#### **Data Overview:**

- This dataset is taken from the **Data on SARS-CoV-2 variants in the EU/EEA** (https://www.ecdc.europa.eu/en/publications-data/data-virus-variants-covid-19-eueea).
- > It contains the data from **December-2019** to **July-2021**.
- > The dataset has **22508** rows and **7** columns.

The column labels are briefed here:

- 1. **Country**: The country column has countries like Austria, Belgium, France, Italy, Germany, Ireland, etc......
- 2. **Indicator**: The indicator column has 4 categories, they are:
  - Daily hospital occupancy
  - Daily ICU occupancy
  - Weekly new ICU admissions per 100k
  - Weekly new hospital admissions per 100k
- 3. Value: The Value column Indicates Number of new patients or new admissions per 100 000 population.
- 4. Date: Date for daily occupancy indicator.
- 5. **Source:** The source column here indicates how the information has been extracted from different sources; the different sources are:
  - Country Website
  - Country GitHub
  - TESSy COVID-19, national daily data
  - Country API

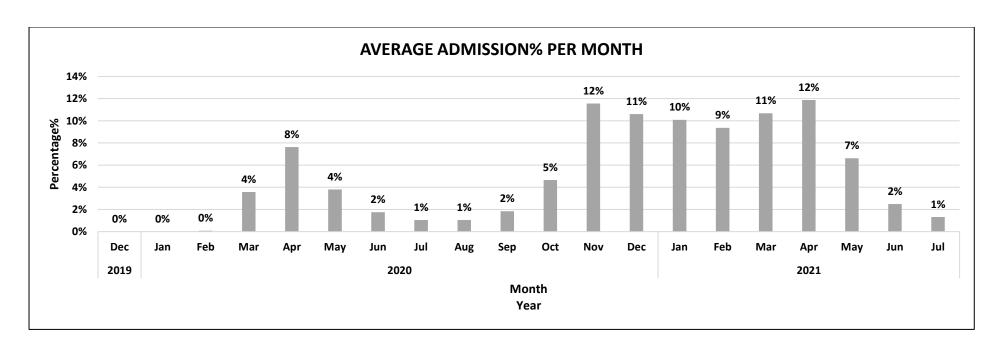
- TESSy COVID-19
- ECDC database compiled from public online sources
- Surveillance
- TESSy COVID-19, national weekly data
- Other Website
- 6. **URL**: The URL column indicates the URL for retrieved data.

### **MONTHLY REPORT**

YEAR	MONTH	TOTAL SUM OF ADMISSIONS	TOTAL COUNT OF ADMISSIONS	AVERAGE ADMISSIONS PER MONTH	AVERAGE ADMISSION % PER MONTH
2019	Dec	0	2	0	0%
	Jan	37	37	1	0%
	Feb	2303	108	21	0%
	Mar	872726	858	1017	4%
	Apr	2671790	1229	2174	8%
	May	1509828	1396	1082	4%
2020	Jun	652623	1309	499	2%
2020	Jul	396564	1337	297	1%
	Aug	409697	1382	296	1%
	Sep	707612	1354	523	2%
	Oct	1873416	1412	1327	5%
	Nov	4668273	1418	3292	12%
	Dec	4355008	1443	3018	11%
	Jan	4202476	1465	2869	10%
	Feb	3478270	1304	2667	9%
	Mar	4389321	1445	3038	11%
2021	Apr	4749120	1405	3380	12%
	May	2751420	1461	1883	7%
	Jun	972801	1371	710	2%
	Jul	288658	771	374	1%

**Note:** Here the total sum of Admissions in **DEC-2019** are given as **0** because of the least occupancy had happened during that time. This table below gives the explanation of the data.

COUNTRY	INDICATOR	DATE	VALUE	SOURCE
Poland	Weekly new hospital admissions per 100k	15-12-2019	0.002634481	TESSy COVID-19, national daily data
Portugal	Weekly new hospital admissions per 100k	29-12-2019	0.019425191	TESSy COVID-19, national daily data

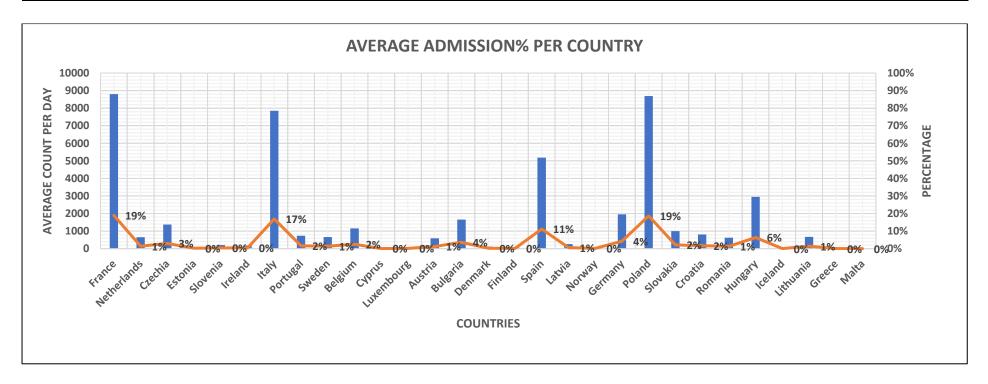


- ❖ Here the bar graph clearly indicates the average admission % per month within respected years.
- ❖ It clearly shows that 0% of admission was there in the initial months because it was the beginning of the COVID-2 and most of the people are unaware of this spreading.
- The Highest % was recorded in May as 8% followed by 4% in March and April as this was the First phase of the lockdown and infection rate has spread globally.
- There is a steep decrease in the months of Jun, Jul, Aug & Sep with 1% & 2% being recorded as of the case of Lockdown, the whole world was shut which resulted in spreading of Infection.
- Again, there is an increase in the months of **Nov-2020**, **Apr-2021** with **12%** followed by **Dec-2020**, **Jan-2021**, & **Feb-2021** with **11%**, **10** % & **9%** as it was the second wave of the COVID-19.
- ❖ With vaccine being rolled out in the recent months the admission % has become down in Jun & Jul with 2% & 1% respectively.

### **COUNTRY WISE REPORT**

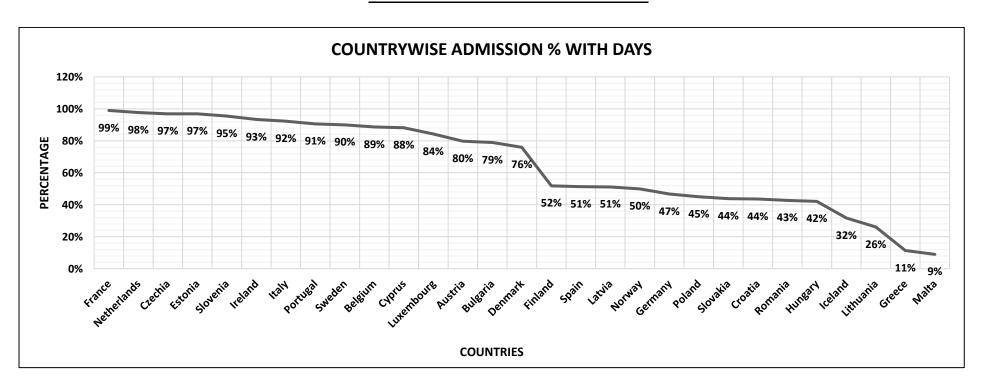
COUNTRY	SUM OF ADMISSIONS	COUNT OF ADMISSIONS PER DAY	ADMISSION % WITH DAYS	ADMISSION % WITH WHOLE DATA	AVERAGE ADMISSIONS PER COUNTRY
France	10349300	1176	99%	5%	8800
Netherlands	759708	1160	98%	5%	655
Czechia	1581581	1151	97%	5%	1374
Estonia	104362	1151	97%	5%	91
Slovenia	237760	1134	95%	5%	210
Ireland	195009	1109	93%	5%	176
Italy	8605169	1096	92%	5%	7851
Portugal	789649	1076	91%	5%	734
Sweden	711470	1069	90%	5%	666
Belgium	1213197	1053	89%	5%	1152
Cyprus	45546	1048	88%	5%	43
Luxembourg	48812	1001	84%	4%	49
Austria	558766	948	80%	4%	589
Bulgaria	1555031	938	79%	4%	1658
Denmark	103149	902	76%	4%	114
Finland	45812	616	52%	3%	74
Spain	3163060	610	51%	3%	5185
Latvia	157744	608	51%	3%	259
Norway	45389	593	50%	3%	77
Germany	1085175	555	47%	2%	1955
Poland	4647546	535	45%	2%	8687

Slovakia	522758	521	44%	2%	1003
Croatia	416575	518	44%	2%	804
Romania	318016	508	43%	2%	626
Hungary	1477255	501	42%	2%	2949
Iceland	4628	377	32%	2%	12
Lithuania	208444	310	26%	1%	672
Greece	686	136	11%	1%	5
Malta	347	107	9%	0%	3



- Here the Line chart describes the Average Percentage of Admissions occurred along with the respected countries.
- ❖ The total average number of Admissions occurred in all the countries are 46,473.
- From the graph it is very clear that France & Poland has got highest Admission rates with 19%, followed by Italy with 17% & Spain with 11%.
- ❖ Whereas the least % of Admissions were happened in countries like Greece, Iceland, Finland, Malta & Norway with 0% followed by Austria, Netherlands, Sweden, & Romania with 1%.

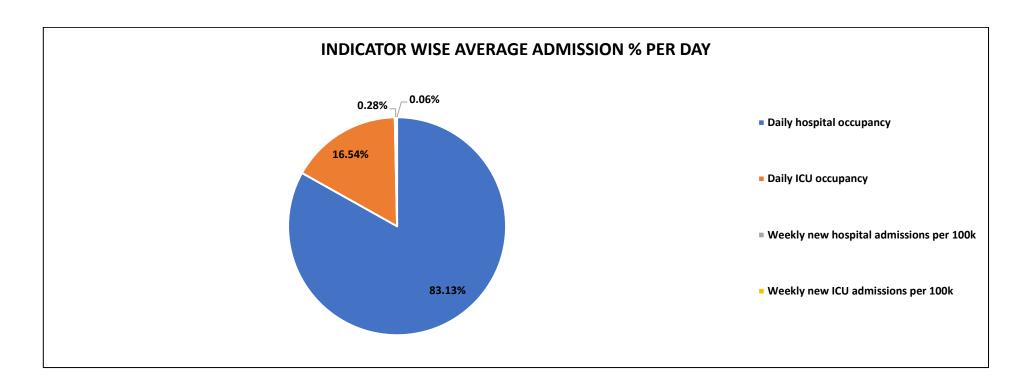
#### **COUNTRY WISE REPORT WITH DAYS**



- As we have data from **December-2019 to July-2021** with Indicators having 4 variables, each time the country repeats on and averagely 2 times. So, the total number of days are **1188**.
- ❖ The above line chart depicts the countrywide admission percentage with days.
- ❖ It is clear from the graph that the France has got highest admission rates with 99%, followed by Netherlands, Czechia, Estonia & Slovenia with 98%, 97% respectively.
- ❖ Whereas the least admission percentage rates are occurred by Malta with 9%, Greece with 11% & Lithuania with 26%.

#### **INDICATOR WISE REPORTS**

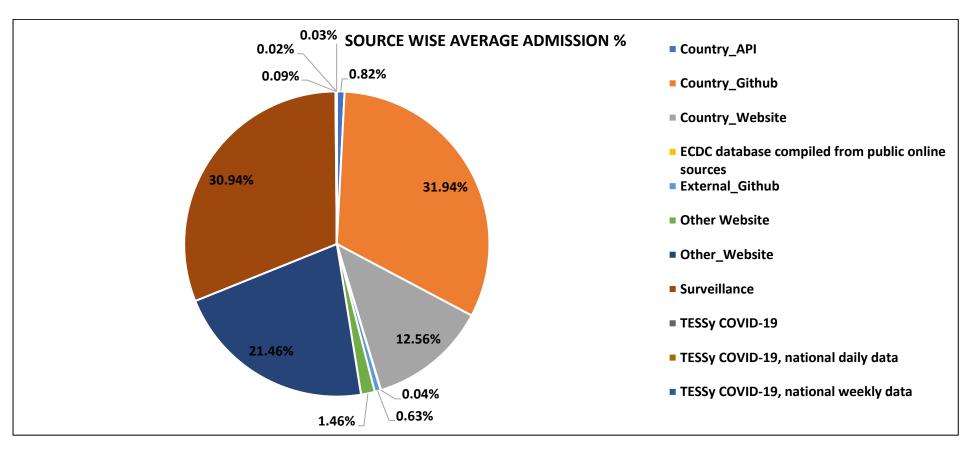
INDICATOR	SUM OF ADMISSIONS	COUNT OF ADMISSIONS	AVERAGE ADMISSION PER DAY
Daily hospital occupancy	33661423	11236	2996
Daily ICU occupancy	5274029	8844	596
Weekly new hospital admissions per 100k	14876	1533	10
Weekly new ICU admissions per 100k	1616	894	2



- ❖ The Pie chart depicts the information of average admissions % of the indicators.
- ❖ It shows that The **Daily Hospital Occupancy** has the Highest with **83%**, followed by the **Daily ICU Occupancy** with **17%**.
- The least being done by both the Weekly new hospital admissions per 100k & Weekly new ICU admissions per 100k because most of the countries are not providing the admissions for these two.

### **SOURCE REPORT**

SOURCE	SUM OF ADMISSIONS	COUNT OF ADMISSIONS	AVERAGE ADMISSION
Country_API	168289	1497	112
Country_Github	8841229	2014	4390
Country_Website	24994076	14476	1727
ECDC database compiled from public online sources	4555	762	6
External_Github	69097	794	87
Other Website	400	2	200
Other_Website	1477255	501	2949
Surveillance	3385106	796	4253
TESSy COVID-19	8156	662	12
TESSy COVID-19, national daily data	1457	502	3
TESSy COVID-19, national weekly data	2325	501	5



- ❖ The Pie chart Describes the Average Admission % from the source.
- It shows that 32% of Admission Sources are from Country GitHub, followed by 31% by Surveillance.
- ❖ Whereas the least admission % sources are occurred by **TESSy COVID-19**, **TESSy COVID-19** national daily data & **TESSy COVID-19**, national weekly data being 0%.

#### **COUNTRY WISE INDICATORS**

COUNTRY	INDICATOR	SUM OF ADMISSIONS	COUNT OF ADMISSIONS	AVERAGE OF ADMISSION
Austria	Daily hospital occupancy	449083	474	947
	Daily ICU occupancy	109683	474	231
Belgium	Daily hospital occupancy	986342	491	2009
	Daily ICU occupancy	226198	491	461
	Weekly new hospital admissions per 100k	657	71	9
Bulgaria	Daily hospital occupancy	1434353	469	3058
	Daily ICU occupancy	120678	469	257
Croatia	Daily hospital occupancy	415552	453	917
	Weekly new hospital admissions per 100k	1023	65	16
Cyprus	Daily hospital occupancy	39186	497	79
	Daily ICU occupancy	6303	497	13
	Weekly new ICU admissions per 100k	57	54	1
Czechia	Daily hospital occupancy	1337369	505	2648
	Daily ICU occupancy	240719	505	477
	Weekly new hospital admissions per 100k	2939	71	41
	Weekly new ICU admissions per 100k	554	70	8
Denmark	Daily hospital occupancy	87943	415	212

	Daily ICU occupancy	14953	414	36
	Weekly new hospital admissions per 100k	253	73	3
Estonia	Daily hospital occupancy	93840	512	183
	Daily ICU occupancy	9763	509	19
	Weekly new hospital admissions per 100k	686	73	9
	Weekly new ICU admissions per 100k	73	57	1
Finland	Daily hospital occupancy	38010	308	123
	Daily ICU occupancy	7802	308	25
France	Daily hospital occupancy	9010062	518	17394
	Daily ICU occupancy	1338426	516	2594
	Weekly new hospital admissions per 100k	684	71	10
	Weekly new ICU admissions per 100k	128	71	2
Germany	Daily ICU occupancy	1084936	474	2289
	Weekly new hospital admissions per 100k	239	81	3
Greece	Weekly new hospital admissions per 100k	613	55	11
	Weekly new ICU admissions per 100k	73	81	1
Hungary	Daily hospital occupancy	1477255	501	2949
Iceland	Daily hospital occupancy	4567	344	13
	Weekly new hospital admissions per 100k	61	33	2

Ireland	Daily hospital occupancy	167922	496	339
	Daily ICU occupancy	26879	478	56
	Weekly new hospital admissions per 100k	185	68	3
	Weekly new ICU admissions per 100k	22	67	0
Italy	Daily hospital occupancy	7788707	511	15242
	Daily ICU occupancy	815772	511	1596
	Weekly new hospital admissions per 100k	690	74	9
Latvia	Daily hospital occupancy	156630	475	330
	Weekly new hospital admissions per 100k	908	81	11
	Weekly new ICU admissions per 100k	206	52	4
Lithuania	Daily hospital occupancy	207848	209	994
	Weekly new hospital admissions per 100k	509	61	8
	Weekly new ICU admissions per 100k	88	40	2
Luxembourg	Daily hospital occupancy	40819	490	83
	Daily ICU occupancy	7993	511	16
Malta	Weekly new hospital admissions per 100k	313	72	4
	Weekly new ICU admissions per 100k	34	35	1
Netherlands	Daily hospital occupancy	541178	506	1070
	Daily ICU occupancy	218080	508	429

Weekly new hospital admissions per 100k	376	73	5
Weekly new ICU admissions per 100k	73	73	1
Daily hospital occupancy	45285	445	102
Weekly new hospital admissions per 100k	87	74	1
Weekly new ICU admissions per 100k	17	74	0
Daily hospital occupancy	4647452	453	10259
Weekly new hospital admissions per 100k	94	82	1
Daily hospital occupancy	680114	497	1368
Daily ICU occupancy	109353	497	220
Weekly new hospital admissions per 100k	182	82	2
Daily ICU occupancy	315446	459	687
Weekly new hospital admissions per 100k	2570	49	52
Daily hospital occupancy	522613	445	1174
Weekly new hospital admissions per 100k	145	76	2
Daily hospital occupancy	199667	496	403
Daily ICU occupancy	37083	496	75
Weekly new hospital admissions per 100k	867	71	12
Weekly new ICU admissions per 100k	144	71	2
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Spain	Daily hospital occupancy	2681560	228	11761
	Daily ICU occupancy	480631	228	2108
	Weekly new hospital admissions per 100k	794	77	10
	Weekly new ICU admissions per 100k	75	77	1
Sweden	Daily hospital occupancy	608066	498	1221
	Daily ICU occupancy	103331	499	207
	Weekly new ICU admissions per 100k	73	72	1

- ❖ Here the green color indicates that the countries are providing 4 types of **Indicators**.
- ❖ The red color indicates that the country is providing only one type of **Indicator**.

### **COUNTRY WISE SOURCE**

COUNTRY	SOURCE	SUM OF ADMISSION	COUNT OF ADMISSION	AVERAGE OF ADMISSION
Austria	Country_Website	558766	948	589
Belgium	Country_Website	1212540	982	1235
	ECDC database compiled from public online sources	657	71	9
Bulgaria	Country_Website	1536649	816	1883
	External_Github	18382	122	151
Croatia	Country_Website	415552	453	917
	ECDC database compiled from public online sources	1023	65	16
Cyprus	Country_Website	45489	994	46
	TESSy COVID-19	57	54	1
Czechia	Country_Website	1578088	1010	1562
	TESSy COVID-19	3493	141	25
Denmark	Country_Website	102896	829	124
	ECDC database compiled from public online sources	253	73	3
Estonia	Country_API	103284	968	107
	ECDC database compiled from public online sources	686	73	9
	Surveillance	319	53	6
	TESSy COVID-19	73	57	1
Finland	External_Github	45805	614	75
	Surveillance	7	2	4

France	Country_Website	10343578	976	10598
	External_Github	4910	58	85
	TESSy COVID-19	812	142	6
Greece	Country_Website	1084936	474	2289
	TESSy COVID-19, national daily data	239	81	3
	ECDC database compiled from public online sources	613	55	11
	TESSy COVID-19, national weekly data	73	81	1
Hungary	Other_Website	1477255	501	2949
Iceland	Country_Website	4548	303	15
	Surveillance	19	41	0
	TESSy COVID-19	61	33	2
Ireland	Country_Website	194801	974	200
	ECDC database compiled from public online sources	208	135	2
Italy	Country_Github	8604479	1022	8419
	TESSy COVID-19, national daily data	690	74	9
Latvia	Country_Website	154069	335	460
	Surveillance	2561	140	18
	TESSy COVID-19	206	52	4
	TESSy COVID-19, national weekly data	908	81	11
Lithuania	Country_Website	207848	209	994
	TESSy COVID-19	509	61	8
	TESSy COVID-19, national weekly data	88	40	2
Luxembourg	Country_Website	48812	1001	49
Malta	TESSy COVID-19, national daily data	34	35	1
	TESSy COVID-19, national weekly data	313	72	4
Netherlands	Country_Website	758858	1012	750

	Other Website	400	2	200
	TESSy COVID-19	376	73	5
	TESSy COVID-19, national weekly data	73	73	1
Norway	Country_API	45225	442	102
	ECDC database compiled from public online sources	104	148	1
	Surveillance	60	3	20
Poland	Country_Website	4427503	352	12578
	Surveillance	219949	101	2178
	TESSy COVID-19, national daily data	94	82	1
Portugal	Country_Website	789467	994	794
	TESSy COVID-19, national daily data	182	82	2
Romania	Country_Website	315446	459	687
	TESSy COVID-19	2570	49	52
Slovakia	Country_Website	522613	445	1174
	TESSy COVID-19, national daily data	145	76	2
Slovenia	Country_Github	236750	992	239
	ECDC database compiled from public online sources	1010	142	7
Spain	Surveillance	3162191	456	6935
	TESSy COVID-19, national weekly data	869	154	6
Sweden	Country_API	19780	87	227
	Country_Website	691617	910	760
	TESSy COVID-19, national daily data	73	72	1

<sup>❖</sup> Here the green color indicates that the countries are providing more than 3 types of **Sources**.

The red color indicates that the countries providing only one type of Source.