How fast COVID-19 GROWS IN INDONESIA

Introduction

Coronavirus disease 2019 COVID-19 pandemic is an ongoing problem in more than 200 countries in the world. COVID-19 has been identified as the cause of an outbreak of infectious respiratory disease in Wuhan, People's Republic of China.

Problem

By November 2020, 12 there have 47,635 active case confirmed in Indonesia and 14,933 deaths related to this disease, as this disease was new in Indonesia doctors and government did not have any preparation for it, it took lots of victims, in this report we discover how fast COVID-19 is growing in Indonesia and is the reason behind this disease.

Goal

As we all know every country is trying to find a way for getting rid of this disease, but until now there is now progress based on this disease, our goal is to check how fast COVID-19 is growing in Indonesia. This report would be based on the dataset which we received.

COVID-19 in Indonesia

Jakarta, Indonesia economy has drop 5.2 percent based on **JAKARTA GLOBE** in the second quarter of 2020, this was the first time Indonesia experienced a contraction on its gross domestic product since the aftermath of the Asian Financial Crisis in 1999. Covid-19 may increase in a very huge number if

government don’t handle this situation, right there is scare Information on the location of infected patients, the number of tests carried out and areas to avoid. There is still a lack of awareness and facility among public social distancing measure. There is also lack of sanctions for those who test positive.

As we all know, president Joko Widodo the former president of Indonesia has announced emergency in the entire Indonesia for over 6 months, but still we are witnessing this disease is rapidly increasing in all around the global and Indonesia. And government launch campaign on social media to make aware the those are not yet aware of this disease.

The growth of COVID-19 in Indonesia

Research showed that by social distancing, limiting social gathering, and isolation for while the disease should slow down. Without these restrictions the growth in the number of COVID-19 patients will increase rapidly, we could say that for very similar period the number of patients multiplies by the number of patients, for instance if two person infected this two would multiple by two which becomes four, and this number would increase each as the people infected.

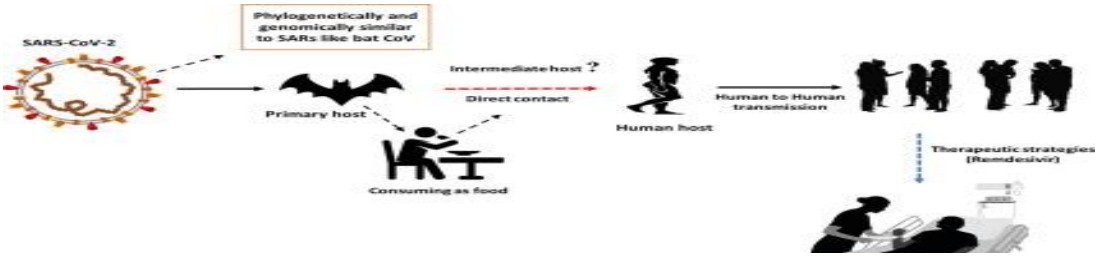


Figure 1: COVID-19 Transmit

The four stage of outbreak

In general, an infectious diseases outbreak has four stages, the delay stage, the exponential stage, the static stage, and the decline stage.

1. The delay phase

The delay stage is the start stage when there are only some people coming for medical and complaints, the period for COVID-19 is 1-24 as the scientist claims, this period provides opportunity for the virus to spread from one person to another person. Some people who infected do not show any symptoms, without testing they may not realize they are carrying the virus.

2. The exponential stage

A protracted delay in discovering infections is usually followed by an explosion of cases. In this phase, health authorities and most people only just begun to realize the danger. They start to panic and immediately act to control the situation. Unfortunately, health services are already being overwhelmed. Indonesia is an example of growing COVID-19, the health care of Indonesia confirmed the very first case on 2, March 2020 and then it starts infected others.

3. The static stage

In this stage, cases have increased to a point from which they start to decrease. And the addition of new cases is no longer as fast as in the exponential phase. New cases still appear, but the number is relatively stable.

4. The decline stage

The last phase is when the infection rate shows a negative trend, and the number of new cases is on a downward trend period of decline. The length of the period of each phase is difficult to predict. But certainly, the exponential phase will happen soon after the delay phase.

Indonesia's men more susceptible to COVID-19 than women: Health Ministry

No	Kelompok Umur	Laki-Laki	Perempuan	Total
(1)	(2)	(3)	(4)	(5)
1	0-4	12.166.127	11.682.156	23.848.283
2	5-9	12.144.930	11.589.013	23.733.943
3	10-14	11.639.907	11.073.230	22.713.137
4	15-19	11.365.555	10.847.326	22.212.881
5	20-24	11.007.888	10.695.675	21.703.563
6	25-29	10.571.609	10.450.584	21.022.193
7	30-34	10.239.637	10.269.484	20.509.121
8	35-39	9.979.462	10.093.038	20.072.500
9	40-44	9.475.304	9.408.942	18.884.246
10	45-49	8.542.556	8.485.479	17.028.035
11	50-54	7.274.122	7.327.347	14.601.469
12	55-59	5.932.338	5.970.949	11.903.287
13	60-64	4.472.064	4.398.429	8.870.493
14	65-69	2.950.697	3.084.716	6.035.413
15	70-74	1.873.805	2.208.376	4.082.181
16	75+	1.943.183	2.726.944	4.670.127
	Jumlah	131.579.184	130.311.688	261.890.872

Table 1: Estimasi jumlah penduduk indonesia menurut kelompok umur dan jenis kelamin tahun 2017

The above table shows the men and women population in 2017, as we see in the table, men are more than women, and recent official data has shown that the COVID-19 outbreak has taken a greater toll on Indonesian men than women, with twice as many men testing positive for the disease. According to data from the Health Ministry's disease control and prevention directorate-general on Monday, 394 male COVID-19 patients have died as of April 26, compared to 176 women.

"In hindsight, men make up about 59 percent of the nationwide COVID-19 cases," National COVID-19 task force chief Doni Monardo said on Monday. In addition, 518 patients who have recovered are men and 366 are women.

Figure 2: Men and women statistic

This image shows the statistic of men and women in Indonesia, this is based on the dataset above, the victim of men is more than as health care mentioned on April the men victim was 394 and women were 176. And also health care authorities have recorded 9,511 confirmed cases across the country as of Tuesday, with 773 deaths and 1,254 recoveries.

Data Warehouse (DW)

The COVID-19 (Corona Virus Disease 2019) outbreak is caused by a novel coronavirus named Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2), and has been classified as a pandemic disease by the World Health Organization (WHO) on 12 March 2020. SARS-CoV-2 has spread over all the world in less than six months, causing more than 10 million tested-positive cases and more than half a million confirmed deaths. A global response has been quickly developed in the form of collective data collection and analysis efforts, which are generally aimed to understand SARS-CoV-2 biology and delivering therapeutic solutions in clinical/pharmacological protocols.

Thus, the management of the COVID-19 pandemic presents several unprecedented challenges that regard a plurality of fields and that may benefit from computing infrastructures and software pipelines, with the main aim to integrate the increasing COVID-19 publicly available data to allow their full exploitation and world-wide collaboration. COVID-19 poses many challenges and numerous research and application fields that regard, to quote a few, “molecular basis of the disease, virus mutations, vaccines and drugs, diagnosis and therapy”. Each one of above may have their benefits, but our main focus is on issue of data and integration of publicly available COVID-19 data, that may simplify data visualization and aggregation for instance in decision making and focusing on specific problem.

The current data is provided by *Kesehatan Indonesia 2017* focusing on the Indonesian pretension civil department, data has been approved by kesehatan Indonesia and national pretension civil, it contains a set of measures detected daily on the territory, such as the number of daily infected subjects quarantined at home,

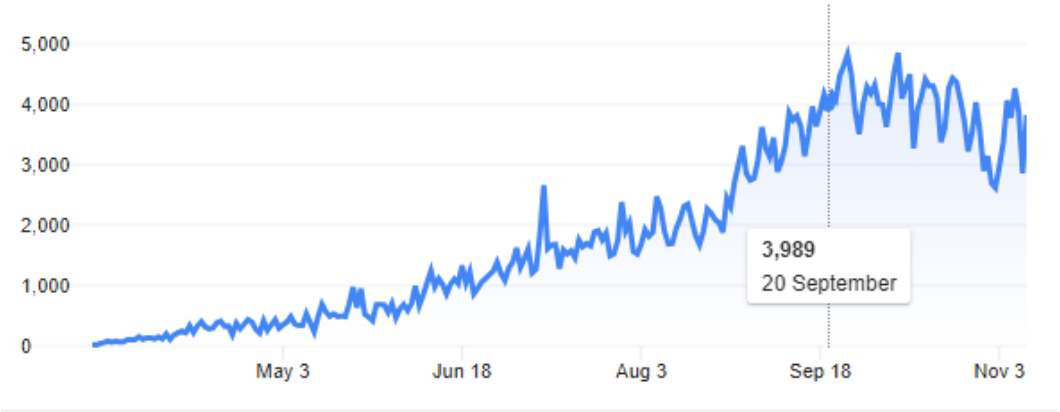
hospitalized patience. Such measures are geo-localized administrative entities, such as provinces, regions and the overall nation.

Indonesia Covid-19, Pollution and Climate Data

The number of COVID-19 cases continues to increase rapidly in Indonesia, while some Southeast Asian neighbors are beginning to live normally and moving closer to winning the battle against the pandemic. Almost every day, Indonesia continues to peak off the chart in the region, which comes as no surprise at all. Taking a step back, when the pandemic began to take the world by storm, come countries were adept at tackling the pandemic, while Indonesia responded slowly and even looked reluctant to announce the current state. As a consequence, COVID-19 transmission escalated, while lax health protocols saw many adopt a terserah (whatever) attitude, as they felt frustrated by the government's inconsistent policies.

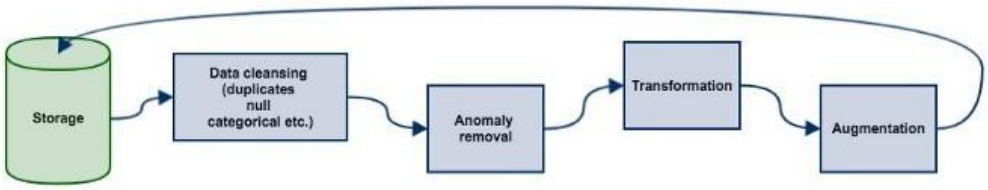
1. Epidemiological COVID-19 data, Indonesia
2. Air pollution data,
3. Weather data

The current Segment provides summary of each of the aforementioned categories of data available for Indonesia at different administrative division levels.



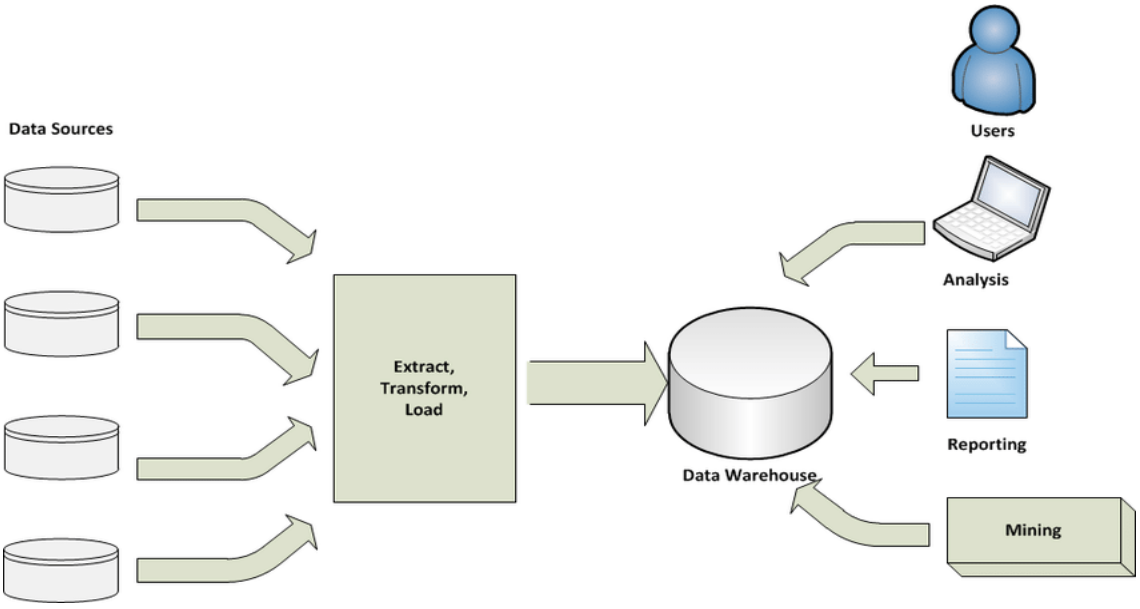
The above image shows the daily update affected case in Indonesia COVID-19, this data is made publicly available by Indonesian department of civil pretension.

Numerous studies showed that relations among human coronavirus and environmental humidity and temperature measures. In particular, recently proposed works aiming at investigating the effects of different meteorological conditions on the spread of COVID-19, may suggest an existing relationship between average temperature and COVID-19 incidence rates. However, research in this field is still limited and, therefore, efforts are needed to provide reliable data sources. Concerning this, weather-related data has been automatically collected for every province of Indonesia, from 2017, up to the date of writing, through automatic web scraping techniques. The information is stored in a CSV format file that is further ingested in the Data Warehouse.



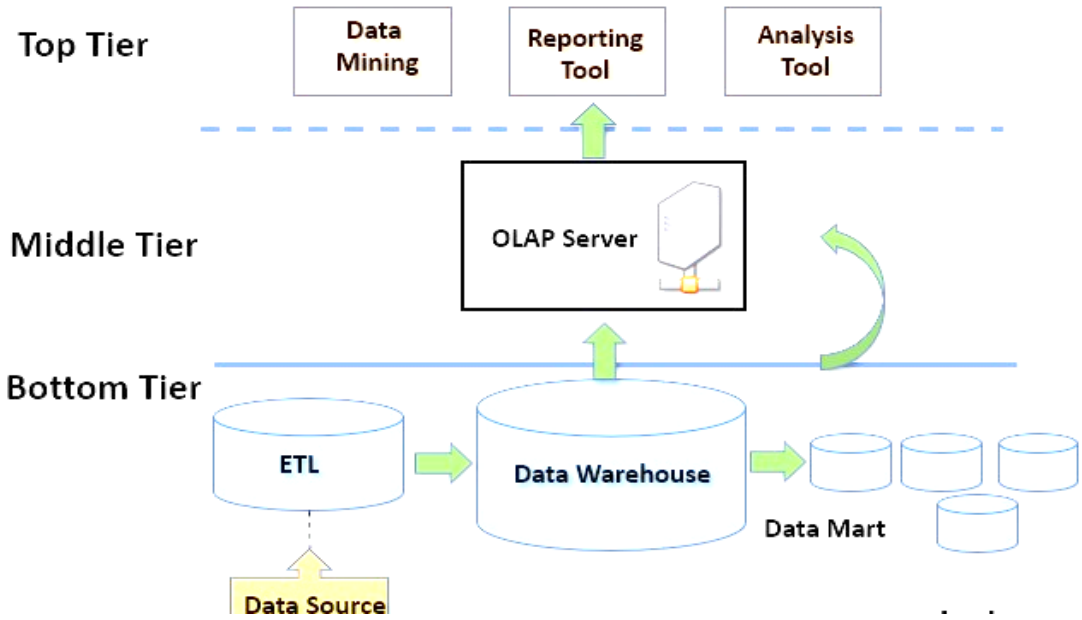
Data Warehouse Architecture

The image shows a general view of data warehouse architecture which is accepted across all applications of data warehouse in real time.



Every application that is working with warehouse includes extraction of the informatics data from the key system with using minor resources as it can, changing data by applying a set of rules from source to the target and retrieving the specific data into DW called ETL process. Design domain of DW architecture vastly grouped into enterprise DW design and data mart related design, the enterprise DW is the blend of those adoptive data mart. A data mart evaluates as a smaller version linked to a DW but it intends on specific subject.

Three-Tier Data Warehouse Architecture



Bottom Tier

The bottom tier consists of the data warehouse server, this is always with RDBMS, it includes several specialized data marts and a metadata repository. In another hand it consists of data repository, data repository is the storage space for the data extraction from various data source, which undergoes a series of activities as a part the ETL process. ETL stands for extract, transform and load, as a preliminary process before the data is loaded into the repository all the data relevant and required are identified from several sources of the system.

The last and final stage of ELT is to load the on the repository, here is a few ELT tools which normally used:

1. Informatics
2. Microsoft SSIS
3. Apache Kafka

Middle Tier

Data warehouse can have several OLAP server, and there can be more than one type of OLAP server modal as well, and that depends on the volume of the data to be processed and the type of data held in the bottom tier. There are three types of OLAP server namely:

- ✓ ROLAP
- ✓ MOALP
- ✓ HOLAP

Each of them can explain broadly, as we don't really need them now I would skip them, the middle tier act as mediator component between the top tier and the data repository, that is the top tier and bottom tier repository.

Top Tier

Top tier is also known as interface this tier allows users to connect with the database system. It's pretty much important the top tier should be easy to use and user friendly.

Data warehouse components

Data warehouse is based on the RDBMS server which is a central information repository that is surrounded by some key components to make the entire environment functional, manageable and accessible.

There are five components of data warehouse, which is as follows:

Data warehouse database

The central database is the foundation of the data warehousing environment, and this database is implemented on the RDBMS technology, this kind of implementation is constraining by the fact that traditional RDBMS system is optimized for transactional database processing and for data warehousing.

Source System

Source system contain the transactional data of the business, usually with no reporting purposes, but with high performance requirements for storing short term periods of data. Each source system usually keeps separate data and does not share with other system of the organization.

Metadata

Metadata is all about the current data and it used for building, maintaining and managing the data warehouse, in the data warehouse metadata play an important role as it specifies the source, usage values and feature of data warehouse data.

Query Tools

One of the main goal of data warehouse is to provide information to business to make strategic decisions, query tools allow users to interact with the data warehouse system, these tools fall into four different categories

1. Query and reporting tools
2. Application Development tools
3. Data Mining tools
4. OLAP tools

Data Marts

A data mart is an access layer which is used to display the data for users, it is presented as an option for large size data warehouse as it takes less time and to build, however there is no standard definition for data mart is differing from person to person.

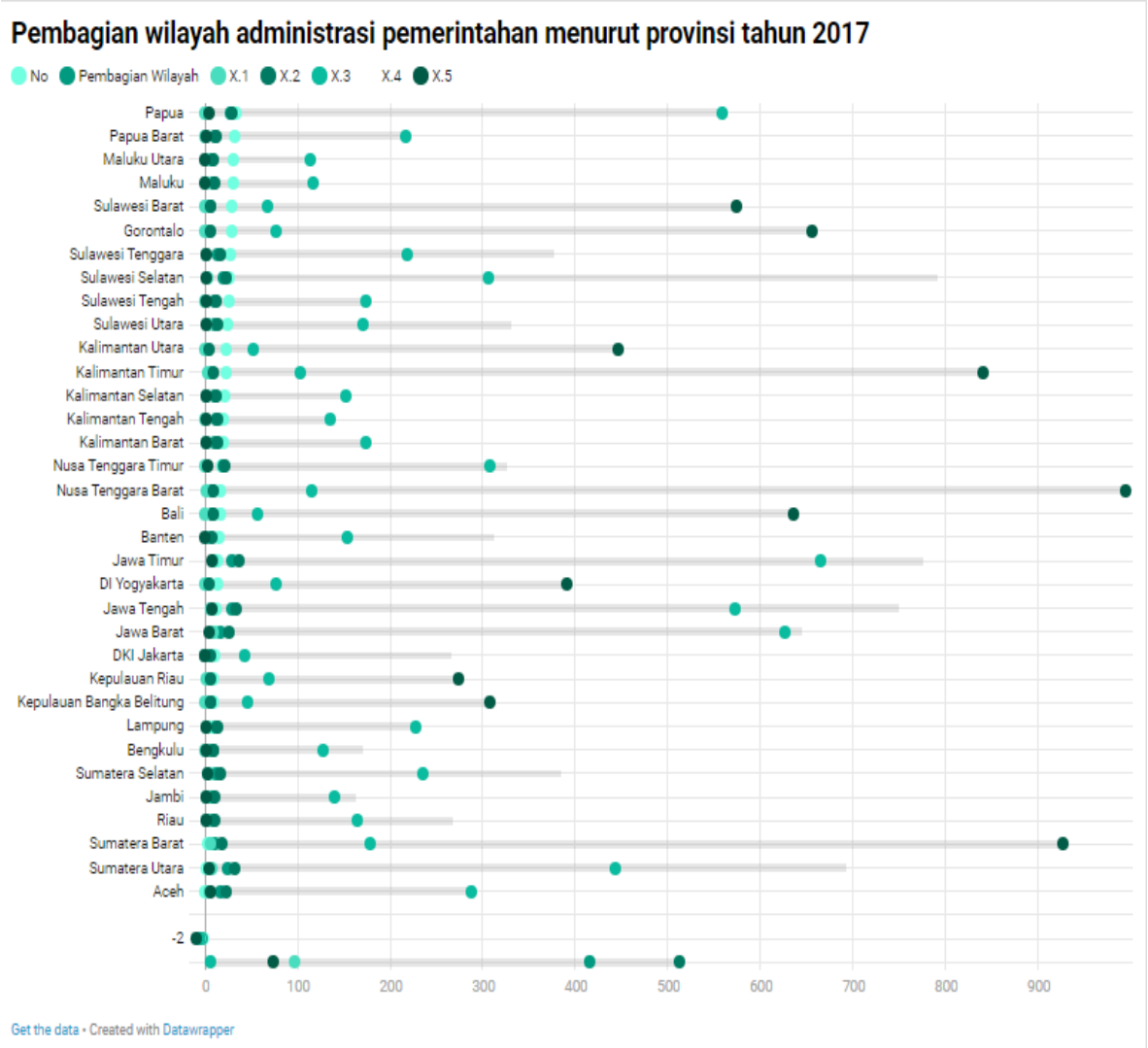
What is data visualization

Data visualization is the practice of converting raw information text, numbers, or symbols, into a graphic format. The data is visualized with a clear purpose: to show logical correlations between units, and define inclinations, tendencies, and patterns. Depending on the type of logical connection and the data itself, visualization can be done in a suitable format. So, it's dead simple, any analytical report contains examples of data interpretations like pie charts, comparison bars, demographic maps, and much more.

In most cases, visuals are created manually via corresponding software, whether it's PowerPoint or Photoshop. But, its core usage remains in the field of analytics. For that reason, data visualization or data visualization became a standard way to introduce information for users through the BI interface data representation tool.The process of data visualization, this visualization is based on the dataset which we received, the process has done through online datawrapper, this is one of the most popular visualization online website.

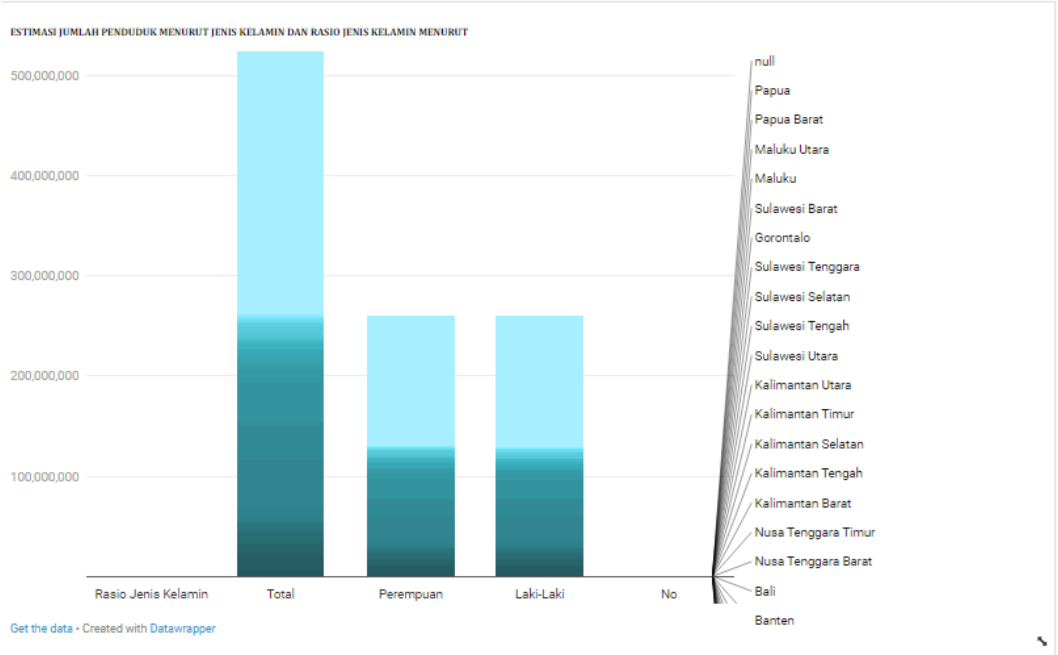
Pembagian wilayah administrasi pemerintahan menurut provinsi tahun 2017

table 1

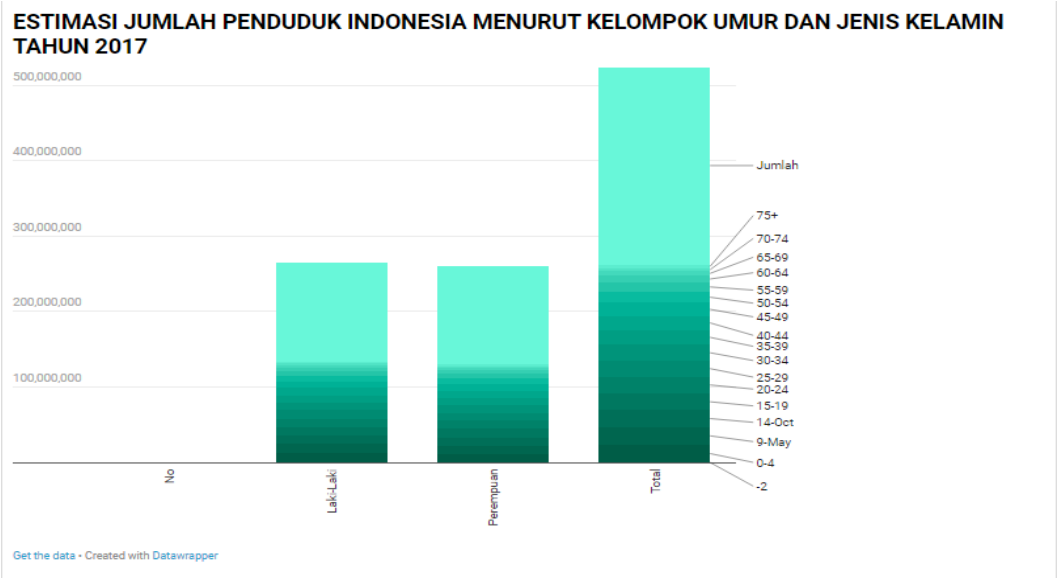


Dot plot: this chart is a statistics chart consist of data points plotted on the fairly simple scale, this chart is based on the dataset we received.

Estimasi jumlah penduduk menurut jenis kelamin dan rasio jenis kelamin menurut provinsi tahun 2017 table 2



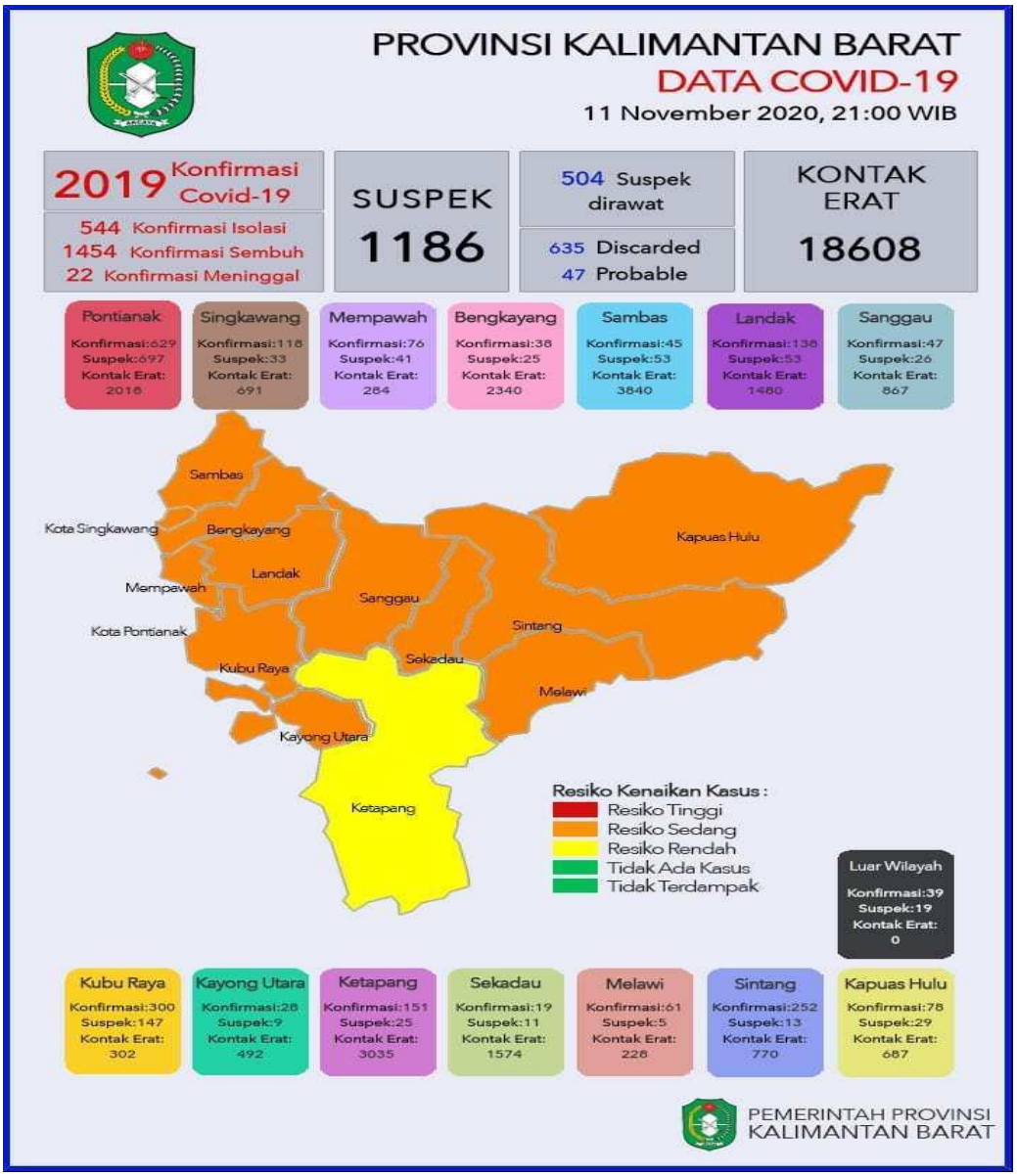
Estimasi jumlah penduduk indonesia menurut kelompok umur dan jenis kelamin tahun 2017 table 3

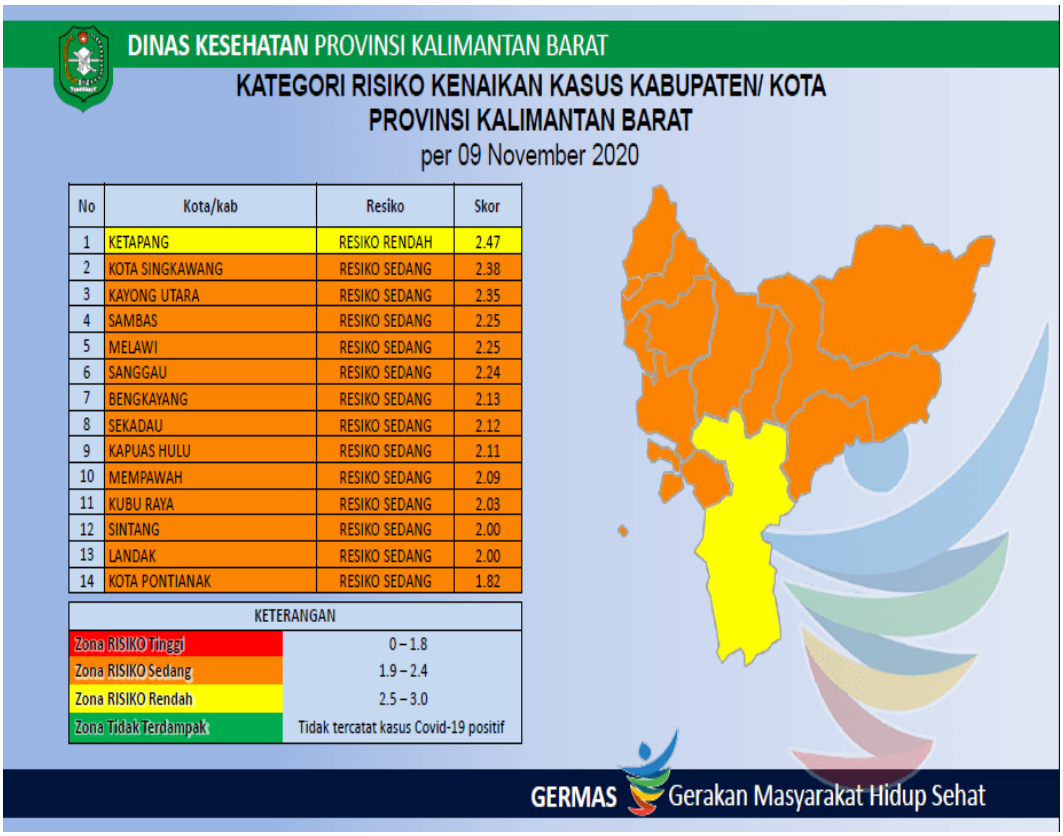


Stacked column chart: this can show changes over time because it's very easy to compare total column length, as we showed in the above chart two different char

with different length and opposite of each other. This because the data is different, we compare two different datasets.

Dashboard





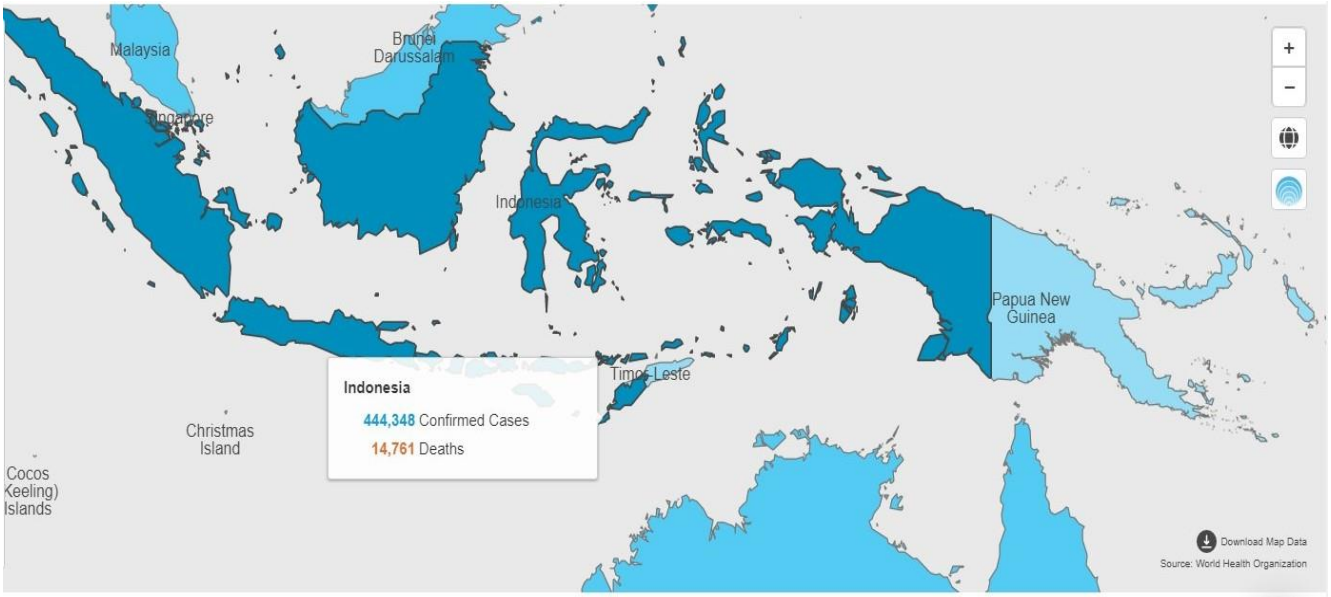
DINAS KESEHATAN PROVINSI KALIMANTAN BARAT

KATEGORI RISIKO KENAIKAN KASUS KABUPATEN/ KOTA
PROVINSI KALIMANTAN BARAT
per 09 November 2020

No	Kota/kab	Resiko	Skor
1	KETAPANG	RESIKO RENDAH	2.47
2	KOTA SINGKAWANG	RESIKO SEDANG	2.38
3	KAYONG UTARA	RESIKO SEDANG	2.35
4	SAMBAS	RESIKO SEDANG	2.25
5	MELAWI	RESIKO SEDANG	2.25
6	SANGGAU	RESIKO SEDANG	2.24
7	BENGKAYANG	RESIKO SEDANG	2.13
8	SEKADAU	RESIKO SEDANG	2.12
9	KAPUAS HULU	RESIKO SEDANG	2.11
10	MEMPAWAH	RESIKO SEDANG	2.09
11	KUBU RAYA	RESIKO SEDANG	2.03
12	SINTANG	RESIKO SEDANG	2.00
13	LANDAK	RESIKO SEDANG	2.00
14	KOTA PONTIANAK	RESIKO SEDANG	1.82

KETERANGAN	
Zona RISIKO Tinggi	0 – 1.8
Zona RISIKO Sedang	1.9 – 2.4
Zona RISIKO Rendah	2.5 – 3.0
Zona Tidak Terdampak	Tidak tercatat kasus Covid-19 positif

GERMAS Gerakan Masyarakat Hidup Sehat



In **Indonesia**, from **Jan 3** to **5:52pm CET, 11 November 2020**, there have been **444,348 confirmed cases** of COVID-

Estimasi jumlah penduduk ndonesia menurut kelompok umur dan jenis kelamin tahun 2017

No	Kelompok Umur	Laki-Laki	Perempuan	Total
-1	-2	-3	-4	-5
1	0-4	12.166.127	11.682.156	23.848.283
2	9-May	12.144.930	11.589.013	23.733.943
3	14-Oct	11.639.907	11.073.230	22.713.137
4	15-19	11.365.555	10.847.326	22.212.881
5	20-24	11.007.888	10.695.675	21.703.563
6	25-29	10.571.609	10.450.584	21.022.193
7	30-34	10.239.637	10.269.484	20.509.121
8	35-39	9.979.462	10.093.038	20.072.500
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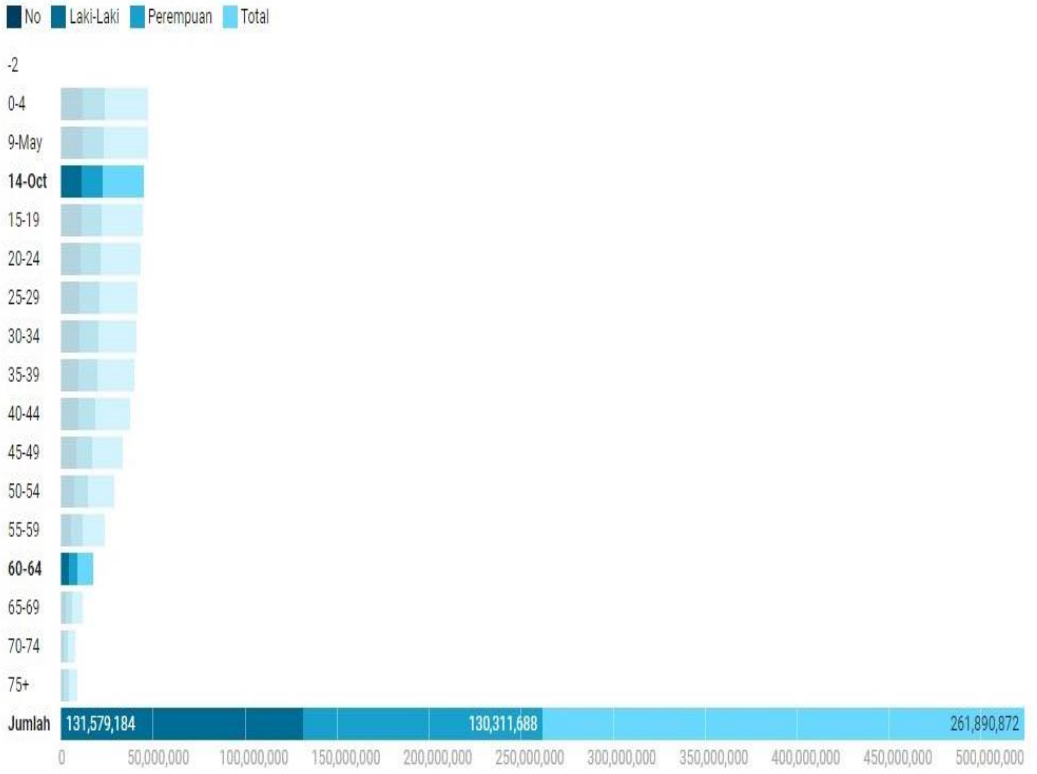
10	45-49	8.542.556	8.485.479	17.028.035
11	50-54	7.274.122	7.327.347	14.601.469
12	55-59	5.932.338	5.970.949	11.903.287
13	60-64	4.472.064	4.398.429	8.870.493
14	65-69	2.950.697	3.084.716	6.035.413
15	70-74	1.873.805	2.208.376	4.082.181
16	75+	1.943.183	2.726.944	4.670.127
	Jumlah	**131.579.184**	**130.311.688**	**261.890.872**

ESTIMASI JUMLAH PENDUDUK INDONESIA MENURUT KELOMPOK UMUR DAN JENIS KELAMIN TAHUN 2017



This is the estimation of population

Get the data • Created with Datawrapper

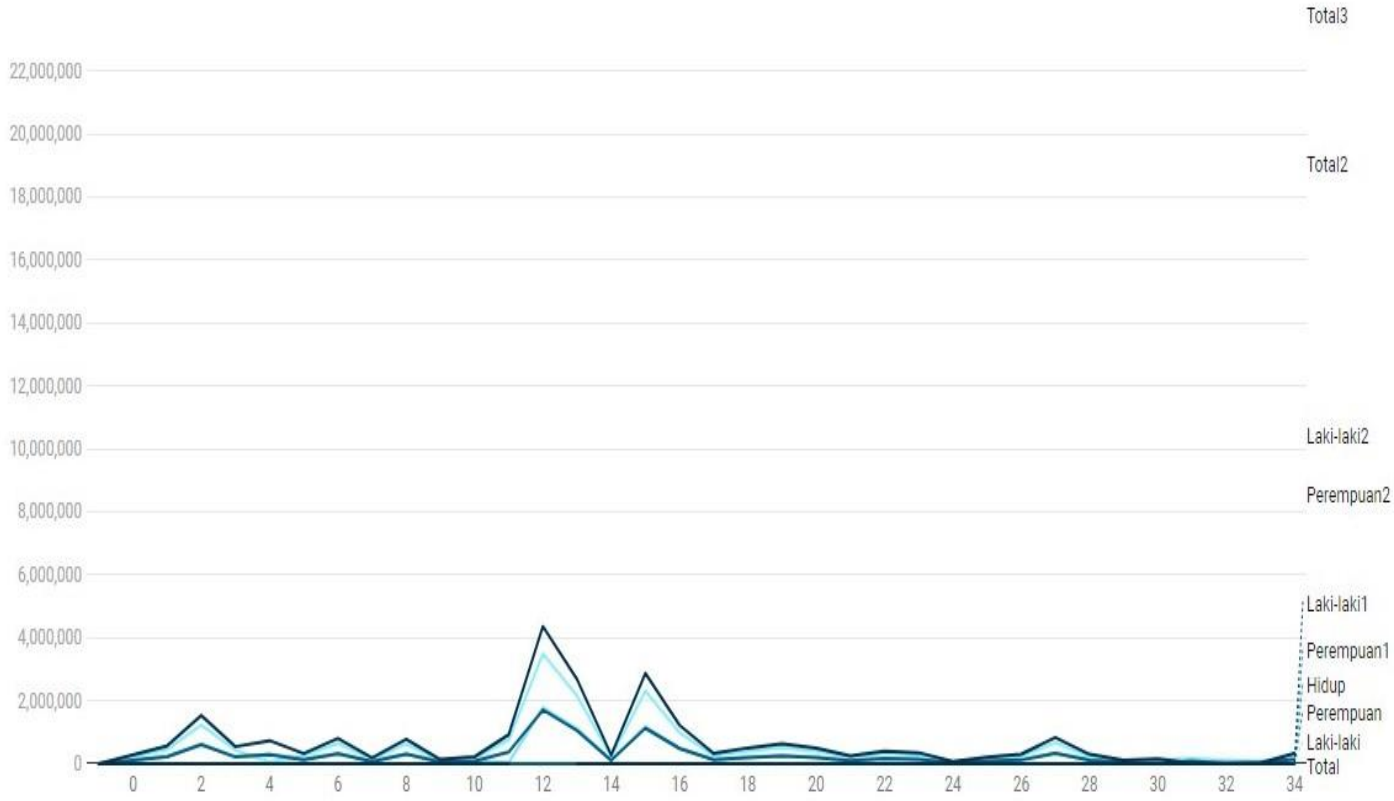
No	Provinsi	Hidup	Laki-laki	Perempuan	Total	Laki-laki	Perempuan	Total	Laki-laki	Perempuan	Total	Laki-laki	Perempuan	Total
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15
1	Aceh	116.591	58.618	56.245	114.863	174.927	168.107	343.034	231.381	222.655	454.036	289.999	278.9	568.899
2	Sumatera Utara	309.358	154.205	148.31	302.515	464.877	448.063	912.94	626.447	604.982	1.231.429	780.652	753.292	1.533.944
3	Sumatera Barat	110.865	55.387	53.185	108.572	165.859	159.579	325.438	221.113	213.134	434.247	276.5	266.319	542.819
4	Riau	153.812	76.598	73.443	150.041	227.069	218.006	445.075	297.473	285.977	583.45	374.071	359.42	733.491
5	Jambi	66.451	33.008	31.62	64.628	98.786	94.75	193.536	131.584	126.359	257.943	164.592	157.979	322.571
6	Sumatera Selatan	163.186	81.167	77.98	159.147	244.209	235.06	479.269	327.336	315.631	642.967	408.503	393.611	802.114
7	Bengkulu	37.43	18.573	17.843	36.416	55.702	53.619	109.321	74.393	71.745	146.138	92.966	89.588	182.554
8	Lampung	155.383	77.412	74.342	151.754	234.795	225.864	460.659	318.763	307.159	625.922	396.175	381.501	777.676
9	Kep. Bangka Belitung	27.275	13.628	13.07	26.698	40.728	39.124	79.852	54.005	51.964	105.969	67.633	65.034	132.667
10	Kep. Riau	42.202	21.582	20.76	42.342	65.821	63.445	129.266	89.638	86.594	176.232	111.22	107.354	218.574
11	DKI Jakarta	173.657	89.764	86.172	175.936	275.508	264.826	540.334	379.71	365.526	745.236	469.474	451.698	921.172
12	Jawa Barat	883.144	445.397	425.9	871.297	1.335.658	1.278.285	2.613.943	1.781.045	1.706.256	3.487.301	2.226.442	2.132.156	4.358.598
13	Jawa Tengah	537.258	271.319	257.959	529.278	818.488	777.163	1.595.651	1.104.368	1.047.599	2.151.967	1.375.687	1.305.558	2.681.245
14	DI Yogyakarta	54.197	27.86	26.632	54.492	84.24	80.578	164.818	113.422	108.577	221.999	141.282	135.209	276.491
15	Jawa Timur	575.485	289.807	277.885	567.692	872.635	837.881	1.710.516	1.173.988	1.128.743	2.302.731	1.463.795	1.406.628	2.870.423
16	Banten	244.179	122.648	117.845	240.493	370.591	356.742	727.333	500.189	482.378	982.567	622.837	600.223	1.223.060

17	Bali	64.992	32.746	31.407	64.153	98.685	94.785	193.47	132.576	127.528	260.104	165.322	158.935	324.257
18	Nusa Tenggara Barat	104.987	51.379	49.35	100.729	153.081	147.482	300.563	203.685	196.722	400.407	255.064	246.072	501.136
19	Nusa Tenggara Timur	136.337	66.494	63.931	130.425	195.705	188.702	384.407	255.381	246.833	502.214	321.875	310.764	632.639
20	Kalimantan Barat	101.794	50.528	48.452	98.98	151.55	145.54	297.09	202.401	194.665	397.066	252.929	243.117	496.046
21	Kalimantan Tengah	53.71	26.269	25.317	51.586	77.915	75.27	153.185	102.443	99.163	201.606	128.712	124.48	253.192
22	Kalimantan Selatan	82.169	40.546	38.935	79.481	122.196	117.608	239.804	164.822	158.961	323.783	205.368	197.896	403.264
23	Kalimantan Timur	74.859	36.181	34.608	70.789	107.835	103.207	211.042	142.379	136.375	278.754	178.56	170.983	349.543
24	Kalimantan Utara	12.137	7.596	7.228	14.824	22.636	21.556	44.192	29.885	28.484	58.369	37.481	35.712	73.193
25	Sulawesi Utara	41.452	20.801	19.936	40.737	62.794	60.26	123.054	84.793	81.481	166.274	105.594	101.417	207.011
26	Sulawesi Tengah	63.106	30.993	29.722	60.715	92.069	88.487	180.556	121.675	117.168	238.843	152.668	146.89	299.558

27	Sulawesi Selatan	170.128	84.597	81.091	165.688	253.776	243.635	497.411	339.372	326.293	665.665	423.969	407.384	831.353
28	Sulawesi Tenggara	62.184	30.744	29.419	60.163	91.488	87.657	179.145	120.746	115.826	236.572	151.49	145.245	296.735
29	Gorontalo	23.741	11.657	11.167	22.824	34.506	33.131	67.637	45.342	43.607	88.949	56.999	54.774	111.773
30	Sulawesi Barat	32.45	15.668	15.075	30.743	46.003	44.429	90.432	59.813	57.94	117.753	75.481	73.015	148.496
31	Maluku	44.192	21.373	20.548	41.921	62.953	60.711	123.664	82.243	79.506	161.749	103.616	100.054	203.67
32	Maluku Utara	29.083	14.303	13.732	28.035	42.541	40.939	83.48	56.235	54.22	110.455	70.538	67.952	138.49
33	Papua Barat	21.52	10.425	10.062	20.487	30.585	29.618	60.203	39.634	38.489	78.123	50.059	48.551	98.61
34	Papua	71.197	34.513	33.481	67.994	102.12	99.428	201.548	134.061	130.964	265.025	168.574	164.445	333.019
Indonesia		4.840.511	2.423.786	2.322.652	4.746.438	7.278.331	6.983.537	14.261.868	9.742.341	9.359.504	19.101.845	12.166.127	11.682.156	23.848.283

ESTIMASI JUMLAH LAHIR HIDUP, JUMLAH BAYI (0 TAHUN), JUMLAH BATITA (0-2 TAHUN), JUMLAH ANAK BALITA (1 - 4 TAHUN), DAN JUMLAH BALITA (0 - 4 TAHUN) MENURUT PROVINSI TAHUN 2017

ESTIMASI JUMLAH LAHIR HIDUP, JUMLAH BAYI (0 TAHUN), JUMLAH BATITA (0-2 TAHUN), JUMLAH ANAK BALITA (1 - 4 TAHUN), DAN JUMLAH BALITA (0 - 4 TAHUN) MENURUT PROVINSI TAHUN 2017



This is the estimation of population

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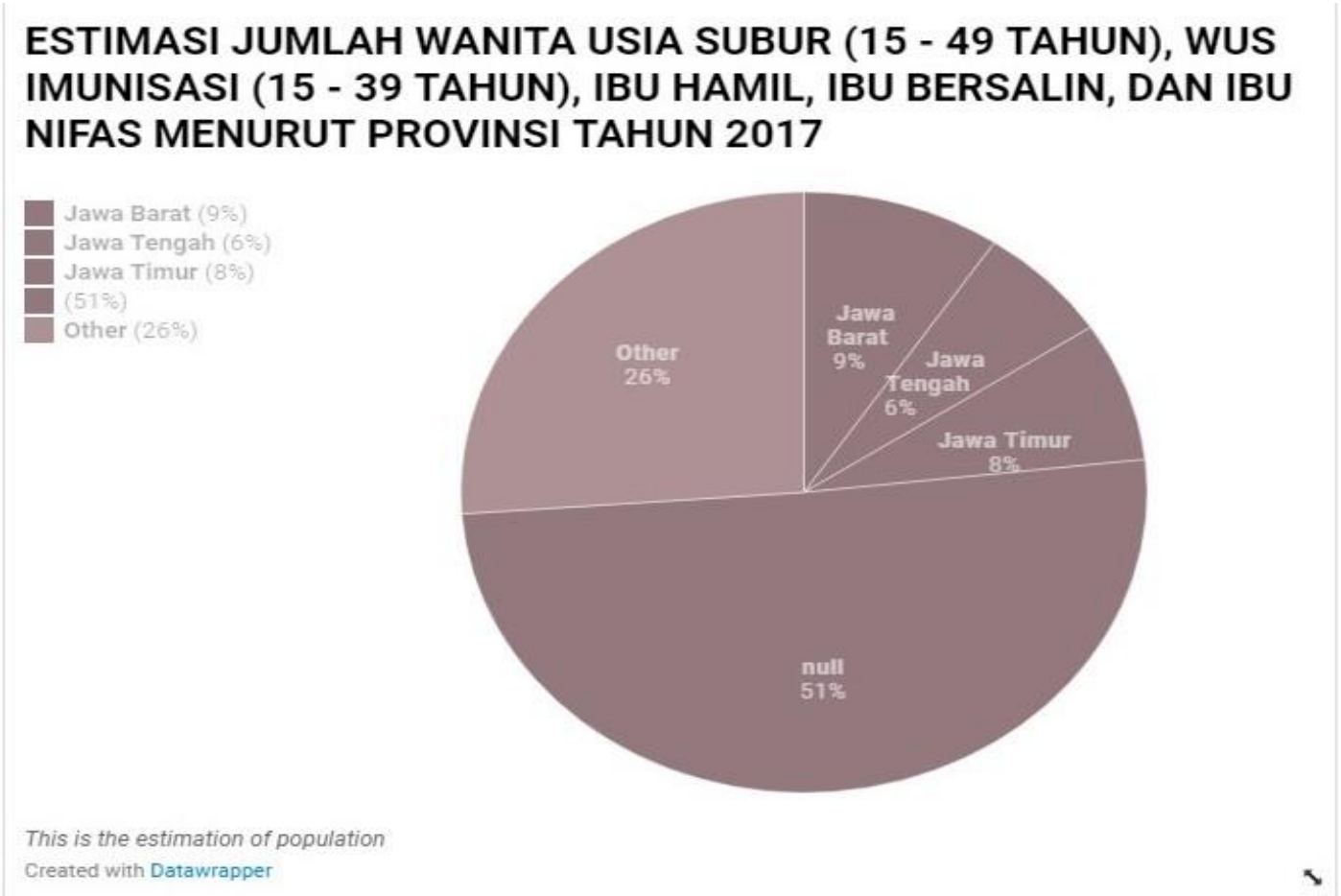
No	Provinsi	Jumlah Wanita Usia Subur (15 - 49 tahun)	Jumlah WUS Imunisasi (15 - 39 tahun)	Jumlah Ibu Hamil	Jumlah Ibu Bersalin/Nifas
-1	-2	-3	-4	-5	-6
1	Aceh	1.414.350	1.105.366	128.25	122.421
2	Sumatera Utara	3.700.478	2.828.455	340.294	324.826
3	Sumatera Barat	1.359.838	1.032.010	121.951	116.408
4	Riau	1.824.942	1.411.572	169.193	161.503
5	Jambi	970.733	738.788	73.096	69.774
6	Sumatera Selatan	2.224.740	1.698.970	179.505	171.345
7	Bengkulu	532.615	405.66	41.173	39.301
8	Lampung	2.177.491	1.621.353	170.921	163.152
9	Kepulauan Bangka Belitung	384.132	292.95	30.002	28.639
10	Kepulauan Riau	601.742	464.2	46.422	44.312
11	DKI Jakarta	3.013.066	2.270.684	191.023	182.34
12	Jawa Barat	13.010.762	9.733.928	971.458	927.301
13	Jawa Tengah	8.835.099	6.373.494	590.984	564.121
14	DI Yogyakarta	980.739	712.321	59.617	56.907
15	Jawa Timur	10.435.722	7.440.667	633.034	604.259
16	Banten	3.512.988	2.668.983	268.597	256.388
17	Bali	1.130.716	805.449	71.491	68.242
18	Nusa Tenggara Barat	1.388.374	1.053.003	115.486	110.236
19	Nusa Tenggara Timur	1.327.608	1.025.550	149.971	143.154
20	Kalimantan Barat	1.326.559	1.021.160	111.973	106.884
21	Kalimantan Tengah	718.82	547.496	59.081	56.395
22	Kalimantan Selatan	1.114.509	826.697	90.386	86.277
23	Kalimantan Timur	978.919	740.16	82.345	78.602
24	Kalimantan Utara	178.099	137.955	13.351	12.744
25	Sulawesi Utara	632.664	462.708	45.597	43.525
26	Sulawesi Tengah	794.242	597.154	69.417	66.261

27	Sulawesi Selatan	2.366.920	1.780.349	187.141	178.634
28	Sulawesi Tenggara	684.09	530.286	68.402	65.293
29	Gorontalo	323.845	245.453	26.115	24.928
30	Sulawesi Barat	363.825	278.603	35.695	34.073
31	Maluku	453.47	356.57	48.611	46.402
32	Maluku Utara	316.855	246.955	31.991	30.537
33	Papua Barat	248.058	195.75	23.672	22.596
34	Papua	923.518	705.408	78.317	74.757
Indonesia		70.250.528	52.356.107	5.324.562	5.082.537

ESTIMASI JUMLAH WANITA USIA SUBUR (15 - 49 TAHUN), WUS IMUNISASI (15 - 39 TAHUN), IBU HAMIL, IBU BERSALIN, DAN IBU NIFAS MENURUT PROVINSI TAHUN 2017



No	Provinsi	Jumlah Anak Prasekolah (5 - 6 tahun)			Jumlah Anak Usia Kelas 1 SD/Setingkat (7 Tahun)			Jumlah Anak Usia SD/Setingkat (7 - 12 Tahun)		
		Laki-laki	Perempuan	Total	Laki-laki	Perempuan	Total	Laki-laki	Perempuan	**Total**
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	*-11*
1	Aceh	113.448	109.337	222.785	55.732	113.565	169.297	322.85	252.65	575.5
2	Sumatera Utara	320.474	310.229	630.703	153.511	313.086	466.597	913.78	717.168	1.630.948
3	Sumatera Barat	110.949	107.199	218.148	53.139	108.66	161.799	321.399	254.841	576.24
4	Riau	143.501	138.219	281.72	67.911	139.321	207.232	400.542	310.871	711.413
5	Jambi	65.815	63.298	129.113	31.338	63.485	94.823	194.817	157.997	352.814
6	Sumatera Selatan	164.846	159.326	324.172	77.446	159.576	237.022	476.307	372.932	849.239
7	Bengkulu	37.265	36.011	73.276	17.423	35.972	53.395	110.257	86.41	196.667
8	Lampung	165.069	159.496	324.565	76.634	158.404	235.038	470.191	367.883	838.074
9	Kep. Bangka Belitung	26.593	25.637	52.23	12.518	25.728	38.246	78.149	61.748	139.897
10	Kep. Riau	45.317	43.93	89.247	21.597	44.22	65.817	127.79	99.418	227.208
11	DKI Jakarta	198.094	191.203	389.297	89.41	181.602	271.012	502.564	385.623	888.187
12	Jawa Barat	891.526	855.763	1.747.289	415.003	856.196	1.271.199	2.576.944	2.021.218	4.598.162

13	Jawa Tengah	569.968	540.414	1.110.382	266.588	552.007	818.595	1.714.577	1.357.275	3.071.852
14	DI Yogyakarta	57.226	54.856	112.082	27.121	55.738	82.859	165.308	129.284	294.592
15	Jawa Timur	601.423	579.377	1.180.800	292.55	600.015	892.565	1.860.886	1.481.908	3.342.794
16	Banten	254.352	245.964	500.316	117.693	242.557	360.25	700.16	544.68	1.244.840
17	Bali	67.192	64.804	131.996	32.618	67.699	100.317	216.753	170.634	387.387
18	Nusa Tenggara Barat	102.302	99.101	201.403	49.206	100.825	150.031	298.721	235.431	534.152
19	Nusa Tenggara Timur	123.949	120.091	244.04	60.253	122.1	182.353	365.086	296.628	661.714
20	Kalimantan Barat	101.478	97.819	199.297	47.002	96.485	143.487	286.727	225.717	512.444
21	Kalimantan Tengah	49.891	48.402	98.293	22.493	46.439	68.932	144.871	114.19	259.061

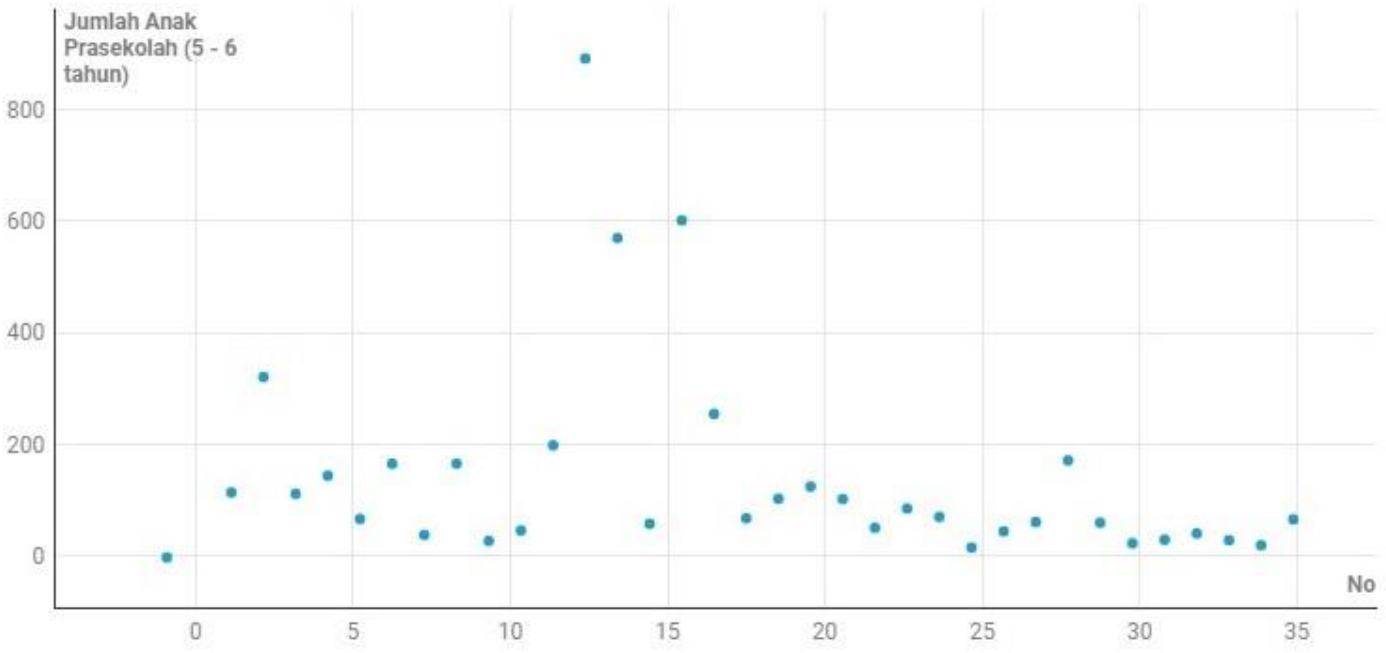
22	Kalimantan Selatan	84.565	81.775	166.34	40.324	82.27	122.594	235.883	183.16	419.043
23	Kalimantan Timur	69.519	66.591	136.11	31.481	65.228	96.709	195.42	151.345	346.765
24	Kalimantan Utara	14.852	14.283	29.135	6.752	13.961	20.713	41.5	32.379	73.879
25	Sulawesi Utara	43.589	41.958	85.547	19.476	40.633	60.109	126.964	101.114	228.078
26	Sulawesi Tengah	60.347	58.258	118.605	28.955	59.032	87.987	167.145	128.629	295.774
27	Sulawesi Selatan	170.912	164.66	335.572	80.229	164.233	244.462	495.806	393.717	889.523
28	Sulawesi Tenggara	59.15	56.848	115.998	29.761	61.319	91.08	177.561	137.797	315.358
29	Gorontalo	22.151	21.336	43.487	10.52	21.582	32.102	65.456	51.502	116.958
30	Sulawesi Barat	28.671	27.866	56.537	13.37	27.511	40.881	82.543	64.441	146.984
31	Maluku	39.861	38.639	78.5	18.273	37.88	56.153	113.65	88.261	201.911

32	Maluku Utara	27.763	26.82	54.583	13.145	26.765	39.91	80.761	64.115	144.876
33	Papua Barat	18.861	18.384	37.245	8.686	18.008	26.694	55.685	43.512	99.197
34	Papua	65.213	63.971	129.184	31.82	64.965	96.785	196.681	155.146	351.827
Indonesia		4.916.132	4.731.865	9.647.997	2.319.978	4.767.067	7.087.045	14.283.734	11.239.624	**25.523.358**

ESTIMASI JUMLAH ANAK PRA SEKOLAH, JUMLAH ANAK USIA KELAS 1 SD/SETINGKAT, DAN JUMLAH ANAK USIA SD/SETINGKAT MENURUT PROVINSI TAHUN 2017

ESTIMASI JUMLAH ANAK PRA SEKOLAH, JUMLAH ANAK USIA KELAS 1 SD/SETINGKAT, DAN JUMLAH ANAK USIA SD/SETINGKAT MENURUT PROVINSI TAHUN 2017

base



This is the estimation of population

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References

Siti Setiati, M. K. (2020). COVID-19 and Indonesia. *COVID-19*, 2.