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## **STATISTICAL RELEASE**

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# Recorded live births

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## Preface

This statistical release presents information on live births that occurred and were recorded in the South African birth registration system at the Department of Home Affairs up to 28 February 2022. Live births from 1997 to 2020 are also included to show patterns and trends in occurrence and registrations. The reporting of live births is analysed by year of birth registration (year of which the birth was captured in the system, irrespective of when it occurred) and year of birth occurrence (the year of which birth took place).



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## 1. Introduction

### 1.1 Background

All children have a right to a name, nationality and to have their birth officially registered as stipulated in the United Nations Convention on the Rights of the Child. Thus birth registration is mandatory for legalising the existence of a child. Without a legal identity, a child may potentially be precluded from economic and social opportunities later in life such as economic participation, or practising and accessing human rights. Goal 16.9 of the Sustainable Development Goals (SDGs) calls for the provision of legal identity for all, including birth registration (United Nations [UN], 2015). In doing so, this would aid in curbing abuse, exploitation, trafficking and all forms of violence and torture of children as noted in Goal 16.2 of the SDGs.

Birth registration in South Africa is governed by Act 51, the Births and Deaths Registration Act which was promulgated in 1992. The actual implementation of the birth registration process is carried out by the Department of Home Affairs (DHA). According to the Act, a birth ought to be registered within the period of 30 days from the day of occurrence using the DHA-24 form. However, if a birth is not registered within this timeframe, the Act allows for the late registration of births using the DHA-24/LRB form and supporting documentation is required to make the application. Late birth registration is classified into three categories: after 30 days but before 365 days, after one year but before age 15 years, and 15 years and older (DHA, 2014). After birth registration is completed, a birth certificate is issued to the applicant and information is captured on the birth register on a monthly basis. Thereafter Statistics South Africa (Stats SA) obtains the births data from the DHA in print form and bi-annually from the State Information Technology Agency (SITA). The South African government has made great strides in eliminating late registration of births through concerted efforts to actively reach those who are hard to reach. This is done by creating several mobile programs that essentially bring social services to communities, including birth registration, to children and their families living far from urban centres, as well as providing on-site registration facilities at designated hospitals with maternity units. This has resulted in the impressive improvement in registration of vital events in South Africa.

### 1.2 Objective of this statistical release

This statistical release has two main objectives, which are:

- To present information on the births that occurred and were registered at the DHA between January 2021 and February 2022.
- To show a historical pattern of birth occurrence and registration from 1998 to 2021

## 2. Data and methods

### 2.1 Data source

This statistical release is based on recorded live births data obtained from the DHA. The release includes current birth registrations and occurrences of live births for 2021 recorded for a period of 14 months covering January 2021 to February 2022. Additionally, information on late birth registrations i.e. births that occurred in 2020 and earlier years, but were captured between January 2021 and February 2022 are included. The age of the child at registration determines the categorisation of the birth. The data files received from DHA are based on this categorisation and include births registered:

- i. within 30 days;
- ii. after 30 days up to 365 days;
- iii. within one to 14 years;
- iv. within 15 years and older;
- v. births registered at health facilities.

The total number of birth registrations for the 2020 and 2021 period are shown in Table 1. As observed from Table 1 birth registrations for the period January 2020 and February 2021 are combined to arrive at the final birth registrations for the analyses in this release. The table indicates that 1 109 803 births were registered between January 2020 and February 2021, of these 34 756 late registrations for the earlier years were removed. A further 71 740 were subtracted for births registered in January to February 2021 as these were 2021 births which were already registered when data was requested from DHA.

Stats SA received 1 262 114 birth registration data pertaining to the year 2021, of these 80 291 were births that occurred earlier than 2021 but were only registered in January and February of 2021. Furthermore, 94 297 births were removed from 2021 birth registrations as they were 2022 births and will be included in the 2022 recorded live births publication. The final number of births that occurred in 2021 and were registered in the period 01 January 2021 and 28 February 2022 in South Africa was 1 087 526.

**Table 1: Birth registrations :2020–2021**

<b>2020</b>	<b>Number of birth registrations</b>
Total births registered January 2020 to February 2021	1 109 803
Births for 2019 and earlier years registered in January to February 2020	34 756
	<b>1 144 559</b>
Less 2021 births registered in January to February 2021	71 740
	<b>1 003 307</b>
<b>2021</b>	
Total births registered January 2021 to February 2022	1 262 114
Births for 2020 and earlier years registered in January to February 2021	80 291
	<b>1 342 405</b>
Less 2022 births registered in January to February 2022	94 297
	<b>1 087 526</b>

## **2.2 Assessment of the quality of data**

### **2.2.1 Completeness of birth registration**

A number of measures were introduced to improve timeliness of birth registration. The revision of registration regulations in 2014 introduced requirement for registration within 30 days of occurrence and associated penalties for late registrations (Republic of South Africa, 2010). Introduction of satellite offices within health facilities and mobile units are other measures towards improvement of births registration. Completeness of birth registration is a key measure of the quality of vital statistics data and an assessment of effectiveness and efficiency of processes at the DHA.

In previous statistical releases, Stats SA noted the method used in the estimation of completeness (Stats SA, 2016). The overall completeness of birth registration is maintained at 88,6% based on the 2011–2016 intercensal period. The completeness for the intercensal period 2016-2021 will be computed once Census 2022 data becomes available.

### **2.2.2 Timeliness of birth registration**

The Births and Deaths Registration Amendment Act (Act No. 18 of 2010), mandates that a birth must be registered within 30 days of occurrence (Republic of South Africa, 2010). Table 2 shows birth registration within 30 days over the period 2017 to 2021. There was an increasing trend in the proportion of births registered within 30 days of occurrence over the period 2017 to 2019, with a decline of 9, 2% observed in 2020 associated with national lockdown regulations which saw the closure of DHA offices and disruption of services such as birth registration over the period of the pandemic.

A slight increase of almost 4% in registration within 30 days in 2021. The increase in birth registrations within 30 days of occurrence attest to improving services in 2021 due to easing of the epidemic. An associated increase in late registrations of birth after the lapse of 30 days but before the end of the year was observed in 2020 to 24,7 with slight recovery to 19,7% in 2021 a decline of just above 4%. Late birth registrations for those aged 1–14 years constituted 4% of all registrations, whereas registrations of birth for persons aged 15 years and older constituted 1,6% with both depicting slight increases from the level observed in 2020. The observed trends are indicative of the continued efforts by the DHA to strengthen early registration through raising awareness and expediting birth registrations in line with legislation.

**Table 2: Distribution of birth registrations by the number of days it took to register the birth: 2017-2021**

Number of days/years	Number of birth registrations					Percentage*					Cumulative percentage*				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
0-30 days	768 418	803 286	840 746	710 814	811 622	77,7	79,6	80,0	70,8	74,6	77,7	79,6	80,0	70,8	74,6
31-364 days	151 145	143 260	132 367	248 209	214 578	15,3	14,2	12,6	24,7	19,7	92,9	93,8	92,6	95,6	94,4
1-14 years	45 271	39 219	50 580	31 332	44 278	4,6	3,9	4,8	3,1	4,1	97,5	97,7	97,4	98,7	98,4
15 years and older	24 484	23 300	27 618	12 952	17 048	2,5	2,3	2,6	1,3	1,6	100,0	100,0	100,0	100,0	100,0
<b>Total</b>	<b>989 318</b>	<b>1 009 065</b>	<b>1 051 311</b>	<b>1 003 307</b>	<b>1 087 526</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>					

\*Percentages may not add up to 100 due to rounding off.



### 2.2.3 Year-on-year changes in birth registration

Annual percentage changes in the number of births registered by age in days or years for the period 2017 to 2021 are shown in Table 3. Increases were observed in the number of births registered within 30 days over the period save for the 2019-2020 period, while decreases were observed in the number of births registered after 30 days. Number of births within 30 days declined drastically in 2019-2020, with an unusually large increase in 2020-2021 (14%), which might be a recovery from the COVID-19 pandemic.

Regarding births registered from 31 to 364 days, the year on year percentage changes are all negative except the 2019-2020 period, which signifies a decline in the number of days it took to register the birth. The declines in 2020-2021 are also much higher (13,5%) than observed in previous years. Births registered between one to fourteen years after birth showed a drastic decline during the 2019-2020 period, while increasing in 2020-2021, also departing from previous trends. These unusual annual changes are also observed for births registered 15 years and later after birth, with decline of 53% and recovery to 31,6% in 2020-2021.

**Table 3: Year on year changes in the number of days/years it took to register the birth: 2017-2021**

Number of days/years	Number of birth registrations					Percentage changes			
	2017	2018	2019	2020	2021	2017-2018	2018-2019	2019-2020	2020-2021
0-30 days	768 418	803 286	840 746	710 814	811 622	4,5	4,7	-15,5	14,2
31-364 days	151 145	143 260	132 367	248 209	214 578	-5,2	-7,6	87,5	-13,5
1-14 years	45 271	39 219	50 580	31 332	44 278	-13,4	29,0	-38,1	41,3
15 years and older	24 484	23 300	27 618	12 952	17 048	-4,8	18,5	-53,1	31,6
<b>Total</b>	<b>989 318</b>	<b>1 009 065</b>	<b>1 051 311</b>	<b>1 003 307</b>	<b>1 087 526</b>	<b>2,0</b>	<b>4,2</b>	<b>-4,6</b>	<b>8,4</b>

### 2.2.4 Data confrontation, DHIS

A comparison between data from District Health Information System (DHIS), National Population Register, DHA data obtained through direct connect and DHA data obtained through SITA for births that occurred in the year 2021 is depicted on Table 4. The DHIS birth data is information on births occurring within public health facilities. It is a system of registers, tally sheets, and monthly data collation forms. The collated data is sent monthly from district or sub-district level to be captured onto computers using DHIS software (Mate *et al*, 2009). If all births that occur within a given year are registered with the DHA, the number of occurrence and DHIS must be consistent save for the small proportion that occurs in the private sector.

Generally, the number of births are higher in the DHIS. The highest number of births were recorded in March for all data sources, but the highest number was captured in the DHIS (92 385). The lowest number of birth occurrences was recorded in the DHA (direct connect) in January, with only 63 540 births. With the exception of the deviation observed in January, the pattern across the four data sources are consistent from month to month.

**Table 4: Data confrontation: 2021**

Birth Month	DHIS	DHA (Direct connect)	DHA (SITA)	NPR
January	86 337	63 540	83 883	82 663
February	82 595	80 664	80 893	79 655
March	92 385	90 607	90 968	89 654
April	87 793	84 883	85 587	84 374
May	91 737	88 040	89 105	87 910
June	87 089	83 311	84 585	83 515
July	86 121	81 792	83 474	82 468
August	84 512	79 444	81 082	80 193
September	86 025	80 108	82 198	81 296
October	78 933	72 199	74 541	73 723
November	78 900	71 338	74 450	73 670
December	83 050	73 831	78 863	78 145

### 2.3 Data analysis

This release includes descriptive analyses using both bivariate and univariate analyses. Additionally, it also includes trends or patterns of median ages at birth together with cross-tabulations. Analyses were mainly on birth occurrences and registered births. Socio-demographic indicators covered include but are not limited to, age of the mother, sex of the child, and province of birth registration. Furthermore, statistics on months of birth occurrence, baby forenames and surnames are covered.

### 3. Birth registrations

#### 3.1 Trends in birth registration

This section reports on the total number of birth occurrences registered at the DHA offices between 1998 and 2021. It is the combination of both current registrations (live births occurring in a specific year and registered within the same year) and late registrations (live births registered later than the year of birth).

Table 5 shows the number and proportion of birth registrations by status of registration for the period 1998 to 2021. Generally, birth registrations in South Africa have been consistently more than a million each year with the exception of the years 2016 and 2017, where birth registrations were less than one million. Over the 23-year period, the year 2003 had the highest number of birth registrations compared to any other year at 1 677 415. It is also worth noting that in the period 1998–2004, the proportion of late birth registrations was higher than current birth registrations. Over time, the proportion of late registration constantly declined, from 77,5 % in 1998 to as low as 8.1% in 2018, and the sharpest decline was between 2003 and 2004. Current registrations have also been characterised by a year on year increase with the highest number of current registrations recorded in 2019 (954 532). It is also worth noting that in recent years (2011–2021) the gap between current and late registrations has increased. Late registrations peaked in 2003 (1 055 528), which was the highest level for late registrations in the 23-year period (but late registrations were approximately 63% of the total registration which was comparable to the proportion in the previous year). The decline indicates an improvement in current registrations as an outcome of the DHA's concerted efforts aimed at universal and early birth registration. It however appears that between 2016 and 2021, there are fluctuations for the proportion of late registrations.

**Table 5: Birth registrations by status of registration, South Africa: 1998–2021**

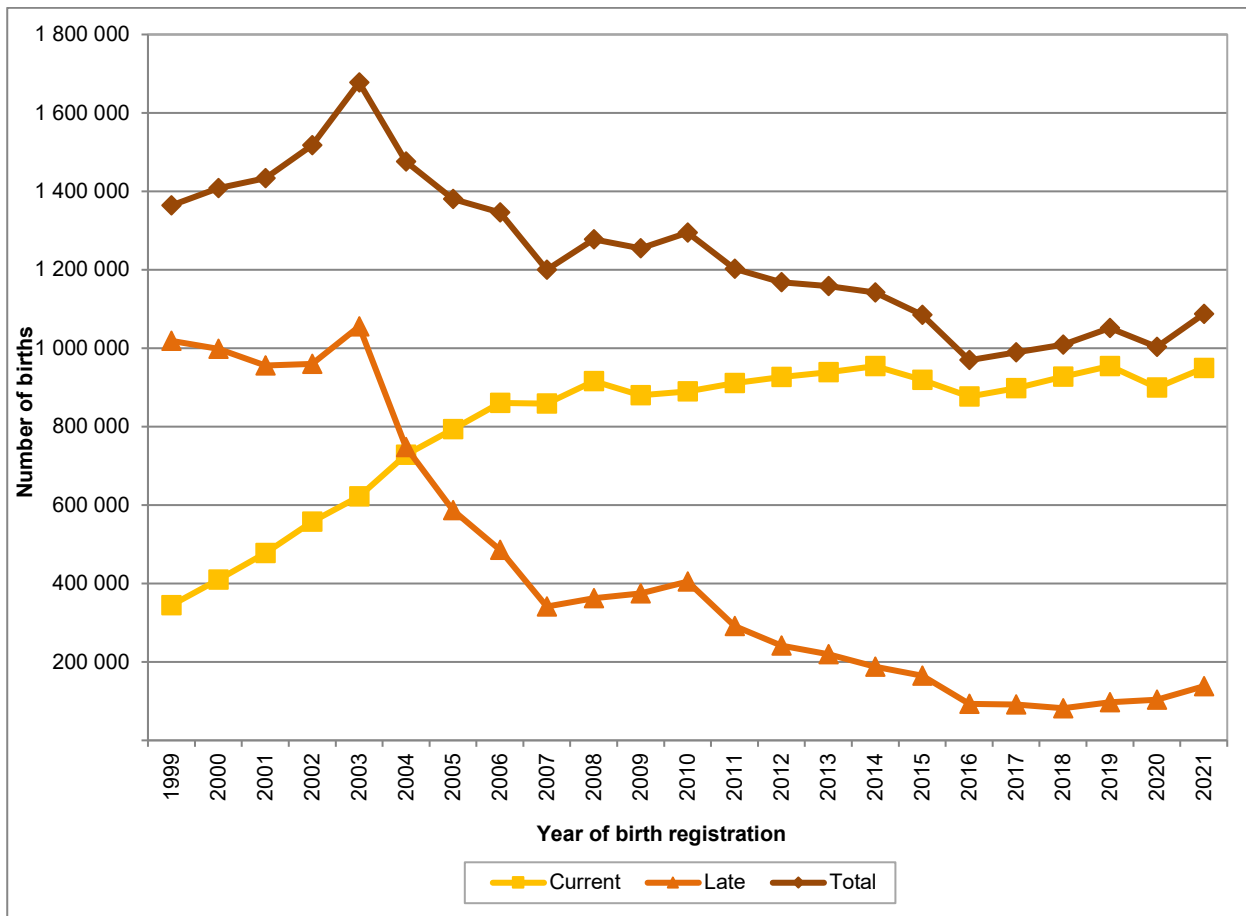
Year of registration	Number of birth registrations			Percentages		
	Total	Current	Late	Total	Current	Late
1998	1 216 337	273 180	943 157	100,0	22,5	77,5
1999	1 363 800	344 700	1 019 100	100,0	25,3	74,7
2000	1 407 833	409 707	998 126	100,0	29,1	70,9
2001	1 433 432	477 489	955 943	100,0	33,3	66,7
2002	1 517 671	557 573	960 098	100,0	36,7	63,3
2003	1 677 415	621 887	1 055 528	100,0	37,1	62,9
2004	1 475 809	728 283	747 526	100,0	49,3	50,7
2005	1 380 496	793 788	586 708	100,0	57,5	42,5
2006	1 346 119	860 263	485 856	100,0	63,9	36,1
2007	1 199 712	858 866	340 846	100,0	71,6	28,4
2008	1 277 763	915 674	362 089	100,0	71,7	28,3
2009	1 254 707	879 707	375 000	100,0	70,1	29,9
2010	1 294 694	889 691	405 003	100,0	68,7	31,3
2011	1 202 377	911 353	291 024	100,0	75,8	24,2
2012	1 168 403	926 726	241 677	100,0	79,3	20,7
2013	1 158 622	939 011	219 611	100,0	81,0	19,0
2014	1 142 275	954 385	187 890	100,0	83,6	16,4
2015	1 084 511	919 562	164 949	100,0	84,8	15,2
2016	969 415	876 435	92 980	100,0	90,4	9,6
2017	989 318	897 750	91 568	100,0	90,7	9,3
2018	1 009 065	927 113	81 952	100,0	91,9	8,1
2019	1 051 311	954 532	96 779	100,0	90,8	9,2
2020	1 003 307	899 303	104 004	100,0	89,6	10,4
2021	1 087 526	949 757	137 769	100,0	87,3	12,7

Figure 1 shows the trends and patterns of birth registrations by status of registration for the years 1999 to 2021, categorised by status of registration. Total birth registrations increased sharply from 1999 peaking in 2003 with a total of 1 677 415. Thereafter, registrations steadily declined to as low as 969 415 in 2016. There was an upward change from 2017 to 2021 as birth registrations continued to increase year on year.

Overall, current registrations have been characterised by a year on year increase from 1999 with the highest number of current registrations recorded in 2019 (954 532). It is also worth noting that in recent years (2011–2021) the gap between current and late registrations has increased, with 2018 having the widest gap since 1999.

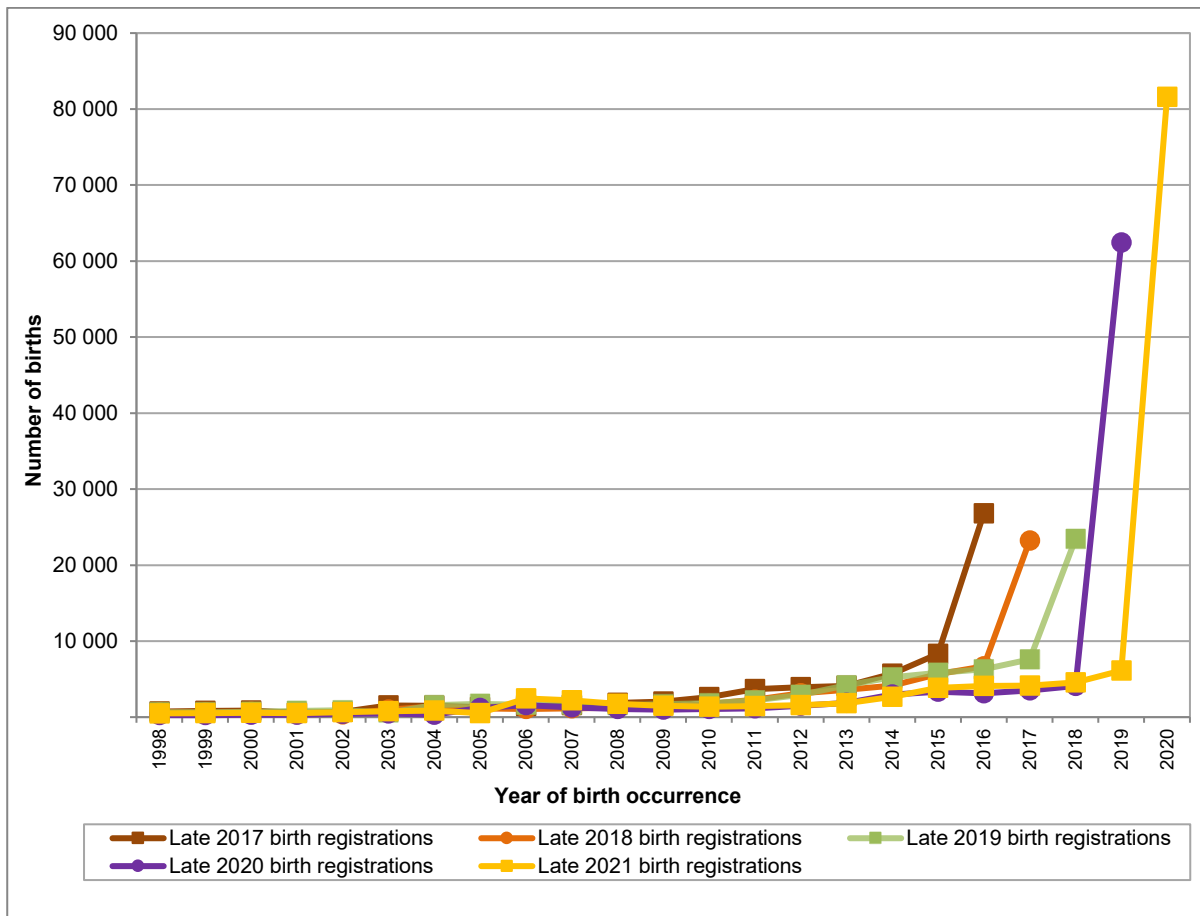
Late registrations decreased between 2000 and 2001 and then peaked in 2003 (1 055 528), which was the highest level for late registrations in the 23-year period. Late registrations were lowest in 2018 with only 81 952 late birth registrations.

**Figure 1: Birth registrations by status of registration, South Africa: 1999–2021**



The overall number of late birth registrations between the years 1998–2020 is shown in Figure 2. For almost all the years, late registrations were highest in the year prior to the year of reporting, which means that the year preceding the reporting period makes up the majority of late registrations. Furthermore, the figure also shows that late registrations have declined over the period.

**Figure 2: Late birth registrations by year of birth, South Africa: 1998–2020**



### 3.2 Birth registrations by selected variables

#### 3.2.1 Age of the mother

Table 6 below describes the number and percentage distribution of registered births by age of the mother and status of registration. The table shows that the age group 25–29 years accounted for the highest number of total birth registrations (265 398), followed by 20–24 years and 30–34 years. These three age groups accounted for 67,9% of all registrations. The lowest number of births (351) occurred for the 50–54 years age group.

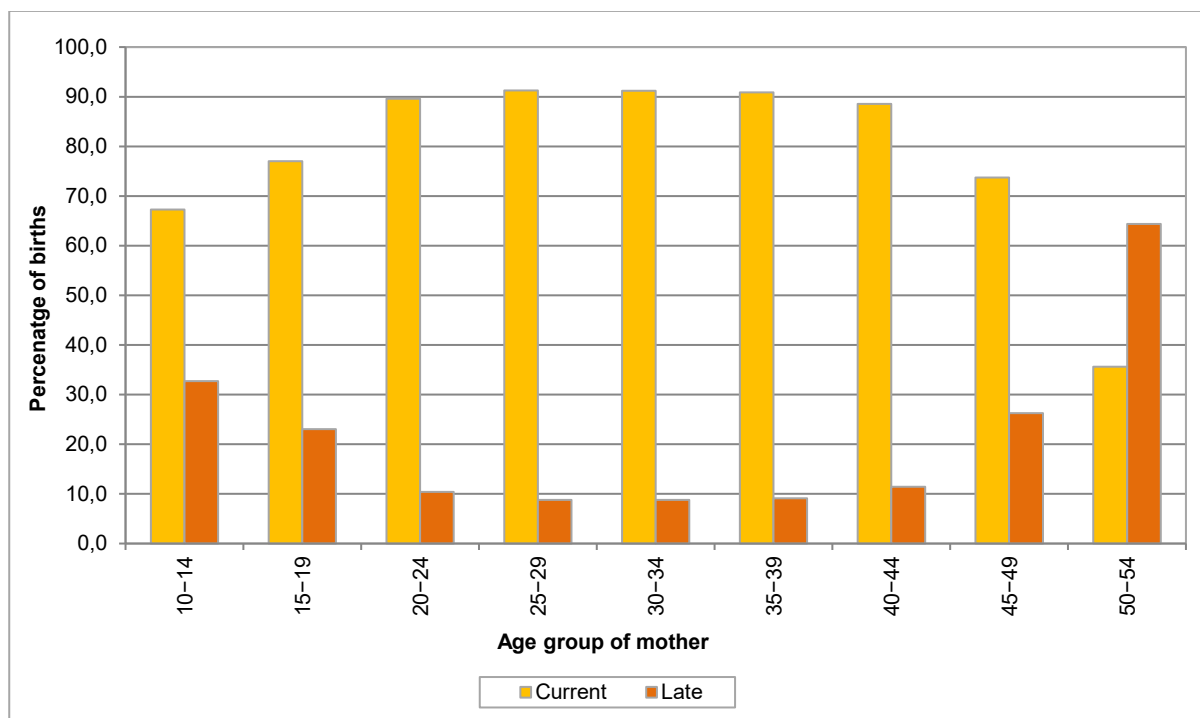
With regards to status of birth registration, mothers aged 25–29 and those aged 30–34 years as well as 35–39 years had approximately 90% of their births registered within the year of occurrence. A high proportion of births registered later than the year of occurrence was observed for age groups 50–54 years (64,4%) and 10–14 years (32,7%), this is consistent with previous years. Almost 78% of births were registered late for mothers within the unspecified and those outside the 10–54 years age range category.

**Table 6: Birth registrations by age of mother and status of registration, South Africa: 2021**

Age of mother	Number of birth registrations			Percentage		
	Total	Current	Late	Total	Current	Late
10-14	4 042	2 720	1 322	100,0	67,3	32,7
15-19	138 662	106 744	31 918	100,0	77,0	23,0
20-24	245 761	220 163	25 598	100,0	89,6	10,4
25-29	265 398	242 136	23 262	100,0	91,2	8,8
30-34	227 288	207 282	20 006	100,0	91,2	8,8
35-39	141 000	128 143	12 857	100,0	90,9	9,1
40-44	39 836	35 279	4 557	100,0	88,6	11,4
45-49	3 315	2 445	870	100,0	73,8	26,2
50-54	351	125	226	100,0	35,6	64,4
Unspecified/outside the 10-54 age range	21 873	4 720	17 153	100,0	21,6	78,4
<b>Total</b>	<b>1 087 526</b>	<b>949 757</b>	<b>137 769</b>	<b>100,0</b>	<b>87,3</b>	<b>12,7</b>

Figure 3 shows the proportion of birth registrations by registration status and age of the mother. Current birth registrations were higher than late birth registrations for all age groups with the exception of mothers aged 50-54 years. The figure also depicts that current birth registrations increase as the mother age increase, until the age group 30-34 years, after which current birth registrations decrease with the increasing age of mothers.

**Figure 3: Birth registrations by age of mother and status of registration, South Africa: 2021**



### 3.2.2 Province of birth registration

Province of birth occurrence in this statistical release is based on the 2016 municipal boundaries. Information on office of birth registration is provided by the DHA, which Stats SA then uses to derive province of birth registration. It must be noted that for persons 15 years and older, the majority of registrations are allocated to the City of Tshwane metropolitan municipality in Gauteng province, which is where late registrations from 15 years and above are centralised for processing.

Figure 4 illustrates the distribution of all births registered in 2021 by province of registration and registration status according to the following four categories:

- i. 0–30 days: registered within the time stipulated by law (classified as current registrations)
- ii. 31–364: registered after a month but within a year
- iii. 1–14 years: registered between one year and 14 years
- iv. 15 years and above: registered from 15 years

The highest number of total births were registered in Gauteng (254 952) followed by KwaZulu-Natal (219 290) and Limpopo (134 056). For all the provinces, there were more births registered within 0–30 days than in the 31–364 days category, although the difference was marginal for the Northern Cape province. Gauteng the highest number of births registered within 0–30 days at 181 470, followed by KwaZulu-Natal with 148 413, whereas Northern Cape had the lowest number of births registered within 30 days at 21 787. KwaZulu-Natal had the highest number of births registered within 31–364 days (67 115) followed by Gauteng at 33 952. As mentioned previously, due to the centralisation of registrations for persons 15 years and above, Gauteng (16 723) had the highest number of birth registrations in this age category.



**Figure 4: Number of birth registrations by province of birth registration and status of registration, South Africa: 2021**

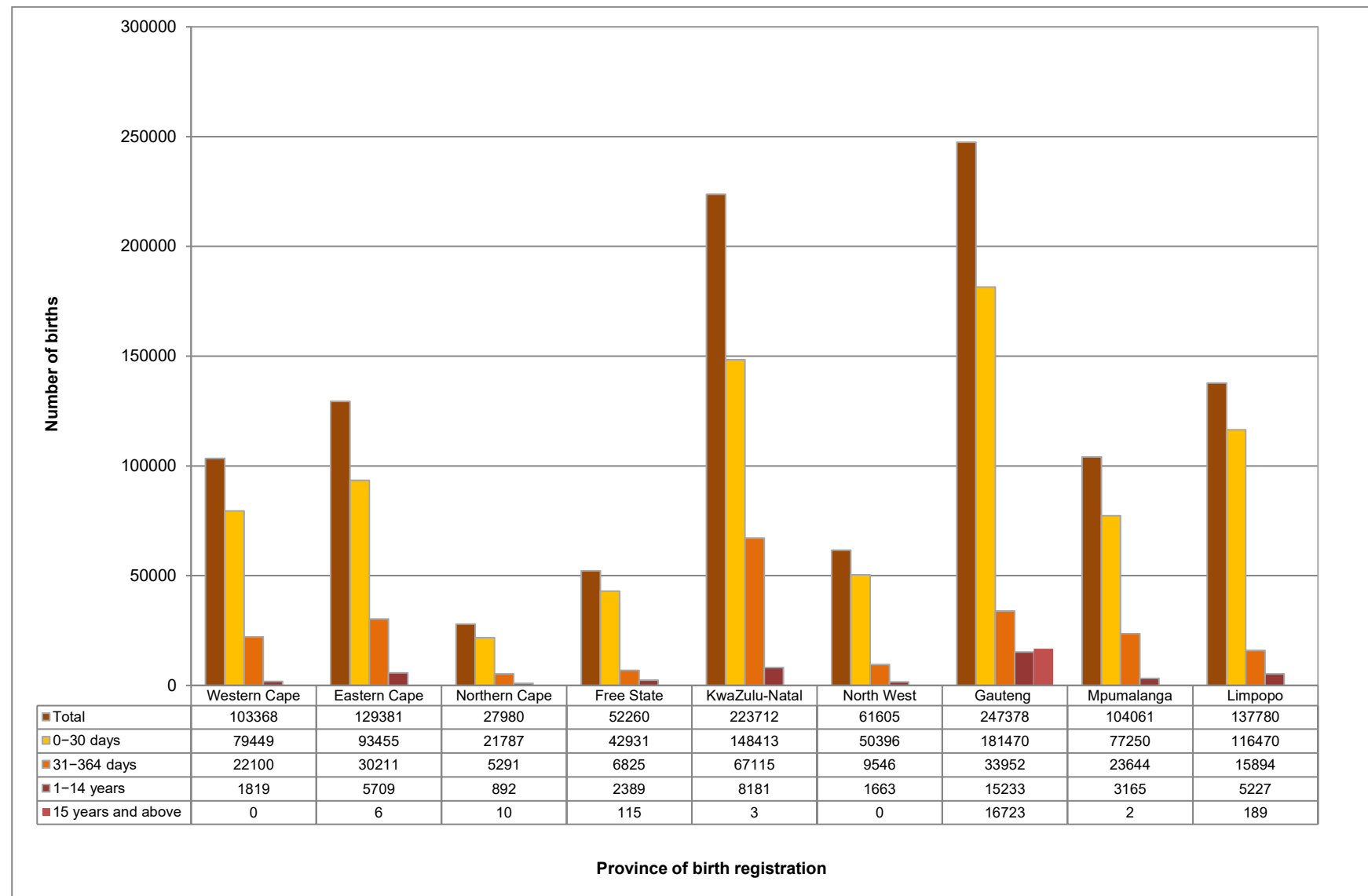
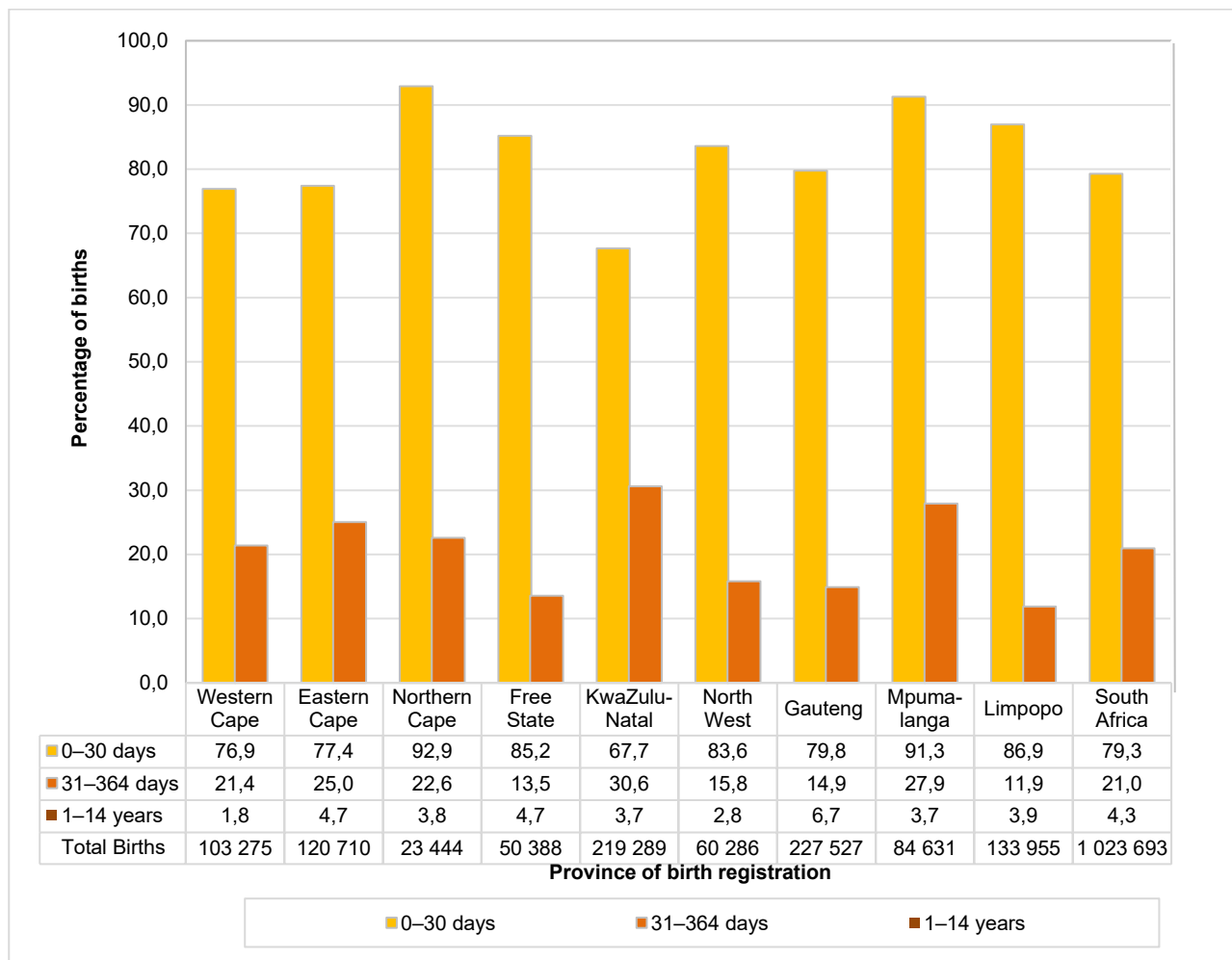


Figure 5 shows the percentage distribution of the total (1,023,693) registered birth occurrences for 2021 by province of birth registration and status of registration. The figure shows that Northern Cape (92,9%) is in the lead with registrations of birth within 30 days. It is closely trailed by Mpumalanga (91,3%) and Limpopo (86,9%). The provinces with the lowest proportions were KwaZulu-Natal (67,7%), and Western Cape (76,9%).

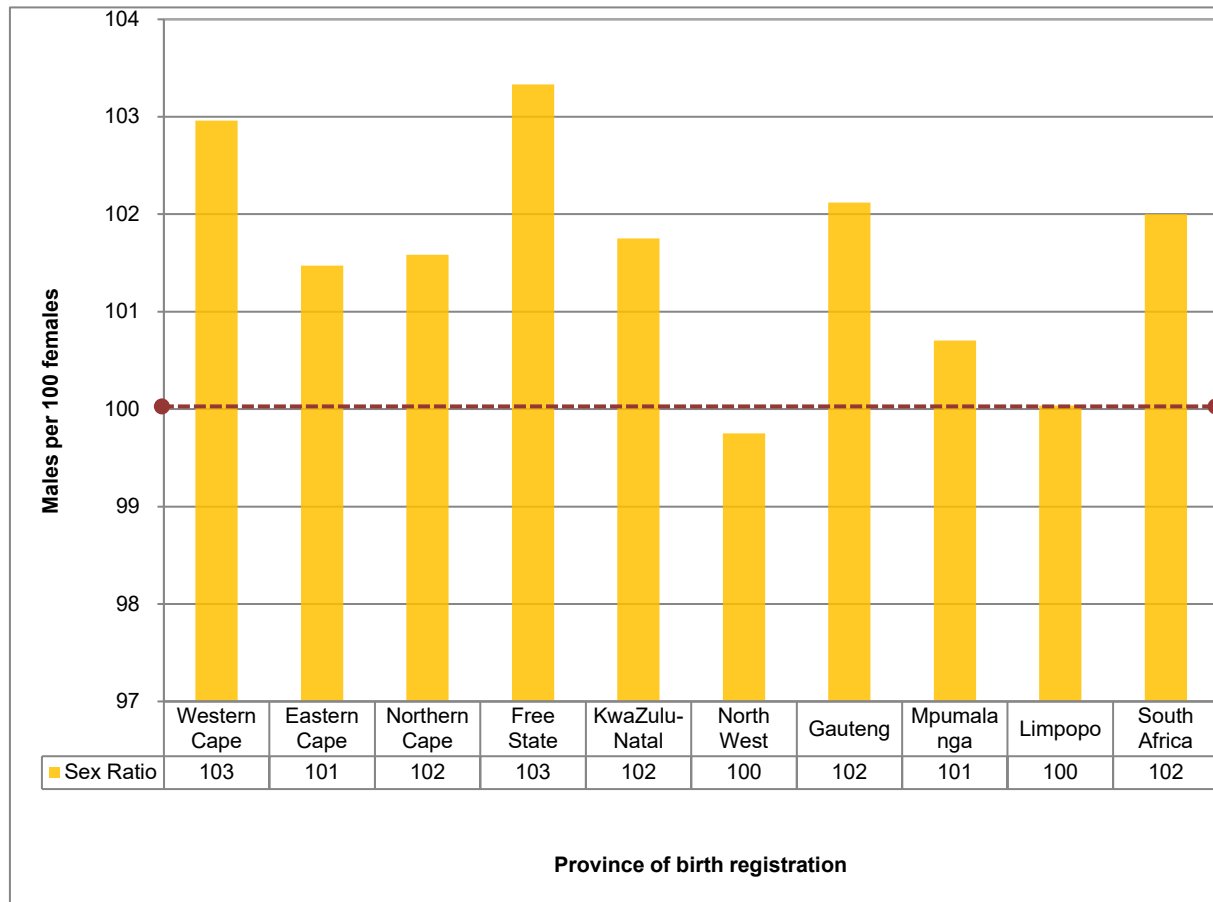
**Figure 5: Percentage of birth registrations by province of birth registration and status of registration, South Africa: 2021**



**3.2.3 Sex of the child**

The sex ratio at birth is defined as the number of male births per 100 female births. A ratio of 100 indicates an equal number of male births for every female birth, whereas a number less than 100 indicates relatively more female births and a number above 100 indicates more male births. Sex ratios at birth by provincial distribution are presented in Figure 6. South Africa had a sex ratio of 102 males per 100 females indicating that there were more male birth registrations than female birth registrations in 2021. Three out of nine provinces had a sex ratio of 102 male birth registrations per 100 female birth registrations. These were Northern Cape, KwaZulu-Natal and Gauteng. Western Cape had the highest sex ratio at 103, whereas North West and Limpopo had the lowest sex ratio at 100 male birth registrations per 100 female birth.

**Figure 6: Sex ratios by province of birth registration, South Africa: 2021**



## 4. Birth occurrences

This section covers data on birth occurrences as reported from two different sources. First it profiles 2021 birth occurrences extracted from the National Population Register (NPR) as of the 31 July 2022. Secondly it profiles birth occurrences based on transaction files received by Statistics South Africa from DHA through SITA using a cloud service solution. Generally, births from the latter are less than births from the former source due to the difference in cut off dates. The cut-off date for births from NPR is 31 July 2022 while for the transaction files the cut-off date was 28 February 2022. Each time a birth for any particular year is registered, the birth occurrences for that particular year are updated to include those that were registered late for both data sources. It is for this reason that information on birth occurrences varies each time data are extracted from these two sources.

Table 7 shows the total birth occurrences as at 28 February 2022, and updated birth occurrences as at 31 July 2022 for the period 1998 to 2021. It is observed that by 28 February 2022, a total of 949 757 births that occurred in 2021 were registered, increasing to 989 629 by 31 July 2022. This indicates that between 28 February 2022 and 31 July 2022, the national birth register was updated by 39 872 births that occurred in 2021. This follows the general trend which has been observed in all the previous reports whereby birth occurrences indicate an increase between the two reference periods. This is indicative of the continuous updating of the national birth registration system.

The pattern on birth occurrences for the period 1998–2021 shows that since 2004, the number of registered births exceeded a million, with the exception of the four years (2015–2021) where the number of birth occurrences registered were less than 1 million. In general, updated birth occurrences as at the last day of Ju for each observation period exceed those from February of the same observation period.

**Table 7: Birth occurrences by year of birth and reference period, South Africa: 1998–2021**

Year of birth occurrence	Birth occurrences	Updated Birth occurrences
	(as at 28 Feb. 2022)	(as at 31 Jul. 2022)
1998	909 015	953 359
1999	939 611	969 214
2000	938 694	981 695
2001	932 969	964 423
2002	921 349	974 995
2003	930 201	970 273
2004	1 019 407	1 028 735
2005	1 066 044	1 070 294
2006	1 096 314	1 101 771
2007	1 082 797	1 088 157
2008	1 101 729	1 111 859
2009	1 038 915	1 060 393
2010	1 029 579	1 033 643
2011	1 038 652	1 042 618
2012	1 034 708	1 042 970
2013	1 027 583	1 029 784
2014	1 028 188	1 033 332
2015	977 862	983 124
2016	922 240	925 044
2017	934 847	937 789
2018	957 742	963 508
2019	974 512	982 642
2020	985 586	999 509
2021	949 757	989 629
<b>Average over 24 years</b>	<b>1 036 448</b>	<b>1 053 859</b>

#### 4.1 Birth occurrences as at 28 February 2022

Table 8 shows the number of births that occurred over the 20-year period 2001 to 2021 ordered by year of birth occurrence and year of birth registration. For each year, births registered within the year they occurred and births registered later than the year of their occurrence are shown. The figures in bold indicate all births that occurred and were registered within the same year of occurrence, while the rest represent late birth registrations, indicating births that occurred in the previous year(s) but were only registered in the later year(s). The 'Total' row shows the updated number of births registered up to the end of February 2022.

Over the 21-year period birth occurrences have been improving with time. The total number of births that occurred and were registered for the year 2021 was 949 757. This number is expected to increase in the next report because it only refers to births registered within the year of occurrence. The average number of birth occurrences for a particular year increases due to updating of the national birth register with late registrations. The table further shows a clear pattern whereby the highest number of late registrations was registered during the year immediately following the year of birth occurrence. Additionally, late registrations have been decreasing over time, with increases in birth registration during the year of occurrence.

**Table 8: Birth occurrences (as at end of February 2022) by year of birth occurrence and year of birth registration, South Africa: 2001–2021**

Year of birth registration	Year of birth occurrence																				
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2001	477 489																				
2002	218 256	557 573																			
2003	94 588	194 204	621 887																		
2004	48 197	63 234	165 662	728 283																	
2005	23 798	27 701	43 404	150 546	793 788																
2006	24 057	26 042	34 601	54 941	154 331	860 263															
2007	15 200	16 766	20 009	26 769	42 569	126 358	858 866														
2008	8 722	11 378	14 085	17 869	23 732	40 554	128 336	915 674													
2009	5 072	6 053	8 322	11 793	14 208	19 510	31 885	101 743	879 707												
2010	3 535	3 844	4 852	7 623	10 566	13 736	19 323	30 164	91 064	889 691											
2011	2 632	2 743	3 457	4 763	7 298	10 111	12 628	16 091	23 665	80 079	911 353										
2012	2 139	2 259	2 644	3 301	4 578	6 599	9 104	10 776	13 065	21 005	74 374	926 726									
2013	1 904	1 925	2 357	2 800	3 590	4 742	6 914	9 018	9 938	12 978	21 023	66 775	939 011								
2014	1 802	1 866	1 950	2 261	2 673	3 241	4 122	6 039	7 390	8 418	10 898	16 147	55 202	954 385							
2015	2 256	1 838	1 759	1 874	2 151	2 489	2 892	3 476	4 908	6 290	7 197	8 882	14 125	46 754	919 562						
2016	626	1 098	1 072	1 084	1 010	1 186	1 468	1 675	1 973	2 901	3 556	3 771	4 470	7 601	32 680	876 435					
2017	465	699	1 218	1 206	1 148	1 239	1 350	1 585	1 768	2 233	3 153	3 220	3 532	5 032	7 355	25 885	849 918				
2018	755	384	1 313	1 671	1 331	1 296	1 367	1 512	1 677	2 155	2 797	3 865	4 197	4 834	6 605	7 595	71 050	879 273			
2019	685	713	429	1 543	1 353	1 349	1 289	1 322	1 438	1 539	1 869	2 465	3 522	4 308	4 912	5 394	6 580	70 214	906 499		
2020	273	385	404	203	1 204	1 186	1 061	899	822	927	981	1 289	1 677	2 619	2 885	2 818	3 167	3 668	61 870	903 997	
2021	518	644	776	877	514	2 455	2 192	1 755	1 500	1 363	1 451	1 568	1 847	2 655	3 863	4 113	4 132	4 587	6 143	81 589	949 757
<b>Total</b>	<b>932 969</b>	<b>921 349</b>	<b>930 201</b>	<b>1 019 407</b>	<b>1 066 044</b>	<b>1 096 314</b>	<b>1 082 797</b>	<b>1 101 729</b>	<b>1 038 915</b>	<b>1 029 579</b>	<b>1 038 652</b>	<b>1 034 708</b>	<b>1 027 583</b>	<b>1 028 188</b>	<b>977 862</b>	<b>922 240</b>	<b>934 847</b>	<b>957 742</b>	<b>974 512</b>	<b>985 586</b>	<b>949 757</b>

## 4.2 Birth occurrences registered within 30 days from date of birth

According to Births and Deaths Registration Amendment Act (Act No. 18 of 2010) all births must be registered within 30 Days of birth. Birth can be registered by a parent, guardian or any other person legally responsible for the child at DHA offices. Births occurring to South Africans (or where one of the parents is South African) outside the country, can be registered at the nearest embassy or mission. This is in line with the World Health Organization which advocates for a functional civil registration that is up to date and reliable for evidence-based decision-making (World Health Organization (WHO), 2013). The DHA has opened satellite offices in some health facilities throughout the country, to help register the birth of a child immediately. This was an effort to ensure that parents do not leave a hospital or health facility without registering the birth of their child and receiving a birth certificate. Registration of birth after 30 days is considered a late registrations and additional requirements apply.

As mentioned earlier in the release, timely birth registration is mandated in terms of the Births and Deaths Registration Amendment Act. Accordingly, the tabulation of month of birth occurrence by month of birth registration provides necessary information for evaluating progress towards this requirement.

Table 9 shows the distribution of births by month of birth occurrence and month of birth registration. This provides information on assessing and evaluating adherence progress towards the 30-day legislation. The table shows that a total of 794 346 births that occurred in 2021 were registered within 30 days from the date of occurrence. Proportionally, 83,6% births which occurred in 2021 were registered within the 30-day period.

The month of March had the highest number of births (77 328) that were registered within the 30-day time frame followed by May (74 008) and April (71 696). However, this does not necessarily mean that parents who gave birth in March and May were more compliant to the 30-day legislation as there were also more birth occurrences in March and May compared to other months. Births registered in January also show unusual decline, with only 16 838 births registered within 30 days during this month (enquires sent to DHA on this decline could not be clarified in time for this publication).

**Table 9: Number of births registered within 30 days of occurrence by month of birth occurrence and month of birth registration, South Africa: 2021**

Month of birth registration	Month of birth occurrence												Total
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
January	16 838												16 838
February	29 803	35 716											65 519
March	132	31 416	58 398										89 946
April			18 930	46 196									65 126
May				25 500	48 078								73 578
June					25 930	43 301							69 231
July						24 477	40 250						64 727
August							26 234	40 833					67 067
September								25 808	41 974				67 782
October									26 359	39 355			65 714
November										23 408	40 168		63 576
December											21 712	37 270	58 982
January												26 260	26 260
<b>Total</b>	<b>46 773</b>	<b>67 132</b>	<b>77 328</b>	<b>71 696</b>	<b>74 008</b>	<b>67 778</b>	<b>66 484</b>	<b>66 641</b>	<b>68 333</b>	<b>62 763</b>	<b>61 880</b>	<b>63 530</b>	<b>794 346</b>



#### 4.2.1 Age of the mother for births occurring in 2021

Information on the mother's age is useful when developing maternal and child health policies and planning for the provision of healthcare services. Children born to older mothers are at higher risk of certain chromosomal conditions, such as Down syndrome, and the risk of pregnancy loss is higher (Kathleen et al., 2018). This may be because of pre-existing medical conditions or chromosomal conditions in the baby. Information on the age of the mother at the birth of child is crucial for planning, monitoring and evaluation of programmes focusing on maternal and child health, social welfare, access to family planning, curbing teenage pregnancies and safe motherhood initiatives (United Nations, 2015). Form DHA-24 makes provision for the inclusion of the mother's details, making it possible to derive the mother's age at birth of her child.

Table 10 shows the distribution of births occurring in 2021 by age of the mother. Women aged 25–29 had the highest percentage of births (25,5%), closely followed by women aged 20–24 (23,2%) and those aged 30–34 (21,8%). Mothers aged 40–54, including mothers with unspecified age, accounted for a lower proportion of births (4,0%). This is to be expected, as the probability to conceive decreases as women get older. Less than 1% of births in 2021 occurred to teenage mothers aged 10–14 years, consistent with previous years.

**Table 10: Number and percentage of births by age of mother, South Africa: 2021**

Age of mother	Number of birth occurrences	Percentage
10–14	2 720	0,3
15–19	106 744	11,2
20–24	220 163	23,2
25–29	242 136	25,5
30–34	207 282	21,8
35–39	128 143	13,5
40–44	35 279	3,7
45–49	2 445	0,3
50–54	125	0,0
Unspecified/outside the 10–54 age range	4 720	0,5
<b>Total</b>	<b>949 757</b>	<b>100,0</b>

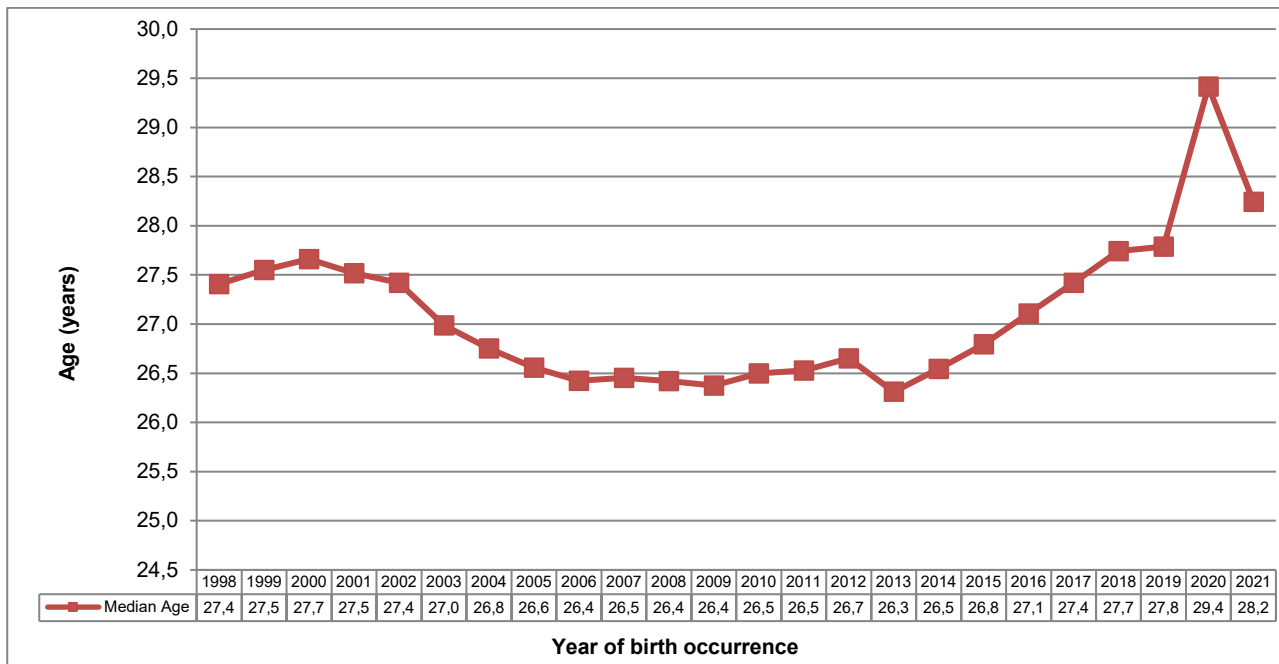
#### 4.2.2 Median age of mothers from 2000 to 2021

The median age of mothers i.e. the age that divides the mothers in two parts of equal size, is shown in Figure 7. A higher median age indicates that, on average, childbearing occurs at older ages and the opposite is true for a lower median age. Figure 6 shows the median ages of mothers for births occurring between 1998 and 2021 (updated with late registrations). It is observed that on average the median ages of mothers for the years 1998 to 2021 ranged from 26 to 29 years.

The median age decreased consistently from 27,7 years (2000) to 26,4 years in 2006 and further decreased to 26,3 years in 2013. Thereafter it increased from 26,5 in 2014 to a high of 29,4 in 2020 then decreasing to 28,2 in 2021. The increase in median ages for 2020 was due to lower than normal number of birth registrations for those ages between 15 and 19 (this age group typically report births much later than older age groups), the

dip observed in 2020 might be due to the effect of COVID-19 pandemic on willingness to report births to DHA offices by this group. These births are expected to be registered in subsequent years.

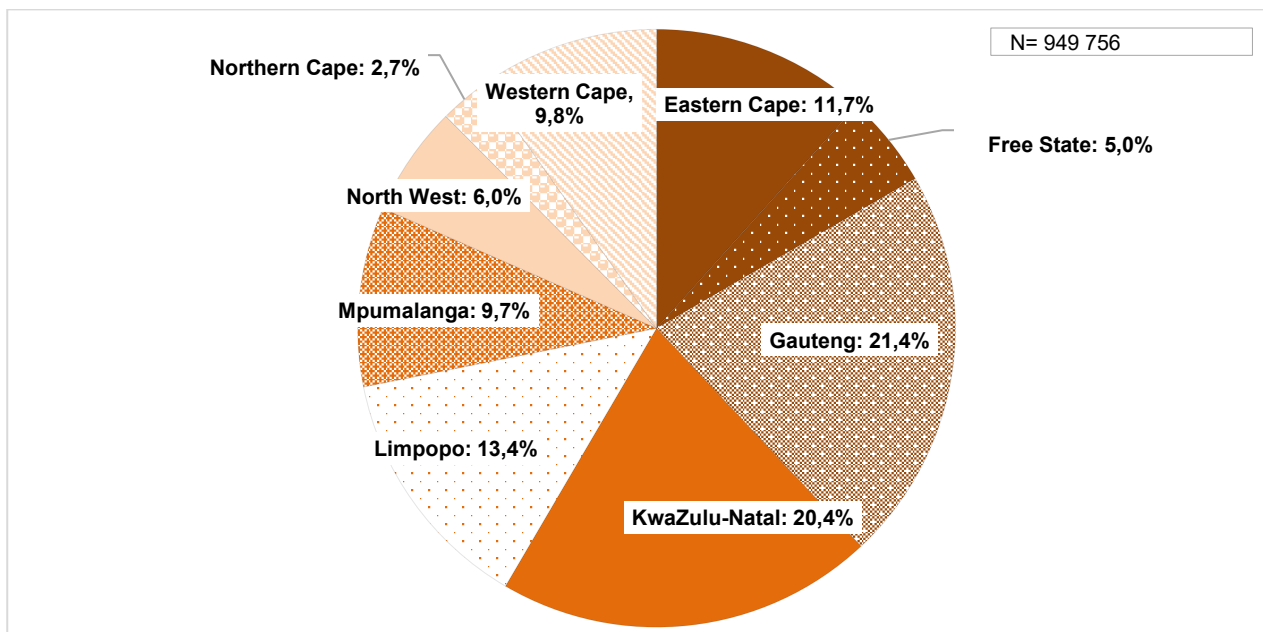
**Figure 7: Median age of mother by year of birth, South Africa: 1999–2021**



**4.2.3 Provincial distribution of births 2021**

The distribution of 2021 birth occurrences by province where the birth was registered is depicted in Figure 8 below. Generally, birth registrations remain higher in the most populated provinces in South Africa. The highest proportion of births were registered in Gauteng (21,4%), followed by KwaZulu-Natal (20,4%). The provinces with lower birth registrations in 2021 were Northern Cape at 2,7% and Free State at 5,0% of birth registrations. The patterns are similar to those recorded for 2020.

**Figure 8: Birth occurrences by province of birth registration, South Africa: 2021\***



\*Excluding births with unspecified province of birth registration

### 4.3 Birth occurrences as at 31st July 2022

This sub-section reports on birth occurrences extracted from the national birth register on the 31st of July 2022, categorised by sex of the child and year of birth as a way of providing the most recent data available before publication. Table 11 presents information on the number of birth occurrences by birth year and sex. The total number of birth occurrences per year, as shown in the table indicates that a total of 20,917 948 million births occurred in South Africa between 1999 and 2019, with an average of 996 093 births per year over the 21-year period. The table further shows that the highest number of birth occurrences was observed in 2008, and the lowest in 2016.

**Table 11: Birth occurrences (as at 31st of July 2022) by sex and year of birth, South Africa: 2001–2021**

Year	Total	Male	Female	Sex ratio
2001	964 423	482 989	481 434	100
2002	974 995	488 090	486 905	100
2003	970 273	487 273	483 000	101
2004	1 028 735	517 114	511 621	101
2005	1 070 294	538 403	531 891	101
2006	1 101 771	553 378	548 393	101
2007	1 088 157	547 781	540 376	101
2008	1 111 859	559 151	552 708	101
2009	1 060 393	533 789	526 604	101
2010	1 033 643	521 420	512 223	102
2011	1 042 618	525 859	516 759	102
2012	1 042 970	526 103	516 867	102
2013	1 029 784	519 646	510 138	102
2014	1 033 332	521 336	511 996	102
2015	983 124	495 445	487 679	102
2016	925 044	467 304	457 740	102
2017	937 789	473 145	464 644	102
2018	963 508	486 543	476 965	102
2019	982 642	495 728	486 914	102
2020	999 509	504 249	495 260	102
2021	989 629	498 573	491 056	102
<b>Total</b>	<b>21 334 492</b>	<b>10 743 319</b>	<b>10 591 173</b>	<b>101</b>

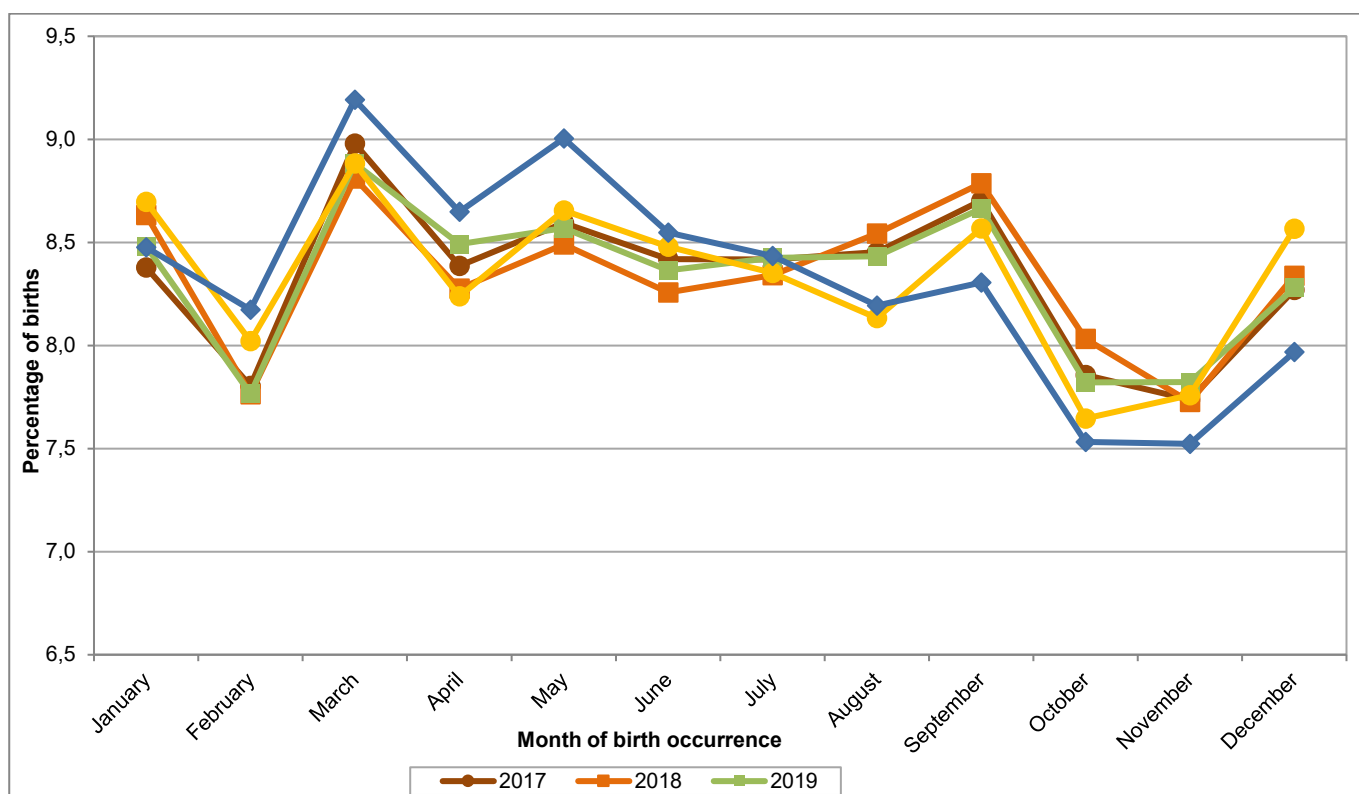
#### 4.3.1 Sex of the child

Table 11 shows that in the 20-year period, sex ratios were between 100 and 102 male births per 100 female births. For the years 2003 to 2009, the sex ratio was at 101 male births per 100 female births, signifying slightly more males than females. In 2001 and 2002, the sex ratio of birth occurrences was 100, indicating that there was a male child birth for every female child birth. Since 2010, the sex ratios have been at 102 male births per 100 female births. Over the 20-year period the sex ratio has been 101 male births per 100 females.

### 4.3.2 Month of birth as at 31st July 2022

Figure 9 shows the percentage distribution of birth occurrences by month of birth for the five years 2017–2021 updated as at 31 July 2022. It is observed that the pattern of birth occurrences by month of birth was largely similar over the five years. The highest proportions of births occurred during the month of March for all the years. This suggests that over the five years, a higher proportion of birth occurrences were likely to be conceived during June or July. In 2021 the second most common month of birth occurrence was May, and January, a departure from the previous trend, where September was the second highest month. The proportion of births occurrence during March and May are also much higher than the pattern seen in previous years, while September shows an uncharacteristic decline in proportion of birth occurrence.

**Figure 9: Percentage distribution of birth occurrences as at 31st of July 2022 by year and month of birth, South Africa: 2017–2021**



### 4.4 Baby forenames and surnames in South Africa, 2021

A person’s forename and surname are fundamental human rights enshrined in the Births and Deaths Registration (Act No. 51 of 1992) are some of the most distinctive markers of individuality and a prerequisite for the issuing of a birth certificate in South Africa (Republic of South Africa, 1992). Additionally, section 28 of the Constitution of the Republic of South Africa (Act No. 108 of 1996), stipulates that ‘every child has the right to a name from birth’ (Republic of South Africa, 1996).

The act of giving a child a name continues throughout their upbringing and these names remains just as important. In a world full of words, language is used to identify, classify and connect. The naming of a newborn child plays a very important role in most cultures around the world. For instance, African baby names are given for reason, relevance and purpose. Similarly, South Africa is a country with a variety of cultures and

religions, this has a profound influence on baby naming. From the day or time a baby is born to the circumstances surrounding the birth, several factors influence the names parents choose for their children (De Klerk V. and Bosch B., 1996).

Table 12, shows the distribution of the top ten baby forenames and surnames for 2021. Amongst males, the top three leading forenames were Lethabo, followed by Lubanzi and Melokuhle. The leading forenames for females were Melokuhle in first place, followed by Omphile in second place and Iminathi in third place. Melokuhle, Lethabo and Lethokuhle appeared on both males and females top ten list. Melokuhle ranked first amongst females while it ranked third amongst males. In general, the popular baby forenames for males and females reflect positive hopes for the child, express beliefs and are inspired by positive connotations of both love and acceptance.

Table 12 further shows that for both sexes Dlamini was the most common baby surname in 2021, closely followed by Nkosi and Ndlovu. It is noteworthy that, nine of the surnames were from the Nguni clans namely isiZulu, isiXhosa, isiNdebele and siSwati. Mokoena which featured as the sixth most popular surname was the only non-Nguni surname.

**Table 12: Number distribution of top ten baby forenames and surnames, South Africa, 2021**

Rank	Male				Female				Both sexes	
	First: Forename	Number	Second: Forename	Number	First: Forename	Number	Second: Forename	Number	Surname	Number
1	Lethabo	3 213	Junior	9 342	Melokuhle	3 784	Precious	4 638	Dlamini	7 080
2	Lubanzi	2 810	Blessing	4 784	Omphile	2 500	Princess	3 754	Nkosi	6 499
3	Melokuhle	2 619	Gift	3 722	Iminathi	2 387	Blessing	2 821	Ndlovu	6 451
4	Junior	2 027	Prince	2 627	Lisakhanya	2 369	Angel	2 687	Khumalo	6 069
5	Lethokuhle	1 993	Lubanzi	1 712	Lethabo	2 336	Faith	2 554	Sithole	4 881
6	Siphosethu	1 953	Siphosethu	1 484	Amahle	2 103	Hope	2 238	Mokoena	4 325
7	Omphile	1 898	Innocent	1 392	Lesedi	2 098	Melokuhle	1 647	Mkhize	4 165
8	Lwandle	1 862	Jayden	1 377	Rethabile	2 035	Amahle	1 415	Gumede	3 777
9	Banele	1 816	Lethabo	1 364	Lethokuhle	2 032	Grace	1 378	Mahlangu	3 770
10	Ofentse	1 765	Melokuhle	1 357	Asemahle	1 844	Lisakhanya	1 345	Ngcobo	3 679

## 5. Concluding remarks

This statistical release provided information on recorded live births for births that occurred in 2021 as well as information on late birth registrations from 1998 to 2020. It also shows trends and patterns in birth occurrences and registrations over a period of 23 years.

A total of 1 087 526 births were registered in 2021. Of these, 949 757 (87.3%) were birth registrations for births that occurred in 2021, while 137 769 (12.7%) were late registrations for births that occurred in previous years. This indicates a 3.5% decrease in current registrations from levels observed prior the COVID-19 pandemic.

The negative impact of COVID-19 pandemic on service delivery, and associated restrictions on movements are still evident in the patterns observed in the 2021 birth registrations data. The reversal of gains made in timely registration of births (registration within 30 days) and increase in late registrations in the last two years are evident from the 2021 registrations data. The number of births within 30 days declined by 15.5% in 2019-2020, with an unusually large increase observed in 2020-2021 (14%), indicating a possible recovery from the COVID-19 pandemic period.

As observed in previous years women aged 20–29 account for most birth occurrences and most birth registrations (and current registrations), while most late birth registrations were observed for age groups 50–54 years (64.4%) and 10–14 years (32.7%). Above 78% of births registered mothers within the unspecified/outside the 10–54 years age range category were late registrations, a pattern consistent with previous years. Provincial differentials show that most births occurred in Gauteng and KwaZulu-Natal provinces. Northern Cape had most births registered within the 30 days after occurrence (93%) followed by Mpumalanga at 91%. The sex ratio in 2021 was 102 male birth registrations per 100 female birth registrations, indicating slightly more male than female birth registrations. A slight departure from previous patterns was observed in births by month of occurrence. Although most births occurred in the months of March, with May the second most common month of birth occurrence, for the second year, January had the third highest proportion of births with September showing an uncharacteristic lower proportion of birth occurrence.

The most popular names amongst both baby girls and boys nationally was Melokuhle, Lethabo and Lethokuhle. Lethabo and Melokuhle were common first and second names for boys and girls respectively. Dlamini followed by Nkosi and Ndlovu was still the top three most common surname amongst babies born and registered in 2021 as was the case in previous years.

The Births and Deaths Registration Act stipulates that all births occurring within South Africa must be registered within 30 days from the date of birth. The discrepancy observed in this statistical release between births occurring and reported through the DHIS and those ultimately registered indicate the need for continued advocacy and mass mobilisation of the public in order to bring early and universal birth registration to the forefront.

## References

Republic of South Africa. 1996. Constitution of the Republic of South Africa, 1996 (Act No.108 of 1996). Pretoria: Government of South Africa.

Republic of South Africa. 1992. Births and Deaths Registration Act (Act No. 51 of 1992). Pretoria: Government of South Africa.

Republic of South Africa. 2010. Births and Deaths Registration Amendment Act (Act No. 18 of 2010). Pretoria: Government of South Africa.

UNICEF global databases, 2020, based on Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), other national surveys, censuses and vital registration systems, 2010-2019.

Stats SA (Statistics South Africa). 2019. Recorded live births, 2018. Pretoria: Statistics South Africa.

United Nations (UN). 2015. Compilation of Metadata Received on Indicators for Global Monitoring of the Sustainable Development Goals and Targets, Inter-Agency and Expert Group on Sustainable Development Goals Indicators, Accessed on 10 August 2017.

UNICEF (2017) Birth Registration [https://www.unicef.org/protection/57929\\_58010.html](https://www.unicef.org/protection/57929_58010.html), Accessed on 15 August 2020.

UNICEF (United Nations Children's Fund). 2013. Every Child's Birth Right: Inequities and trends in birth registration, UNICEF, New York.

[https://www.un.org/ruleoflaw/files/Embargoed\\_11\\_Dec\\_Birth\\_Registration\\_report\\_low\\_res.pdf](https://www.un.org/ruleoflaw/files/Embargoed_11_Dec_Birth_Registration_report_low_res.pdf). Accessed on 15 August 2020.

UN (2015) Compilation of Metadata Received on Indicators for Global Monitoring of the Sustainable Development Goals and Targets, Inter-Agency and Expert Group on Sustainable Development Goals Indicators,

<https://unstats.un.org/sdgs/files/Metadata%20Compilation%20for%20SDG%20Indicators%2023%20October%202015%20Update.pdf>. Accessed 10 August, 2017

WHO (World Health Organization). 2013. Strengthening civil registration and vital statistics for births, deaths and causes of death: Resource kit. Geneva: World Health Organization.

Duncan, G.J., Lee, K.T.H., Rosales-Rueda, M. & Kalil M. Maternal Age and Child Development. *Demography* 55, 2229–2255 (2018).

Kathleen et al. 2018. Maternal age and offspring developmental vulnerability at age five: A population-based cohort study of Australian children Published: April 24, 2018 <https://doi.org/10.1371/journal.pmed.1002558>

Mutshinyani Mercy Mahwasane & Thambatshira Johannes Tshifaro (2019) New-born baby naming practices of the Vhavenda: A sociolinguistic analysis perspective, *South African Journal of African Languages*, 39:2, 175-184,

Vivian de Klerk & Barbara Bosch 1996. Naming Practices in the Eastern Cape Province of South Africa, *Names*, 44:3, 167-188.

Mate K.S., Bennett B., Mphatswe W., Barker P, and Rollins N. (2009). Challenges for routine health system data management in a large public programme to prevent Mother-to-Child HIV Transmission in South Africa. *PLoS ONE*. 4(5): e5483. Doi: 10.1371/journal.pone.0005483.



## Explanatory notes

### Sources of data

The Department of Home Affairs (DHA) provides Statistics South Africa (Stats SA) with information on recorded live births. Two sets of birth statistics are provided: registration-based and occurrence-based data. Both these datasets come from the Nucleus Bureau of the DHA. When the officials at the various offices of the Department of Home Affairs capture the information about a birth, they do so directly onto the database at the Nucleus Bureau. These transactions are used to update the database of the birth register.

For the purpose of producing vital statistics, the following system is followed: each day, all civil transactions carried out at all the Department of Home Affairs offices are written onto a cassette. At the end of every month, a combined set of cassettes is created, containing all the transactions done for the month. These transactions are downloaded and the birth transactions are extracted for processing at Stats SA. The year in which the births are registered is the registration year. Using this information, Stats SA provides the breakdown of the registered births according to the year in which the births occurred.

While births information sent to Stats SA is the same as that in the population register, there is a difference of format between the two. On the one hand, Stats SA's data are based on births registered during the year (registration-based), while on the other hand, entries in the population register reflect the date of birth. The date of registration of birth is not stored on the population registration file. For this reason, the population register can only be used to obtain birth data broken down by date of birth (occurrence-based).

By continuously updating the population register for late registration, the occurrence-based data from the population register get closer and closer to the true level of births. In a situation where birth registrations are complete (with very few late registrations), the occurrence-based perspective will be very similar to the registration-based perspective. However, if there are a large number of late registrations, the two perspectives will become widely dissimilar. With improvements in birth registration, the recorded data from the two sources will gradually converge.

### The South African population register

The South African population register covers births, deaths, identity, marriages, divorces and movements of all South African citizens and permanent residents. The Births and Deaths Registration Act, 1992 (Act No. 51 of 1992) guides the registration of births and deaths throughout South Africa. The Act was subsequently amended in 1997 (Act No. 67 of 1997), in 1998 (Act No. 43 of 1998) and in 2010 (Act No. 18 of 2010). Another Act pertinent to the population register is the Identification Act, 1997 (Act No. 68 of 1997). This Act repealed previous Identification Acts (Act No. 72 of 1986, Act No. 21 of 1991, Act No. 4 of 1993, and Act No. 47 of 1995). Thus, each of the Acts dealing with any aspect of civil registration has implications for the information recorded into the population register.

From these Acts and amendments, the following persons and particulars are eligible to be included on the population register:

- All children born of South African citizens and permanent residents when the notice of the birth is given within one year after the birth of the child.
- All children born of South African citizens and permanent residents when the notice of the birth is given one year after the birth of the child together with the prescribed requirement for a late registration of birth.
- All South African citizens and permanent residents who, upon attainment of the age of 16, applied for and were granted identification cards (or books).
- All South African citizens and permanent residents who die at any age after birth.
- All South African citizens and permanent residents who depart permanently from South Africa.
- Persons whose particulars are not eligible for inclusion on the population register are listed below:
  - Non-South African citizens who sojourn temporarily in the country.
  - All South African citizens and permanent residents who died before notice of their birth had been given.

### **Foreign births**

Statistics South Africa previously received data on foreign birth registrations, as part of birth data obtained from the Department of Home Affairs (DHA). These births were subsequently excluded from annual data with effect from 2015 due to technical problems encountered in their retrieval by the DHA. Stats SA has been in discussions with DHA to find solutions to this challenge in order to restore these data as part of the annual births data for better completeness of the statistical release of these births. As such, the total number of births in this statistical release exclude foreign birth.

### **Municipal demarcation**

The Department of Home Affairs captured information on places based on office of birth registration. Stats SA re-classified the offices of birth registration into district councils and metropolitan areas based on the 2016 municipal boundaries. Certain magisterial districts are situated in more than one district council, in which case such magisterial districts are allocated to the district council where the majority of the land area falls. The only exception was with Nigel in Gauteng province. The majority of the land area of Nigel magisterial district is in Sedibeng District Council (which is mainly farm areas and therefore sparsely populated), while the majority of the population lives in the Ekurhuleni metropolitan area. As such, Nigel was classified under Ekurhuleni and not under Sedibeng. Maps for the old and the new classification are available from Stats SA on request.

### **Population group**

As from 1991, no distinction is made between the different population groups on the data collected by the Department of Home Affairs. The statistics collected, therefore, refer to all population groups combined.

## **Definitions of concepts used**

### **1.1 Live birth**

The complete expulsion or extraction from its mother's womb of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered live born (WHO, 1992).

### **1.2 Recorded live births**

The number of births recorded (registered) in a specific year, irrespective of when the birth actually occurred. The births recorded in any given year include the births that occurred during that year plus other births that occurred in years prior to the year of registration. It should be noted that not all births are recorded (registered).

### **1.3 Current birth registrations**

This refers to the number of births occurring in a specific year and registered within the same year.

### **1.4 Late birth registrations**

This refers to births occurring in a given calendar year but registered in subsequent calendar years. In this release, late registrations are grouped into two: (i) births registered after one year of birth but less than 15 years after birth; and (ii) births registered from 15 years after birth.

