

Reference Data for Year 2021

Health Informatics Centre Planning Division MOH/S/RAN/227.22(PT) (OCTOBER 2022)

Land Area, Population and Vital Statistics

Land Area: Malaysia - 330,155.28 sq. km

Source: Department of Survey & Mapping, Malaysia

| | 2019 | | | 2020 | | | | 2021 | | |
|--|---------------------|--------------------|-------------------|------------|--------------------|-------------------|-------------------|-------------------|---------------------|--|
| Population and Vital Statistics | Male | Female | Total | Male | Female | Total | Male | Female | Total | |
| Total Population ^a ('000) | 16,764.9 | 15,758.2 | 32,523.0 | 16,966.2 | 15,481.2 | 32,447.4 | 17,000.5 | 15,575.8 | 32,576.3 | |
| Total Population Density (per sq. km) | : | : | 98.0 | : | : | 98.0 | : | : | 99.0 | |
| Population by Age Group: (number & percentage) | | | | | | | | | | |
| below 15 years ('000) | 3,948.3 (23.6%) | 3,704.2 (23.5%) | , " | , | 3,765.7 (24.3%) | • | 1 | • | 7,685.1 (23.6%) | |
| 15 - 64 years ('000) | 11,758.7 (70.1%) | 10,921.8 (69.3%) | | | 10,590.8 (68.4%) | | | | 22,601.2 (69.4%) | |
| 65 years & above ('000) | 1,057.9 (6.3%) | 1,132.1 (7.2%) | 2,190.0 (6.7%) | " . | 1,124.5 (7.3%) | 2,191.2 (6.8%) | 1 | <i>*.</i> | 2,290.2 (7.0%) | |
| Annual Population Growth Rate (%) | 0.3 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.4 | |
| Crude Birth Rate (per 1,000 population) | 15.1 | 15.0 | 15.1 | 14.4 | 14.7 | 14.5 | 13.3 | 13.7 | 13.5 | |
| Crude Death Rate (per 1,000 population) | 6.0 | 4.7 | 5.4 | 5.7 | 4.5 | 5.1 | 7.5 | 6.2 | 6.9 | |
| Stillbirth Rate (per 1,000 births) | 5.6 | 5.1 | 5.3 | 5.3 | 4.9 | 5.1 | 5.3 | 4.8 | 5.0 | |
| Perinatal Mortality Rate (per 1,000 births) | 8.8 | 7.9 | 8.4 | 8.5 | 7.5 | 8.0 | 8.7 | 7.6 | 8.2 | |
| Neonatal Mortality Rate (per 1,000 live births) | 4.3 | 3.8 | 4.1 | 4.3 | 3.5 | 3.9 | 4.4 | 3.8 | 4.1 | |
| Infant Mortality Rate (per 1,000 live births) | 7.0 | 6.1 | 6.6 | 6.4 | 5.4 | 5.9 | 6.4 | 5.8 | 6.1 | |
| Toddler Mortality Rate (per 1,000 population aged 1-4 years) | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | |
| Under-5 Mortality Rate (per 1,000 live births) | 8.7 | 7.5 | 8.1 | 7.9 | 6.7 | 7.0 | 7.7 | 7.0 | 7.4 | |
| Maternal Mortality Ratio (per 100,000 live births) | : | 21.0 | : | : | 24.8 | : | : | 68.2 | : | |
| Life Expectancy at Birth (in years) | 72.5 | 77.4 | 74.8 | 72.5 | 77.2 | 74.7 | 72.3 ^P | 77.0 ^P | 74.5 ^P | |
| Distribution Live Births by Birthweight (%): | | | | | | | | | | |
| Under 2.5 kg | 11.0 | 13.2 | 12.1 | 10.7 | 12.9 | 11.7 | 11.0 | 13.4 | 12.2 | |
| 2.5 kg & over | 88.9 | 86.7 | 87.8 | 89.2 | 87.1 | 88.2 | 88.9 | 86.6 | 87.8 | |
| Unknown | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | |

Notes:

PreliminaryNot applicable

Source: Department of Statistics, Malaysia, DOSM

^a 2019: Current population estimates based on Population and Housing Census 2010 data 2020 and 2021: Current population estimates based on Population and Housing Census 2020 data The added total may differ due to rounding

Financial Allocation, 2022

| Total Allocation for Ministry of Health (MOH) (In Million) | RM32,410 |
|--|----------|
| Operating | RM28,030 |
| Development | RM4,380 |
| Percentage of Total MOH Allocation to National Budget | 10.42% |
| Per Capita Income¹ (current prices) | RM48,187 |

Sources: Estimated Federal Budget 2022, Ministry of Finance

¹Economic Outlook 2022, Ministry of Finance

National Health Accounts

| Indicator | 2019 | 2020 |
|---|----------|----------|
| Total Expenditure on Health (Public & Private) (In Million) | RM64,241 | RM67,022 |
| Total Expenditure on Health as a Percentage of GDP | 4.25% | 4.73% |
| Public Expenditure as a Percentage of Total Expenditure on Health | 53.25% | 54.63% |

Source: Database MNHA 1997-2020, MNHA Section, Planning Division, MOH

Government

Ministry of Health

| | No. | Official Bed |
|---|-----|-----------------|
| Hospital and Special Medical Institution | 146 | 44,849 |
| Hospital | 135 | 39,263 |
| Special Medical Institution ¹ | 11 | 5,586 |
| Low Risk COVID-19 Quarantine and Treatment Centre (PKRC) ² | 211 | 52,462 |

| | No. | Team |
|--------------------------------|-----------------------|------|
| Health Clinic | 2,892 | - |
| Health Clinic | 1,057 | - |
| Rural Clinic (Klinik Desa) | 1,749 | - |
| Maternal & Child Health Clinic | 86 | _ |
| Mobile Health Clinic | _ | 229 |
| Flying Doctor Service | 5 ³ | 11 |

Notes:

Data as of 31st December 2021

¹ Refers to Rehabilitation Hospital, National Leprosy Control Centre, Institute of Respiratory Medicine, National Cancer Institute, Sarawak Heart Centre, Pyschiatric Institutions (4) and Women & Children Hospital (2)

² Source: Medical Development Division, MOH

³ No. of Helicopter

Government (cont'd)

Ministry of Health

| | No. | Dental Chair |
|---|-----|--------------------|
| Dental Clinic | | |
| Standalone Dental Clinic | 63 | 530 |
| Dental Clinic in Health Clinic ¹ | 592 | 1,617 |
| Dental Clinic in Hospital | 75 | 412 |
| Dental Clinic in Other Institutes | 20 | 19 |
| School Dental Clinic ² | 911 | 656 |
| Mobile Dental Clinic ² | 34 | 53 |
| Dental Mobile Team | | |
| Pre-School | 137 | |
| Primary and Secondary School | 491 | 1,768 ³ |
| Elderly and Special Children | 4 | |

Notes:

Data as of 31st December 2021

¹ Include Dental Clinics in Maternal & Child Health Clinics

² Include Dental Clinics in primary and secondary school

³ Refers to portable chairs

Government (cont'd)

Ministry of Health

| | No. | Team |
|--------------------------------|-----|------|
| Community Clinic | | |
| Community Clinic | 255 | - |
| Community Mobile Clinic (Bus) | 7 | 11 |
| Community Mobile Clinic (Boat) | 4 | 8 |

| | No. | Dental Chair |
|--------------------------------------|-----|-----------------|
| Community Dental Clinic | | |
| Community Dental Clinic (UTC) | 22 | 42 |
| Community Dental Clinic (RTC) | 4 | 6 |
| Community Dental Mobile Clinic (Bus) | 1 | 1 |

Non Ministry of Health

| | No. | Official Bed |
|-----------------------|-----|-----------------|
| Hospital ¹ | 12 | 4,932 |

Notes:

UTC - Urban Transformation Centre

RTC - Rural Transformation Centre

Data as of 31st December 2021

¹ Refers to Army Hospitals (5) and University Hospitals (7)

Private

Licensed

| | No. | Official Bed |
|----------------------------------|-------|-----------------|
| Hospital | 209 | 17,628 |
| Maternity Home | 17 | 51 |
| Nursing Home | 21 | 927 |
| Hospice | 9 | 33 |
| Ambulatory Care Centre | 153 | 384 |
| Blood Bank | 5 | 28 ¹ |
| Haemodialysis Centre | 604 | 7,532 |
| Community Mental Health Centre | 1 | _ |
| Combined Facilities ² | 2 | 19/26 |
| Registered | | |
| Medical Clinic | 8,419 | _ |
| Dental Clinic | 3,053 | _ |

Notes:

Data as of 31st December 2021

Source: Medical Practice Division, MOH



¹ Refers to tanks

² Combination of Ambulatory Care and Haemodialysis Centre provides 19 beds and 26 dialysis chairs

Health Human Resources, 2021

| | МОН | Non- MOH | Private | Total | Profession: Population ^e |
|---|---------------------------|--------------------|----------------------------|---------|--|
| Doctora | | | | 77,755 | 1:420 |
| Annual Practicing Certificate ¹ | 40,803 | 5,537 | 16,196 | 62,536 | |
| Full Registration ¹ (new) | •• | | | 5,641 | |
| House Officer 2,3 | 9,57 | 78 | | 9,578 | |
| Dentist ⁴ | 6,917 | 868 | 4,789 | 12,574 | 1:2,597 |
| Pharmacist ⁵ | | | | 18,575 | 1:1,758 |
| Annual Certificate | 11,092 | 360 | 6,032 | 17,484 | |
| Fully Registration (new) | •• | •• | •• | 1,091 | |
| Nurse | 70,7973 | 7,629 ⁶ | 36,804 ⁶ | 115,230 | 1:283 |
| Community Nurse | 20,3083 | 197 ⁶ | 311 ⁶ | 20,816 | 1:1,569 |
| Assistant Medical Officer | 18,438 ³ | 704 ⁷ | 4, 187 ⁷ | 23,329 | 1:1,400 |
| Pharmacy Assistant | 4,275 ³ | 431 | 1,597 | 6,303 | 1 : 5,181 |
| Dental Therapist ^{3,b,c} | 2,849 | •• | ** | 2,849 | 1:3,404 |
| Dental Technologist ³ | 1,024 | •• | •• | 1,024 | 1:31,890 |
| Dental Surgery Assistant ³ | 4,556 | •• | •• | 4,556 | 1:7,168 |

Health Human Resources, 2021

| | МОН | Non- MOH | Private | Total | Profession: Population ^e |
|--|-------|-------------|---------|-------|--|
| Optometrist ⁸ | | | | 2,356 | 1: 13,860 |
| Annual Practicing Certificate | 305 | 69 | 1,740 | 2,114 | |
| New Registration | | | | 242 | |
| Optician ⁸ | | | | 2,491 | 1:13,109 |
| Annual Practicing Certificate | •• | •• | 2,457 | 2,457 | |
| New Registration | | | | 34 | |
| Environmental Health Officer ³ | 272 | •• | •• | 272 | 1: 120,056 |
| Assistant Environmental Health Officer ³ | 5,683 | •• | •• | 5,683 | 1: 5,746 |
| Medical Laboratory Technologist ³ | 7,675 | | | 7,675 | 1: 4,255 |
| Radiographers (Diagnostic & Therapists) ³ | 3,244 | •• | •• | 3,244 | 1: 10,066 |
| Occupational Therapists ³ | 1,303 | •• | ••• | 1,303 | 1: 25,062 |
| Physiotherapist ³ | 1,536 | | | 1,536 | 1: 21,260 |
| Traditional & Complementary Medicine Practitioner ^{9,d} | •• | •• | 2,251 | 2,251 | 1: 14,507 |

Health Human Resources, 2021

Notes:

- ·· Not obtained
- ^a Includes House Officers
- ^b Formally known as Dental Nurses
- ^c Ratio to current population of under 18 years old (estimate)
- d Refers to Registration of local practitioners in recognised practice areas that commenced on 15 March 2021 by zones. As of 31 December 2021, the zones involved are the Central, Northern, Southern and Eastern zone, while registration for the Sabah and Sarawak zones commenced on 15 March 2022. Registration of foreign practitioners commenced on 15 March 2021 regardless of zone.*Note: The current data reflects actual figures of practitioners (local & foreign) registered with the T&CM Council, and not the number of practitioners that had voluntarily registered with the MOH up to 1 August 2016 as reported previously
- ^e Current population estimates

Data as of 31st December 2021

Sources:

- ¹ Malaysian Medical Council
- ² Ministry of Defence Malaysia (MinDef)
- ³ Human Resources Division, MOH
- ⁴ Malaysian Dental Council
- ⁵ Pharmacy Board Malaysia
- ⁶ Malaysian Nursing Board
- ⁷ Malaysian Medical Assistant Board
- 8 Malaysian Optical Council
- ⁹ Traditional & Complementary Medicine Division, MOH

Admissions and Attendances, 2021

Government

| Ministry of Health | | |
|--|------------|-------------------|
| | 2020 | 2021 ^p |
| Admission ¹ | | |
| Hospital | 2,336,400 | 2,258,022 |
| Special Medical Institution | 104,491 | 108,642 |
| Day Care Attendance ² | | |
| Hospital | 1,690,302 | 1,609,041 |
| Special Medical Institution | 74,093 | 65,673 |
| | | |
| | | 2021 |
| Outpatient Attendance | | |
| Hospital ³ | | 14,505,623 |
| Special Medical Institution ³ | | 443,156 |
| Public Health Facility ⁴ | | 33,849,826 |
| Dental Health Attendance | | |
| Dental Clinic | | 4,820,622 |
| | | |
| | 202 | 21 |
| | Manual | MyHDW |
| | Submission | Submission |
| Clinical Support Service Attendance | | |
| Medical Rehabilitation (Physiotherapy) ⁵ | 1,725,727 | 1,407,224 |
| Medical Rehabilitation (Occupational Therapy) ⁶ | 811,260 | 653,587 |

146,111

93,146

451,253

100,655

110,739

79,553

307,114

87,808

Medical Rehabilitation (Hearing)⁷

Medical Rehabilitation (Speech)⁸

Medical Social Service¹⁰

Dietetic⁹

Admissions and Attendances, 2021

Government (cont'd)

Ministry of Health

Maternal & Child Health Attendance

| Antenatal Attendance | 5,821,741 |
|----------------------|-----------|
| Postnatal Attendance | 441,093 |
| Child Attendance | 8,499,135 |

Non Ministry of Health Hospital

| Admission | 146,113 |
|-----------------------|-----------|
| Outpatient Attendance | 2,269,298 |

 Low Risk COVID-19 Quarantine and Treatment Centre (PKRC)¹¹

| Admission | 578,144 |
|-----------|---------|
|-----------|---------|

Private Hospital¹²

| Admission | 774,197 |
|-----------------------|-----------|
| Outpatient Attendance | 3,285,071 |

- P Preliminary
- ¹ Based on 98.51% submission rate
- ² Based on 92.44% response rate
- ³ Based on 100.0% response rate
- ⁴ Based on 100.0% submission rate
- ⁵ Based on 81.54% submission rate
- ⁶ Based on 80.56% submission rate
- ⁷ Based on 75.79% submission rate
- 8 Based on 85.41% submission rate
- ⁹ Based on 68.06% submission rate
- ¹⁰ Based on 87.24% submission rate
- ¹¹ Source: Medical Development Division, MOH
- ¹² Based on 80.30% response rate. Include Private Hospitals, Private Maternity Homes, Private Nursing Homes and Private Hospice

Ten Principal Causes of Hospitalisation in MOH Hospital, 2021

| 1 | Pregnancy, childbirth and the puerperium | 19.63% |
|----|---|--------|
| 2 | Codes for special purposes ¹ | 19.17% |
| 3 | Certain conditions originating in the perinatal period | 9.73% |
| 4 | Diseases of the circulatory system | 7.73% |
| 5 | Diseases of the respiratory system | 7.36% |
| 6 | Injury, poisoning and certain other consequences of external causes | 5.55% |
| 7 | Neoplasms | 4.41% |
| 8 | Certain infectious and parasitic diseases | 4.08% |
| 9 | Diseases of the digestive system | 3.80% |
| 10 | Diseases of the genitourinary system | 3.35% |

Ten Principal Causes of Deaths² in MOH Hospital, 2021

| 1 | Diseases of the respiratory system | 24.53% |
|----|--|--------|
| 2 | Diseases of the circulatory system | 17.67% |
| 3 | Codes for special purposes ¹ | 16.31% |
| 4 | Certain infectious and parasitic diseases | 10.88% |
| 5 | Neoplasms | 7.00% |
| 6 | Diseases of the genitourinary system | 4.91% |
| 7 | Endocrine, nutritional and metabolic diseases | 4.37% |
| 8 | Diseases of the digestive system | 3.58% |
| 9 | External causes of morbidity and mortality | 2.84% |
| 10 | Certain conditions originating in the perinatal period | 1.53% |

¹ Refers to severe acute respiratory syndrome (SARS), COVID-19 and bacterial agents resistant to antibiotics

² Based on underlying causes of deaths

Ten Principal Causes of Hospitalisation in Private Hospital, 2021

| 1 | Diseases of the digestive system | 12.09% |
|----|---|--------|
| 2 | Pregnancy, childbirth and the puerperium | 10.61% |
| 3 | Diseases of the circulatory system | 9.49% |
| 4 | Diseases of the genitourinary system | 8.41% |
| 5 | Injury, poisoning and certain other consequences of external causes | 7.90% |
| 6 | Diseases of the respiratory system | 7.61% |
| 7 | Certain infectious and parasitic diseases | 7.44% |
| 8 | Diseases of the musculoskeletal system and connective tissue | 7.11% |
| 9 | Factors influencing health status and contact with health services | 6.24% |
| 10 | Neoplasms | 5.58% |

Ten Principal Causes of Deaths in Private Hospital, 2021

| 1 | Neoplasms | 28.03% |
|------------------------|--|----------------------|
| 2 | Diseases of the circulatory system | 21.24% |
| 3 | Diseases of the respiratory system | 14.69% |
| 4 | Certain infectious and parasitic diseases | 12.41% |
| 5 | Codes for special purposes ¹ | 6.31% |
| 6 | Diseases of the genitourinary system | 3.93% |
| 7 | Congenital malformations, deformations and chromosomal abnormalities | 3.75% |
| 8 | Diseases of the digestive system | 3.46% |
| 9 | Diseases of the nervous system | 1.13% |
| 10 | Endocrine, nutritional and metabolic diseases | 1.05% |
| 6 7 8 9 10 | Congenital malformations, deformations and chromosomal abnormalities Diseases of the digestive system Diseases of the nervous system | 3.75 3.46 1.13 |

¹ Refers to severe acute respiratory syndrome (SARS), COVID-19 and bacterial agents resistant to antibiotics

Ten Principal Causes of Hospitalisation in MOH & Private Hospital, 2021

| 1 | Pregnancy, childbirth and the puerperium | 16.95% |
|----|---|--------|
| 2 | Codes for special purpose ¹ | 14.41% |
| 3 | Diseases of the circulatory system | 7.93% |
| 4 | Certain conditions originating in the perinatal period | 7.73% |
| 5 | Diseases of the respiratory system | 7.22% |
| 6 | Injury, poisoning and certain other consequences of external causes | 5.95% |
| 7 | Diseases of the digestive system | 5.64% |
| 8 | Certain infectious and parasitic diseases | 4.75% |
| 9 | Neoplasms | 4.56% |
| 10 | Diseases of the genitourinary system | 4.44% |

¹ Refers to severe acute respiratory syndrome (SARS), COVID-19 and bacterial agents resistant to antibiotics

Incidence Rate and Mortality Rate of Communicable Diseases, 2021 (per 100,000 population)

| Communicable Diseases | Incidence Rate | Mortality Rate | | |
|---------------------------------|----------------|----------------|--|--|
| Food and Water Borne Diseases | | | | |
| Cholera | 0.20 | 0 | | |
| Dysentry | 0.61 | 0 | | |
| Food Poisoning | 18.40 | 0.00 | | |
| Hepatitis A | 0.07 | 0 | | |
| Typhoid And Paratyphi | 0.31 | 0.00 | | |
| Vaccine Preventable Disease | | | | |
| Diphtheria | 0.02 | 0.01 | | |
| Acute Poliomyelitis | 0 | 0 | | |
| Others Tetanus | 0.05 | 0.00 | | |
| Neonatal Tetanus | 0.05 | 0.01 | | |
| Pertussis | 0.03 | 0.01 | | |
| Hepatitis B | 11.58 | 0.17 | | |
| Other Specified Viral Hepatitis | 0.02 | 0 | | |
| Measles | 0.39 | 0 | | |
| Vector Borne Diseases | | | | |
| Chikungunya | 4.39 | 0 | | |
| Dengue Fever | 80.54 | 0 | | |
| Dengue Haemorrhagic | 0.20 | 0.06 | | |
| Japanese Encephalitis | 0.10 | 0.02 | | |
| Malaria | 11.29 | 0.04 | | |
| Plague | 0 | 0 | | |
| Relapsing Fever | 0 | 0 | | |
| Typhus | 0.03 | 0 | | |
| Yellow Fever | 0 | 0 | | |
| Zika Virus Infections | 0 | 0 | | |
| <u>Filariasis</u> | 0.82 | 0 | | |

Incidence Rate and Mortality Rate of Communicable Diseases, 2021 (cont'd) (per 100,000 population)

| Communicable Diseases | Incidence Rate | Mortality Rate |
|---------------------------------|----------------|----------------|
| Tuberculosis / Leprosy | | |
| Tuberculosis | 66.53 | 7.01 |
| Leprosy | 0.41 | 0.00 |
| Sexually Transmitted Infections | | |
| AIDS ¹ | 2.69 | 1.17 |
| HIV^1 | 8.45 | 0.42 |
| Chancroid | 0.00 | 0 |
| Gonorrhea | 4.47 | 0 |
| Syphilis | 10.60 | 0.06 |
| Hepatitis C | 8.59 | 0.16 |
| Zoonosis | | |
| Avian Influenza | 0 | 0 |
| Ebola | 0 | 0 |
| HFMD | 12.98 | 0 |
| Leptospirosis | 5.40 | 0.08 |
| Rabies | 0.03 | 0.03 |
| Viral Encephalitis | 0 | 0 |
| Nipah | 0 | 0 |
| Others Viral Encephalitis | 0 | 0 |
| Surveillance | | |
| Mers-Cov | 0 | 0 |
| COVID-19 | 8,099.97 | 94.98 |

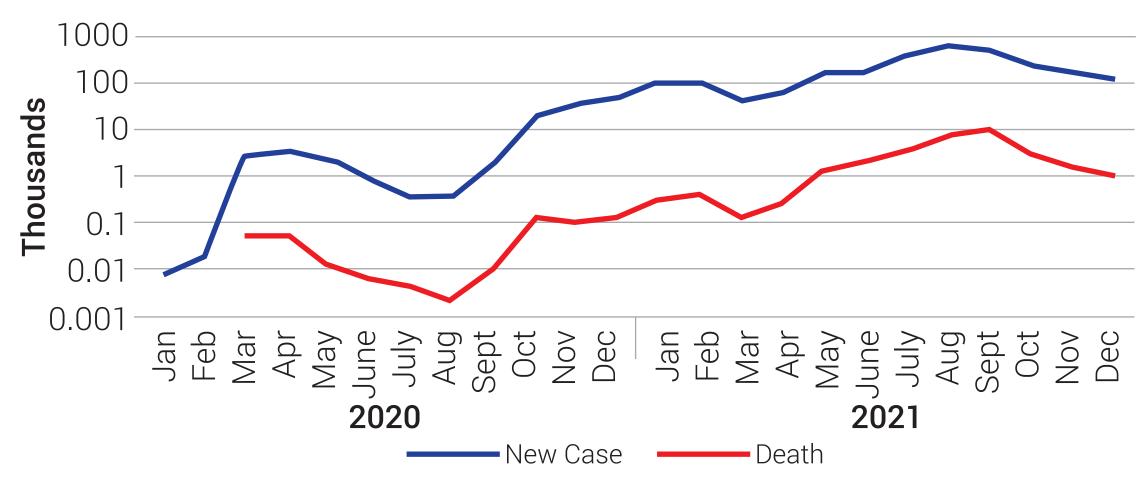
Notes:

0.00 Less than half the smallest unit shown. For example, less than 0.005 per cent Source: Disease Control Division, MOH

¹ Notification rate

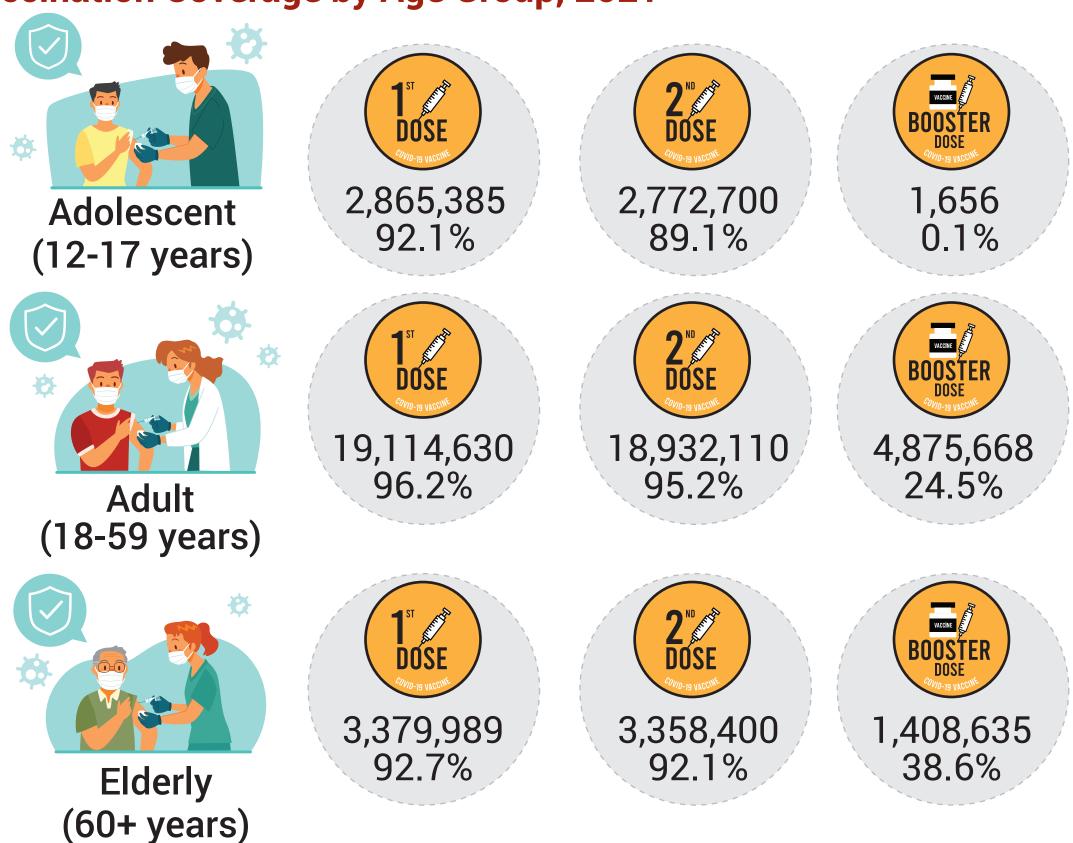
COVID-19 Facts, 2021

New Case and Death due to COVID-19, 2020 to 2021



Source: https://github.com/MOH-Malaysia/covid19-public, National CPRC, MOH

Vaccination Coverage by Age Group, 2021



Sources: 1. https://github.com/MOH-Malaysia/covid19-public, National CPRC, MOH

2. Current population estimates, 2021, DOSM

Childhood Immunisation Coverage, 2021

| BCG Immunisation Coverage of Infants ¹ | 98.80% |
|---|--------|
| DPT - HIB Immunisation Coverage of Infants (3 rd Dose) ^{2,p} | 94.24% |
| Polio Immunisation Coverage of Infants (3 rd Dose) ^{2,p} | 94.24% |
| MMR Immunisation Coverage of Children Aged 1 to < 2 years | 99.53% |
| Hepatitis B Immunisation Coverage of Infants (4 th Dose - Completed Dose) ^{2,p} | 92.96% |
| HPV Immunisation Coverage of Girls 13 years (2 nd Dose) ³ | 91.28% |

Notes:

Environmental Health for Rural Area¹, 2021

| Percentage of houses served with safe water supply | 97.04% |
|---|--------|
| Percentage of houses served with sanitary latrines | 96.38% |
| Percentage of houses served with sullage disposal | 67.79% |
| Percentage of houses served with solid waste disposal | 73.13% |

¹ Tuberculosis Information System (TBIS), Disease Control Division, MOH

² Denominator: Live births (DOSM, 2020)

³ Denominator: Female population aged 13 years (DOSM, 2021)

^p Preliminary

¹ Rural area refers to area outside of Local Authority/Municipality's operational area