Number and type of professional figures dedicated to each activity at the local level progressively aligned with the standards recommended at European level	Number and type of dedicated professionals at local level reported how not adjusted according to the recommended standards at the level European	Periodic report (monthly)
	2.5	Number, type of professional figures and time / person dedicated to each service territorial activities of sampling / sending to reference laboratories and monitoring of close contacts and cases placed respectively in quarantine and isolation			
	2.6	Number of confirmed cases of infection in the region for which regular epidemiological investigation has been carried out with search for close contacts / total of new confirmed cases of infection	Improving trend with final target 100%		

Region.PA	Ind2.1 * (previous one)	Ind2.1 # (reference week)	Ind2.2 (median days between onset of symptoms and diagnosis **)	Ind2.3 (median)	Ind2.4	Ind2.5	Total resources human	Ind2.6	Resilience of local health services
Abruzzo	29%	**35%**	0	Not calculable	0.7 per 10000	0.8 per 10000	1.4 for 10000	**70.8%**	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold
Basilicata	33%	**37%**	1	0	1.5 per 10000	4.6 per 10000	6.1 per 10000	92.4%	**1 resilience alert.** Ind 2.1 on the rise
Calabria	25%	**31%**	0	0	0.7 per 10000	1.3 per 10000	2 per 10000	91.4%	**1 resilience alert.** Ind 2.1 on the rise
Campania	31%	**37%**	1	1	0.7 per 10000	1.4 for 10000	2 per 10000	88.9%	**1 resilience alert.** Ind 2.1 on the rise
Emilia Romagna	26%	**33%**	2	Not calculable	0.5 per 10000	0.8 per 10000	1.3 per 10000	**24.1%**	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold
FVG	47%	**49%**	1	1	0.6 per 10000	0.7 per 10000	1.3 per 10000	95.4%	**1 resilience alert.** Ind 2.1 on the rise
Lazio	25%	**33%**	1	1	0.9 for 10000	1 per 10000	1.9 for 10000	**67.1%**	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold
Liguria	22%	**25%**	0	0	0.3 per 10000	0.6 per 10000	**0.9 for 10000**	88.6%	**2 resilience alerts.** Ind 2.1 on the rise and total human resources below the threshold
Lombardy	4%	**5%**	1	Not calculable	1 per 10000	1 per 10000	2 per 10000	98.3%	**1 resilience alert.** Ind 2.1 on the rise
Marche	24%	**34%**	0	0	0.2 per 10000	0.3 per 10000	**0.6 per 10000**	100%	**2 resilience alerts.** Ind 2.1 on the rise and total human resources below the threshold
Molise	28%	**31%**	-0.5	-0.5	1.1 per 10000	2.7 for 10000	3.8 per 10000	100%	**1 resilience alert.** Ind 2.1 on the rise

Region.PA	Ind2.1 * (previous one)	Ind2.1 # (reference week)	Ind2.2 (median days between onset of symptoms and diagnosis **)	Ind2.3 (median)	Ind2.4	Ind2.5	Total resources human	Ind2.6	Resilience of local health services
Piedmont	32%	**40%**	2	Not calculable	0.8 per 10000	1.1 per 10000	1.9 for 10000	99.1%	**1 resilience alert.** Ind 2.1 on the rise
PA Bolzano / Bozen	7%	7%	0	0	1 per 10000	1 per 10000	1.9 for 10000	94.1%	0 resilience alerts
PA Trento	42%	**47%**	1	1	1.1 per 10000	1.6 for 10000	2.7 for 10000	100%	**1 resilience alert.** Ind 2.1 on the rise
Puglia	51%	**59%**	0	0	0.3 per 10000	0.5 per 10000	**0.7 per 10000**	**47.3%**	**3 resilience alerts.** Ind 2.1 increasing, total human resources below the threshold and ind 2.6 below the threshold
Sardinia	47%	**51%**	0	Not calculable	0.1 per 10000	1.1 per 10000	1.3 per 10000	99.6%	**1 resilience alert.** Ind 2.1 on the rise
Sicily	21%	**25%**	1	Not calculable	1 per 10000	2.2 for 10000	3.3 per 10000	92.7%	**1 resilience alert.** Ind 2.1 on the rise
Tuscany	100%	90%	0	1	0.2 per 10000	0.4 per 10000	**0.5 per 10000**	92.8%	**2 resilience alerts.** Ind 2.1 on the rise and total human resources below the threshold
Umbria	41%	**49%**	2	2	0.4 per 10000	0 per 10000	**0.5 per 10000**	91.1%	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold
Vd'Aosta / Vd'Aoste	26%	**29%**	2	2	0.5 per 10000	1.1 per 10000	1.6 for 10000	94.6%	**1 resilience alert.** Ind 2.1 on the rise
Veneto	24%	**29%**	1	1	1 per 10000	1.8 per 10000	2.9 per 10000	**77.3%**	**2 resilience alerts.** Ind 2.1 on the rise and ind 2.6 below the threshold

* the different "testing" offer policies ** in numerous the use of alternatives to the molecular in test test e Regions / PPAA not make this indicator comparable to each other. cases that are diagnosed before the onset of symptoms (asymptomatic) it is possible to find very short median times in extreme cases remember or, contact persons of the Please respective Regions / PA before finalizing the weekly reports.

#As agreed the with Regions / PPAA (specified Minutes Cabin of del Directed 16/7/2021), considers the trend of the positive indicator 2.1 rounded with his to the nearest whole%.