

PUBLICATION INFORMATION

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1 Introduction

This report aims to examine the teenage fertility rates and trends by Local Health District and Local Government Area in NSW from 2007 to 2016, in order to identify areas where there may be a greater need for sexual and reproductive health services among the teenage population.

Teenage mothers and their babies are more likely to have poorer outcomes in the short term (peripartum) and longer term (e.g. socioeconomic disadvantage) compared to older mothers ¹.

Globally the teenage birth rate has declined from 65 births per 1,000 women in 1990 to 44 births per 1,000 women in 2018². Echoing the international trend, Australia's teenage birth rate has also fallen to historic lows, decreasing from 17 live births per 1,000 women in 2007 to 11 live births per 1,000 women in 2016, with total live births decreased from 11,835 to 7,559 between 2007 and 2016³. A similar trend is also seen in NSW with a decline from 15 to 10 live births per 1,000 women between 2007 and 2016. Despite this overall fall, different areas within NSW may have experienced different trends in teenage birth rates.

Teenage fertility rate is calculated as the number of births during the calendar year to women aged 15-19 years, per 1,000 females of the estimated resident population aged 15-19 years at 30 June of the same year. The small number of births to mothers under 15 years are also included in the 15-19 years group.

Local Government Areas (LGAs) are an Australian Bureau of Statistics (ABS) approximation of officially gazetted Local Government Areas as defined by each State and Territory Local Government Department. Teenage fertility rates from each LGA in this summary were provided by ABS.

There are 15 local health districts (LHDs) in NSW. These LHDs provide a variety of services across the state: from community nurses in outback regions to tertiary hospitals in major cities. We report the teenage fertility rates for the LGAs within each of the 15 LHDs (map of LHDs can be viewed here: <u>http://www.health.nsw.gov.au/lhd/Documents/lhd-wall-map.pdf</u>).

2 Teenage fertility rate in NSW

The teenage fertility rate in Australia increased from 17 live births per 1,000 women aged 15-19 in 2007 to 18 in 2008, and then decreased to 11 live births per 1,000 women in 2016. The teenage fertility rate in NSW was lower than the national level but followed the same pattern, nationally it increased from 15 in 2007 to 17 in 2008, and then decreased to 10 in 2016 (Figure 1). Among the 15 Local Health Districts (LHDs) in NSW, the teenage fertility rate was lowest in Northern Sydney LHD, South Eastern Sydney LHD and Sydney LHD, and highest in Western NSW LHD and Far West LHD.

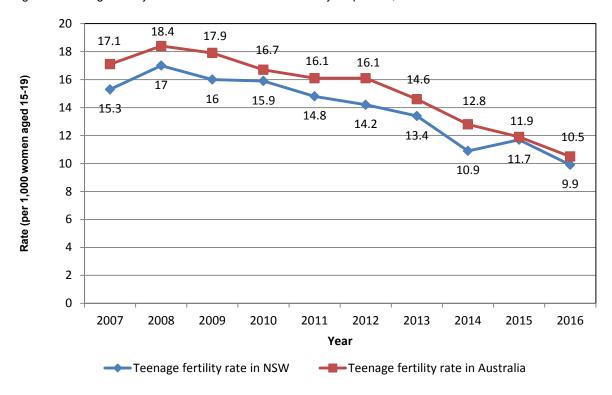


Figure 1: Teenage fertility rate in NSW and Australia in ten-year periods, 2007 to 2016

2.1 Teenage fertility rate in Northern Sydney LHD, South Eastern Sydney LHD and Sydney LHD

Between 2007 and 2016, the LGA's in three LHD's (Northern Sydney LHD (Figure 2), South Eastern Sydney LHD (Figure 3) and Sydney LHD (Figure 4)) had teenage fertility rates that were consistently below the state and national fertility rates. These LHDs also followed the national decline in rates between 2007 and 2016, with the exception of Northern Sydney LGA and Canada Bay LGA. The teenage fertility rate in 2016 varied between 0 live births per 1,000 women (Hunters Hill LGA) and 2 (Northern Sydney LGA) in Northern Sydney LHD, between 0.25 (Waverley LGA) and 6 (Botany Bay LGA) in South Eastern Sydney LHD and between 1 (Burwood LGA) and 7 (Canterbury LGA) in Sydney LHD. In Northern Sydney LGA the rate in 2016 (1.76) was almost the same as that in 2007 (1.75) and reached a maximum in 2011 at 3 live births per 1,000 women, and in Canada Bay LGA it increased from 1.6 in 2007 to 2.6 in 2016.

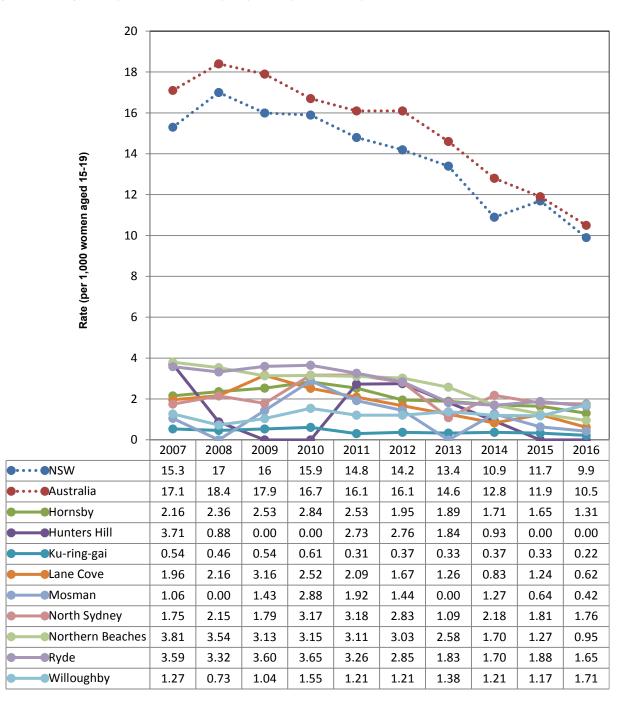
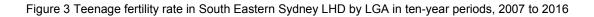
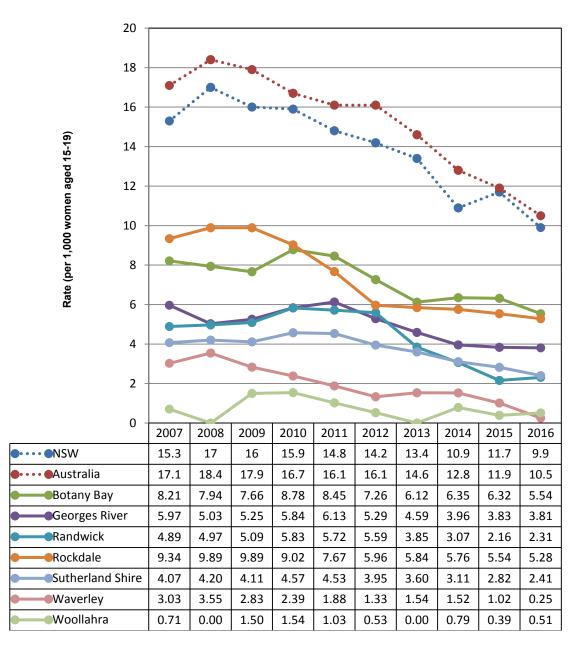
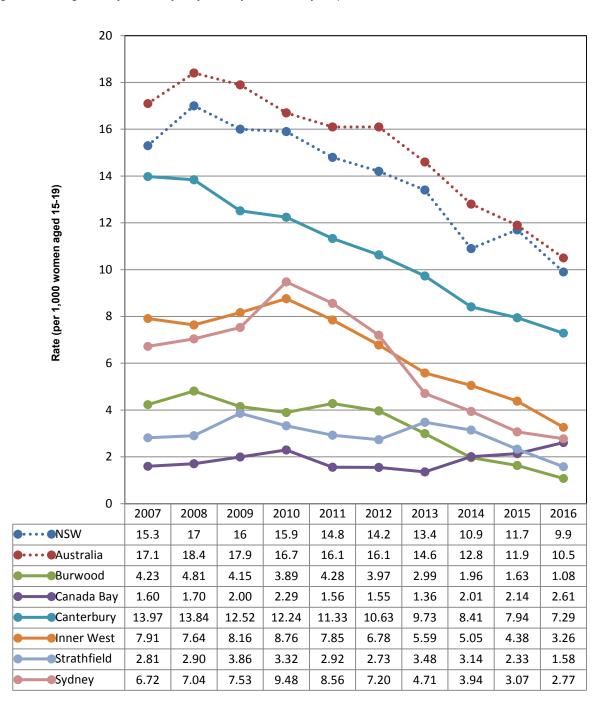


Figure 2 Teenage fertility rate in Northern Sydney LHD by LGA in ten-year periods, 2007 to 2016







2.2 Teenage fertility rate in Central Coast LHD

The teenage fertility rate in the Central Coast LHD (Figure 5) was 12 live births per 1,000 women in 2016. The rate was higher than the state level but similar to the national level between 2007 and 2009, then it was consistently slightly higher than the national level from 2010. The decline in the rates observed at the state and national levels was also observed in the Central Coast LHD.

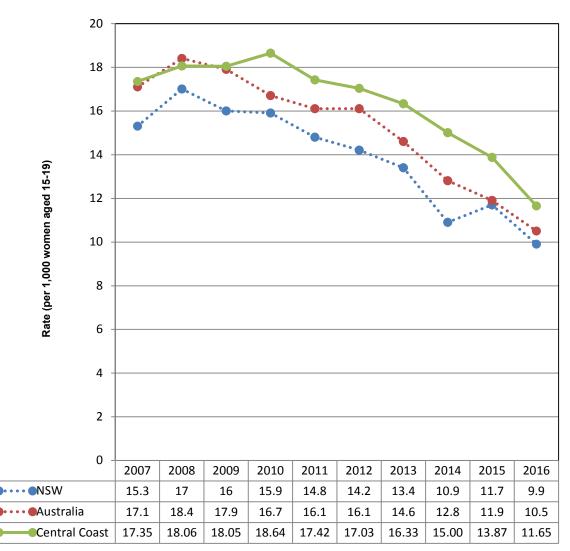


Figure 5 Teenage fertility rate in Central Coast LHD by LGA in ten-year periods, 2007 to 2016

2.3 Teenage fertility rate in Western Sydney LHD

In Western Sydney LHD (Figure 6), the teenage fertility rate ranged between 2 live births per 1,000 women in the Hills Shire LGA and 15 in Blacktown LGA in 2016. The teenage fertility rate in Blacktown LGA was approximately 1.5-fold higher than the national and state level while the teenage fertility rates in other LGAs were consistently lower than the state and national levels between 2007 and 2016. The rates in this LHD experienced a similar decline over the period as observed nationally.

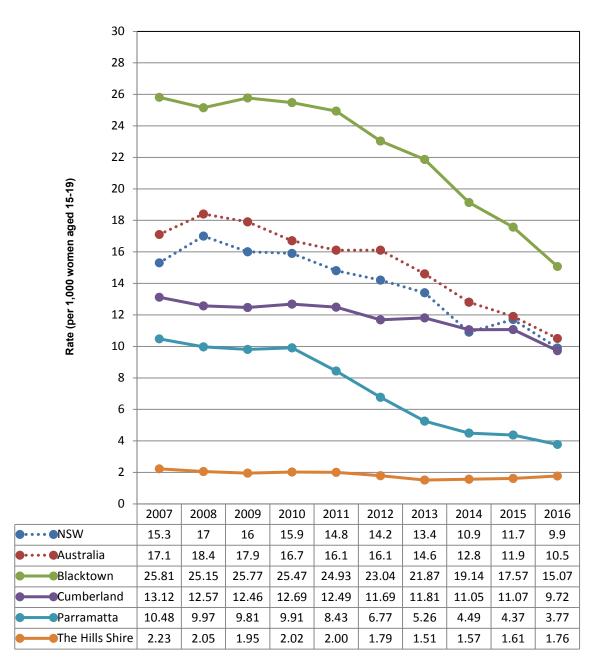


Figure 6 Teenage fertility rate in Western Sydney LHD by LGA in ten-year periods, 2007 to 2016

2.4 Teenage fertility rate in South Western Sydney LHD

In South Western Sydney LHD (Figure 7), the teenage fertility rates varied between 6 live births per 1,000 women in Wollondilly LGA and 17 in Campbelltown LGA in 2016. The teenage fertility rate in Campbelltown LGA was consistently approximately 1.5-fold higher than the state and national and levels while the teenage fertility rates of the other areas in this LHD were similar to, or lower than, the state and national rates between 2007 and 2016. Among these LGAs, Campbelltown LGA, Liverpool LGA and Fairfield LGA experienced a similar decline in rates over the period as observed nationally, whereas the rates for other LGAs were stable or increased during part of this time period.

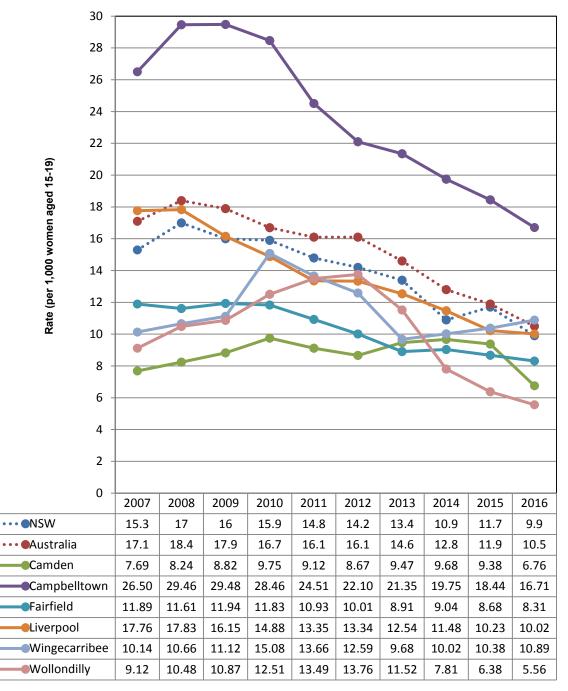


Figure 7 Teenage fertility rate in South Western Sydney LHD by LGA in ten-year periods, 2007 to 2016

2.5 Teenage fertility rate in Illawarra Shoalhaven LHD

In Illawarra Shoalhaven LHD (Figure 8), the teenage fertility rate ranged between 6 live births per 1,000 women in Kiama LGA and 17 in Shoalhaven LGA in 2016. The teenage fertility rate in Shoalhaven LGA was consistently higher than the state and national level; it increased from 19 in 2007 to 25 in 2011, and then fell to 17 in 2016. The rate in Shellharbour LGA was between the state and national level in 2007 and 2008, but after 2009 it was consistently higher than the national level, with 19 live births per 1,000 women compared to 18 nationally in 2009, and 15 compared to 11 nationally in 2016. The teenage fertility rates of the other areas in this LHD were similar to or lower than the national and state rates. The decline in the rates observed at the state and national levels between 2007 and 2016 was also observed in Illawarra Shoalhaven LHD.

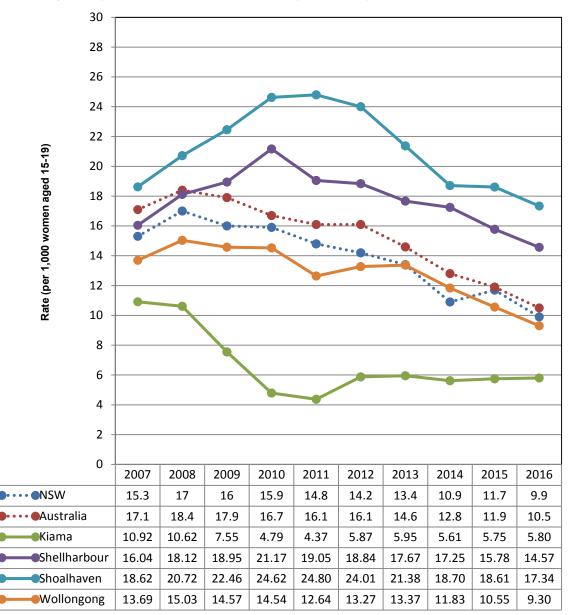
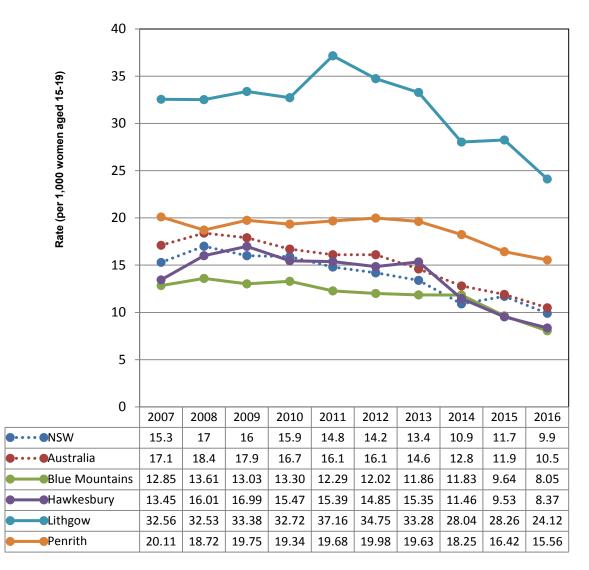


Figure 8 Teenage fertility rate in Illawarra Shoalhaven LHD by LGA in ten-year periods, 2007 to 2016

2.6 Teenage fertility rate in Nepean Blue Mountains LHD

In Nepean Blue Mountains LHD (Figure 9), the teenage fertility rate varied from 8 live births per 1,000 women in Blue Mountains LGA to 24 in Lithgow LGA in 2016. The fertility rate was consistently higher than the state and national levels in Lithgow LGA and Penrith LGA. The teenage fertility rate in Lithgow LGA was about two-fold higher than the national level (33 live births per 1,000 women compared to 17 in 2007 and 24 compared to 11 in 2016); the teenage fertility rate in Penrith LGA was about 1.2 to 1.5 times higher than the national level (20 live births per 1000 women in 2007 and 16 in 2016) except in 2008, when it was almost the same as the national rate (19 compared to 18). The rates for other LGAs were similar to, or lower than, the state and national rates between 2007 and 2016. Teenage fertility rates decreased in all LGAs in this LHD from 2007 to 2016, although between 2007 and 2013 the rates remained relatively stable.

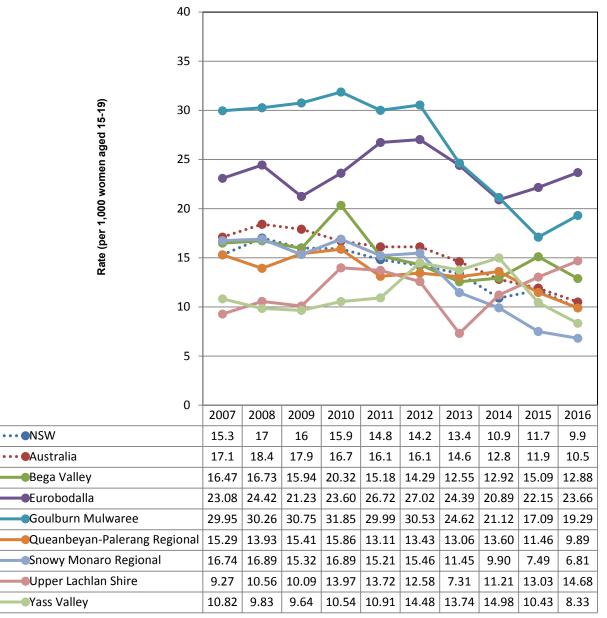
Figure 9 Teenage fertility rate in Nepean Blue Mountains LHD by LGA in ten-year periods, 2007 to 2016



2.7 Teenage fertility rate in Southern NSW LHD

In Southern NSW LHD (Figure 10), the teenage fertility rate ranged between 7 live births per 1,000 women in Snowy Monaro Regional LGA and 24 in Eurobodalla LGA in 2016. The teenage fertility rates in Eurobodalla LGA and Goulburn Mulwaree LGA were higher than in other LGAs in this LHD, and were about 1.3 and 2.2 times higher than the state and national levels from 2007 to 2016. The teenage fertility rate was highest in Goulburn Mulwaree LGA between 2007 (30) and 2014 (21) but was highest in Eurobodalla LGA (22) since 2015. The teenage fertility rates in other LGAs in this LHD were similar to, or lower than, the state and national rates between 2007 and 2016. Among these LGAs, the teenage fertility rate in Upper Lachlan Shire LGA increased from 9 live births per 1,000 women to 15 between 2007 and 2016, while in Eurobodalla LGA the rate fluctuated but ended at a similar level in 2016 (24) compared to 2007 (23). The rates for other LGAs experienced a similar decline in rates over the period as observed nationally.

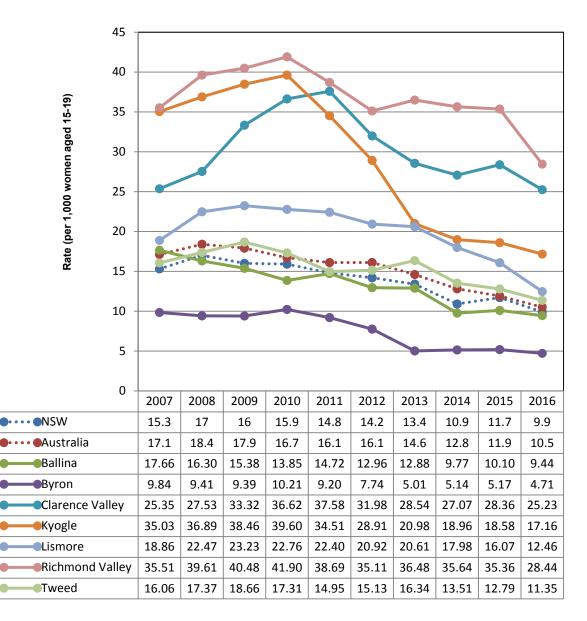
Figure 10 Teenage fertility rate in Southern NSW LHD by LGA in ten-year periods, 2007 to 2016



2.8 Teenage fertility rate in Northern NSW LHD

In Northern NSW LHD (Figure 11), the teenage fertility rate ranged between 5 live births per 1,000 women in Byron LGA to 28 in Richmond Valley LGA in 2016. The teenage fertility rates in Richmond Valley, Clarence Valley, Kyogle and Lismore LGAs were higher than the national level between 2007 and 2016. Richmond Valley LGA had the highest rate (36 live births per 1000 women in 2007 and 28 in 2016) at 2 to 2.7-fold higher than the national level. The rates in Tweed and Ballina LGAs were similar to the state and national levels while the rate in Byron LGA was much lower. The decline in the rates observed at the state and national levels between 2007 and 2016 was also observed in Northern NSW LHD except for in Clarence Valley LGA, where the rate in 2016 was the same as that in 2007 (25 live births per 1,000 women) and reached a maximum in 2011 at 38 live births per 1,000 women. Among LGAs, Kyogle LGA showed the largest decline from 25 in 2007 to 17 in 2016.

Figure 11 Teenage fertility rate in Northern NSW LHD by LGA in ten-year periods, 2007 to 2016



2.9 Teenage fertility rate in Mid North Coast LHD

In Mid North Coast LHD (Figure 12), the teenage fertility rate ranged from 12 live births per 1,000 women in Bellingen LGA to 31 in Kempsey LGA in 2016. Kempsey and Nambucca LGAs had the highest teenage fertility rates in this LHD between 2007 and 2016 and were about 2.5 to 3-fold higher, and 1.3 to 2.6-fold higher than the national level, respectively. The rates in other LGAs were higher than or similar to the national rates during this period. In contrast to the gradually declining trend observed nationally, the teenage fertility rates in Nambucca LGA experienced an increase and reached a maximum in 2013 at 38 live births per 1,000 women. In Nambucca LGA the rates then declined but the rate in 2016 (27) remained higher than that in 2007 (23). The rates in other LGAs experienced similar declines as observed nationally between 2007 and 2016, though increased during parts of this period.

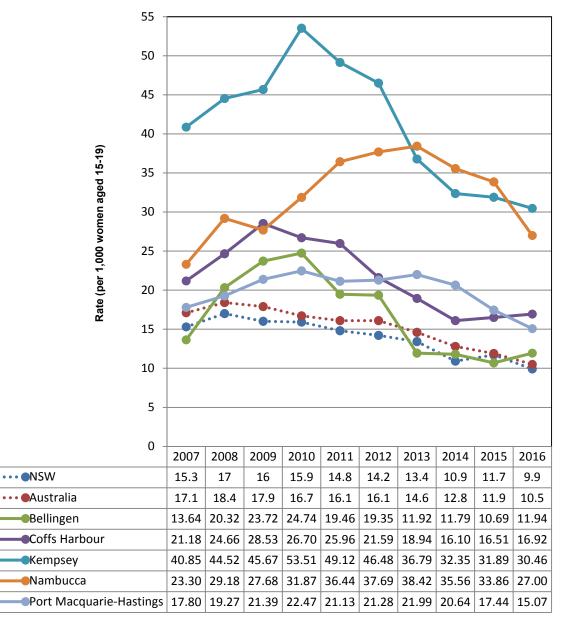


Figure 12 Teenage fertility rate in Mid North Coast LHD by LGA in ten-year periods, 2007 to 2016

2.10 Teenage fertility rate in Murrumbidgee LHD

In Murrumbidgee LHD (Figure 13 & 14), the teenage fertility rate varied across the LGAs from 6 live births per 1,000 women in Murrumbidgee LGA to 39 in Junee LGA in 2016. The rates in Junee LGA and Narrandera LGA were about 2 to 4-fold higher and 2 to 3-fold higher than the state and national rates between 2007 and 2016. The rates in Gundagai, Hilltops, Lockhart, Wagga Wagga, Griffith, Bland, Snowy Valleys, and Leeton LGAs were also consistently higher than the national rate between 2007 and 2016. The rates in Deniliguin LGA were consistently lower than the state and national rates during the same period. The rates in other LGAs fluctuated between being above and below the national levels.

In three LGAs (Federation, Coolamon and Berrigan) the rates increased between 2007 and 2016 (from 17 to 20, 13 to 29, and 7 to 18, respectively). In Narrandera, Albury, Snowy Valleys, Wagga Wagga and Edward River LGAs the rates in 2016 were similar to that in 2007. In Edward River LGA the rate in 2016 (26) was also similar to the 2007 rate (27), but it fluctuated over this period reaching a minimum of 12 in 2013. In contrast, the rate in Greater Hume Shire LGA in 2016 was similar to that in 2007 but it reached a peak of 20 in 2013. The rates in Carrathool and Leeton LGAs showed a decline between 2007 and 2016, but peaked within this period at 41 live births per 1,000 women in 2013 in Carrathool LGA and 25 in 2010 in Leeton LGA. The rates for other LGAs experienced a similar decline over the period as observed nationally, with Murrumbidgee LGA showing the largest decline from 36 in 2007 to 6 in 2016, followed by Hay LGA, where the rate declined from 37 in 2007 to 12 in 2016.

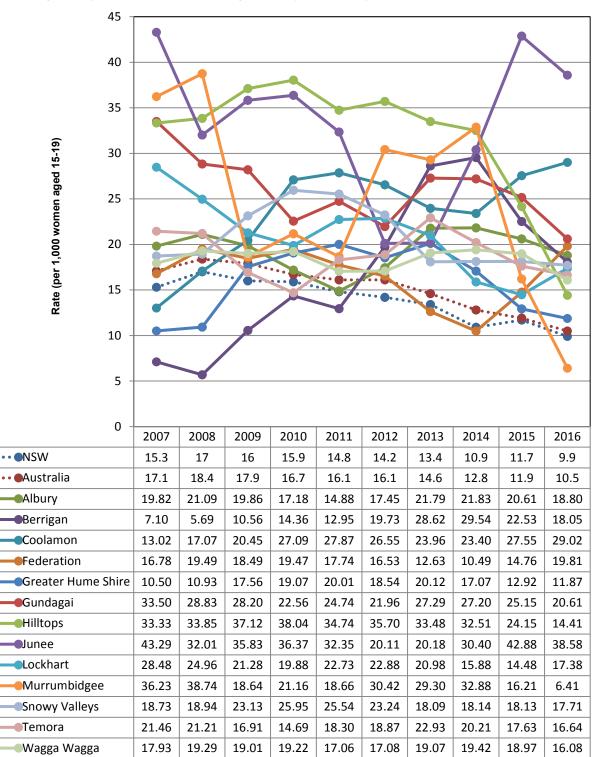


Figure 13 Teenage fertility rate in eastern Murrumbidgee LHD by LGA in ten-year periods, 2007 to 2016

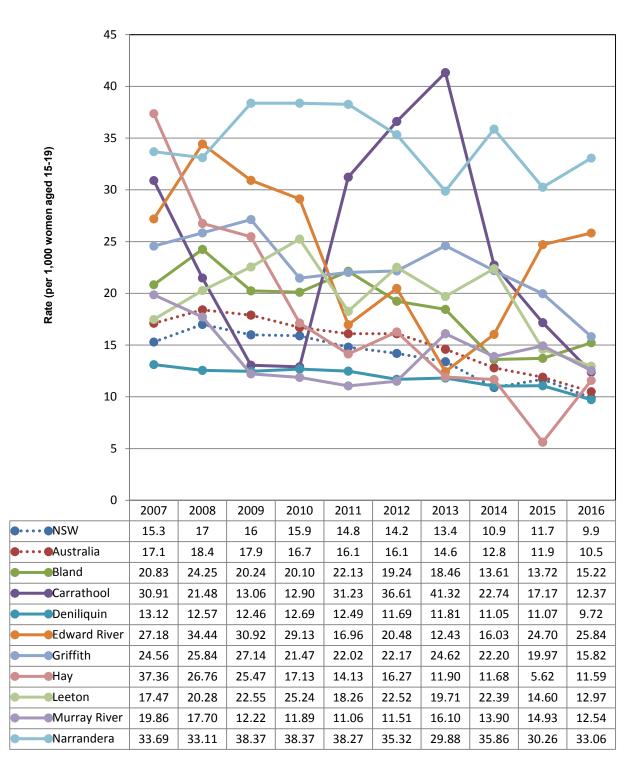


Figure 14 Teenage fertility rate in western Murrumbidgee LHD by LGA in ten-year periods, 2007 to 2016

2.11 Teenage fertility rate in Hunter New England LHD

In Hunter New England LHD (Figure 15 & 16), the teenage fertility rate ranged from 5 live births per 1,000 women in Uralla LGA to 48 in Moree Plains LGA in 2016. Moree Plains LGA had the highest teenage fertility rate in this LHD, at 3 to 4.5-fold higher than the national level. In this LHD, the teenage fertility rates in Dungog, Newcastle, Lake Macquarie, Armidale Regional and Uralla LGAs were similar to the state and national rates between 2007 and 2016. The rates in Singleton, Port Stephens, Upper Hunter Shire and Maitland LGAs were 1.3 to 1.8-fold higher than the state and national rates. The rates in Mid-Coast, Narrabri, Liverpool Plains, Tamworth Regional, Cessnock, Gunnedah and Muswellbrook LGAs were 2 to 2.7-fold higher, and in Inverell, Gwydir and Glen Innes Severn LGAs the rates were 3 to 3.8-fold higher than the national rates during most of the period but also lower than the national level in 2007, 2009 and 2016, respectively.

The teenage fertility rates in Tenterfield LGA and Gwydir LGA more than tripled in 2016 compared to in 2007 (40 versus 12 and 38 versus 12, respectively). The rates in Inverell, Mid-coast and Tamworth Regional LGAs in 2016 were similar to those in 2007, but they reached a maximum of 45 in 2013, 31 in 2010 and 32 in 2012, respectively. The rates in the other LGAs experienced similar declines as observed nationally between 2007 and 2016. The most dramatic decline was in Uralla LGA, where the teenage fertility rate fell from 24 to 5 between 2007 and 2016.

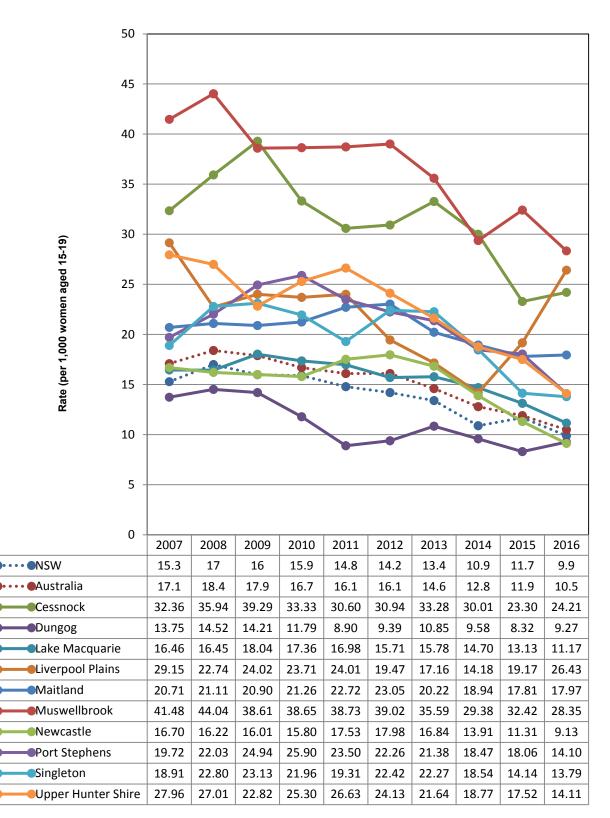
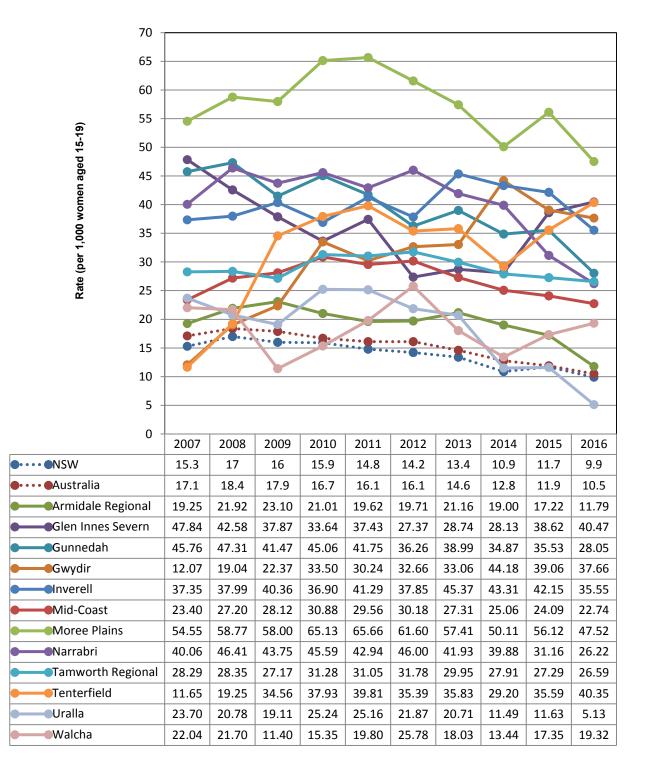


Figure 15 Teenage fertility rate in southern Hunter New England LHD by LGA in ten-year periods, 2007 to 2016



2.12 Teenage fertility rate in Far West LHD

In Far West LHD (Figure 17), the teenage fertility rate varied between 31 live births per 1,000 women in Broken Hill LGA and 96 in Central Darling LGA in 2016. The rates of all LGAs in this LHD were higher than the state and national rates between 2007 and 2016. Broken Hill LGA experienced a similar decline over the period as observed nationally, whereas the rate for Wentworth LGA was stable with some dips during parts of the period. The teenage fertility rates fluctuated in Central Darling and Balranald LGAs over the period, reaching a maximum of 69 live births per 1,000 women in Balranald LGA in 2014 and 104 in Central Darling LGA in 2015. Both LGAs then experienced a decline with the rates falling to 48 for Balranald and 96 for Central Darling by 2016.

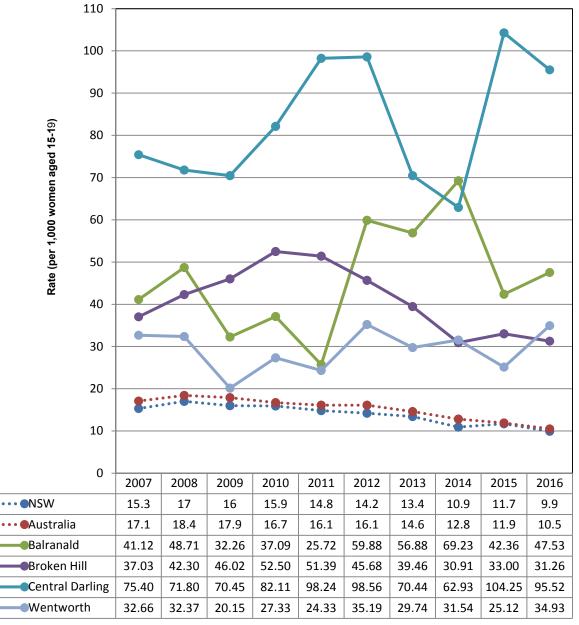


Figure 17 Teenage fertility rate in Far West LHD by LGA in ten-year periods, 2007 to 2016

2.13 Teenage fertility rate in Western NSW LHD

In Western NSW LHD (Figure 18 & 19), the teenage fertility rate ranged between 14 live births per 1,000 women in Mid-Western Regional LGA and 129 in Bourke LGA in 2016. Bourke (129), Walgett (90) and Brewarrina (73) LGAs had the highest rates in this LHD in 2016, at about 12-fold, 9-fold and 7-fold higher than the national level, respectively. Except for Weddin LGA, Blayney LGA and Cabonne LGA, where the rates were similar to the state and national rates at some points between 2007 and 2016, the teenage fertility rates of other LGAs in this LHD were consistently higher than the national and state level during this period.

Among the LGAs, teenage fertility rates between 2007 and 2016 increased to 1.6-fold higher in Bourke LGA (129), and to 1.5-fold higher in Lachlan LGA (62), Cobar LGA (37) and Forbes LGA (30). It is noted that the rates in Gilgandra LGA (43), Bogan LGA (46), Warren LGA (65) and Walgett LGA (90) also increased during this period. However, the rates in the other LGAs showed a similar decline as observed nationally with the largest declines observed in Narromine LGA and Mid-Western Regional LGA, where the rates fell from 48 to 22 and from 31 to 14, respectively between 2007 and 2016.

Figure 18 Teenage fertility rate in Southern Western NSW LHD by LGA in ten-year periods, 2007 to 2016

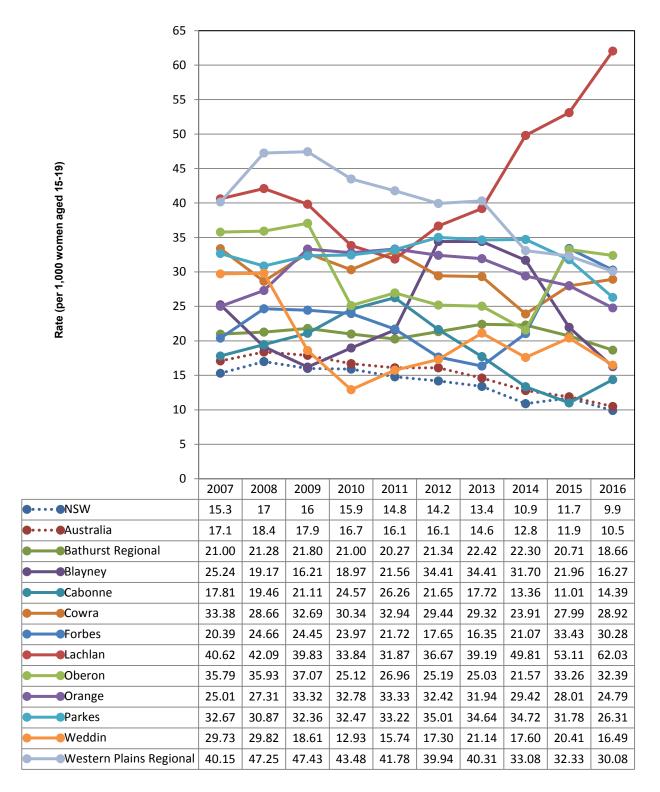
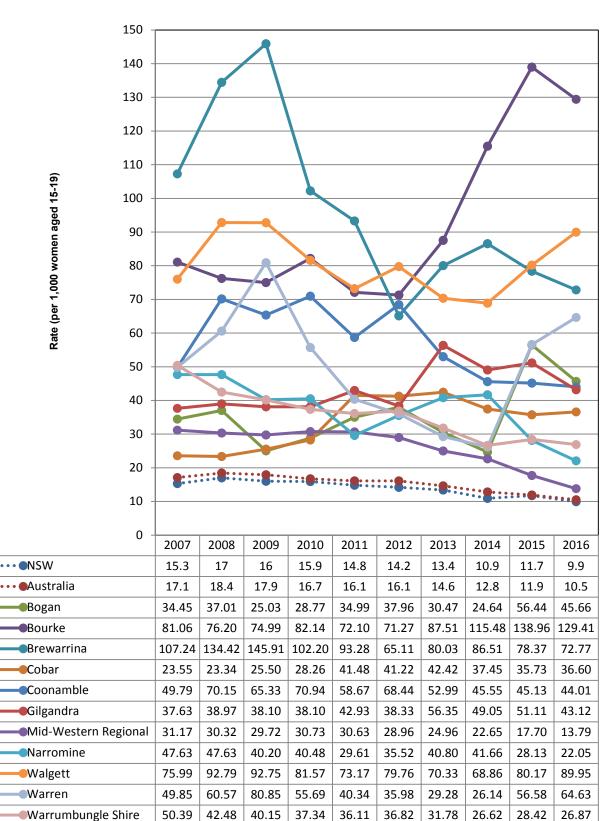


Figure 19 Teenage fertility rate in northern Western NSW LHD by LGA in ten-year periods, 2007 to 2016



3 Summary

The teenage fertility rates in NSW, and nationally, declined between 2007 and 2016. However, there is considerable variation in teenage fertility rates, and trends, across the LHDs and LGAs within NSW. For example, the rate in 2016 varied from Hunters Hill LGA with a rate of 0 live birth per 1,000 women to Bourke LGA with a rate of 129 live births per 1,000 women. Many LGAs had similar declines in rates to that observed nationally but some experienced an increase. For example, in Tenterfield and Gwydir LGAs, the rate increased from 12 to about 40, respectively, and in Bourke LGA the rate increased from 81 to 129. The diversity in fertility rates across the state indicates the need for targeted resources to support teenage sexual and reproductive health.

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