

Project:	Joint Strategic Needs Assessment (JSNA)
Profile Title:	Teenage Pregnancy
Author/Priority Lead:	Sue Perkin, Public Health Lead
Date of Submission:	
Document Reference n ^{o:}	Final Version: no 4,
	2017

Please ensure you complete the version control to ensure the most recent document is presented.

Version	Comments	Author	Date Issued	Status
1	Feedback from	SP	8 th May 2017	
	Teenage			
	Pregnancy Action			
	Group			
2	Updated Under -	SP	22 nd May 2017	
	18s Alcohol data			
3	Updated Ward Map	SP	17 th July 2017	
4	Updated 2016	Janet Collins	20 th April 2018	
	Data			

This JSNA should be read in conjunction with the JSNA Children 0-19.

Executive Summary

The link between teenage pregnancy and deprivation is well established <u>Office of National</u> <u>Statistics (ONS)</u>, Sunderland is one of the 20% most deprived districts/unitary authorities in England and approximately 24% (11,500) of children live in low income families.

In England and Wales the under -18 conception rate in 2016 was 18.9 per 1,000 women aged 15-17; suggesting rates have declined by 10% compared to 2015, with similar decreases documented for both maternities and abortions within this age group. The England and Wales under -16 conception rate also continues to decline, from 8.1 per 1,000 women aged 13-15 in 2007 compared to 3.8 in 2014-16, the lowest recorded teenage pregnancy rates since 1969 <u>Ons.gov.uk</u>. Sunderland's decline in rates follows the national trend however locally we still lag behind England as a whole with wide variation across the City.

The chart below highlights the Sunderland trend 1998-2015 in under- 18 conception rate per 1,000 women compared to England.



Export chart as image Show confidence intervals							
100	Recent tren	d: 🖡					
	Period	Count	Value	Lower CI	Upper CI	North East	England
75	1998	35	7 63.1	56.7	70.0	56.5	46.6
75	1999	• 35	7 63.6	57.2	70.6	55.3	44.8
	2000	• 29	51.0	45.3	57.2	50.8	43.6
	2001	• 29	5 51.5	45.8	57.7	48.3	42.5
8 ************	2002	• 32	55.5	49.6	61.9	51.2	42.8
	2003	36	4 63.7	57.3	70.6	52.4	42.1
25	2004	• 29	4 52.1	46.3	58.4	51.2	41.6
-	2005	• 30	B 56.3	50.2	62.9	50.5	41.4
0	2006	• 30	1 55.4	49.3	62.1	49.1	40.6
1998 2001 2004 2007 2010 2013	2007	32	7 59.1	52.8	65.8	52.8	41.4
	2008	• 29	52.3	46.4	58.6	48.0	39.7
+ England	2009	• 28	8 53.4	47.4	59.9	45.7	37.1
	2010	• 26	4 52.3	46.2	59.0	43.5	34.2
	2011	• 20	8 42.9	37.2	49.1	38.4	30.7
	2012	• 20	7 43.1	37.4	49.4	35.5	27.7
	2013	• 17	35.3	30.2	41.0	30.6	24.3
	2014	• 16	3 34.9	29.8	40.7	30.2	22.8
	2015	• 15	5 34.6	29.4	40.5	28.0	20.8

Source: Public Health England, Sexual and Reproductive Health Profiles. fingertips.phe.org.uk/profile/sexualhealth

Many aspects of young people's well-being and development are shaped by the wider economic, social, cultural, legislative and policy context. Teenage Pregnancy is one such aspect that impacts on health inequalities, social exclusion, stigma and poorer health outcomes for those affected. It also imposes significant costs on mothers, their children and society, according to a 2013 report by Development Economics costs of unintended pregnancies to the NHS are predicted to be almost £5.1 billion between 2012 and 2020 fpa.org.uk/unprotected-nation.

Young people are the parents of the next generation; therefore sexual and reproductive health is an important indicator of population health and essential to good physical and mental wellbeing of young people and families. Teenage pregnancy is a complex, social policy issue which is affected by a range of factors, including socio economic patterns of service use amongst young people and cultural norms, the impact of which is seen both nationally and locally. The social exclusion unit however identify 3 key factors which they believe stand out from the evidence. Low expectations amongst young people who have been disadvantaged and as a result have poor expectations of education or the job market. Ignorance, young people often lack the correct knowledge and skills about contraception, sexual health and what to expect in relationships and parenthood and mixed messages from the media and key influencers such as parents <u>Social Exclusion Unit</u>. However research suggests education has a larger association with teenage pregnancy and is likely to be the key driver (Girma S, Paton D (2015).

The term 'teenage pregnancy' includes under-18 conceptions that lead to a birth, stillbirth or legal termination (abortion). Teenage pregnancy is a complex multi-faceted issue and an issue of inequality as early parenthood is associated with poor health and economic outcomes for both teenage parents and their children <u>beds.ac.uk/knowledgeexchange</u>. Women under 19 years of age have increased obstetric risk, an increased risk of stillbirth, preterm birth and low birth weight. Infant and child mortality rates in Sunderland are higher than the national average and locally we have the worst low birth weight (less than



2,500g) in the region. In 2016 the percentage of all live births at term with low birth weight in Sunderland is 4.2%, compared to England 2.9% <u>http://www.chimat.org.uk/resource</u>.

As health and social needs are inherently complex; it is unlikely that there will be a single factor which is responsible for a particular issue such as teenage pregnancy.

Child poverty, deprivation, unemployment and education are all wider determinants which impact and influence teenage pregnancy and poor outcomes for young people and families. Therefore reducing under-18 conceptions will contribute to the delivery of local strategies including:

- Child Poverty and Worklessness
- Safeguarding and Child Exploitation
- Domestic Violence
- Substance and Alcohol Misuse
- Reducing Infant Mortality
- Reducing Health Inequalities
- Improving health outcomes particularly sexual and emotional health and wellbeing.

Sunderland is ranked at 31 of 152 most deprived local authorities, with 1 representing the most deprived area (Indices of Multiple Deprivation, IMD 2015). www.gov.uk/government/IMD. The Sunderland Child Health Profile 2017 demonstrates higher than average levels of deprivation and poor health and wellbeing outcomes for many children and families, with around a quarter of children (23.4%) in Sunderland living in poverty, and this figure is set to rise by 2020 Fingertips.phe.org.uk/profile/child-health-overview. Children and young people under the age of 20 years make up 22.2% of the population of Sunderland with 7.2% of school age children being from a minority ethnic group. Of these 26%, 12,615 under 16s live in low income families compared to 18.6% nationally (PHE 2014).

Long Term unemployment in Sunderland is around 8.4% and the number of young people between 16 and 18 who were not in employment, education or training (NEETs) in 2014 was 7.3% this compares to 4.7% nationally. For Sunderland families, poverty and low income is a significant issue which is influenced by local economic challenges including a narrow range of local industry and limited employment related education and skills. As a result of this Sunderland is experiencing an increased loss of younger age working population, according to the <u>Office for National Statistics</u>, just over 600 16 to 19-year-olds left Sunderland last year - more than double the average departure count of 246 for all 326 local authorities in England. Should this continue over time Sunderland is likely to experience a widening in inequalities for young people compared to the North East region.

This JSNA covers a theme where cross- agency partnership arrangements require strong leadership, shared intelligence and where appropriate, joint commissioning plans in order to maximise effectiveness.

Who's at risk and why:

Child poverty and unemployment are two wider determinant risk factors with moderately strong influence on under-18 conception rates. Teenage pregnancy follows intergenerational cycles with children born into poverty at increased risk of



teenage pregnancy, especially for young women living in workless households when aged 11-15 (Ermisch 2001). Sunderland's Children and Young People strategic needs assessment suggests 23% of children live in workless households compared to 13% across England with 23% of children and young people living in low income families <u>Sunderland.gov.uk/Joint Strategic Needs Assessment</u>. The Index of Multiple Deprivation (IMD 2015) measures the proportion of children under 16 that live in low income households. In the darkest shaded areas of the map below 30%-70% of children live in low income low income households.



Map 1: Source: Sunderland City Council.

Out of a range of measures looking at different aspects of deprivation, the indicator with the strongest association with under- 18 conception rates was the overall deprivation rank. Free school meals (FSM) eligibility a proxy measure of deprivation is



one of the strongest individual risk factors for under- 18 conceptions (ONS 2014).

Sunderland takes a proactive stance to encourage maximum uptake of free school meals for those eligible by utilising an 'assumed consent' model. When an application for Housing or Council Tax Benefit is awarded, households with children will automatically be registered for free school meals.



Source: Public Health England

However, analysis of ward level data highlights that low educational attainment is strongly associated with high teenage pregnancy rates even after accounting for the effects of deprivation <u>Department of Education and Skills</u>, <u>Department of Health</u>. This is supported by Wellings et al (2016) who in their research identified low educational attainment as both a cause and a consequence of teenage pregnancy.

In 2015/16, 53.9% of pupils in Sunderland achieved at least 5 GCSEs at grade A*-C, including English and Maths. This is below the England average of 57.8%. For children with FSM status, the figure was significantly lower, at 27.4%, which is below the England (33.3%) and regional (30.5%) averages. This represents a significant inequality for this population cohort which evidence suggests has a long term impact.

Persistent absence from school is an issue which impacts on educational attainment, in 2014/15 there were 1,698 persistent primary absentees representing 9.3% of primary school children, which is worse than regional (9%) and national average (8.4%). The number of persistent absentees at secondary school level in 2014/15 was 2,499, representing 16.8% of secondary school children, which is worse than regional (15.2%) the national average of (13.8%). These young people are at increased risk of participating in risk taking behaviour and unlikely to achieve expected attainment levels therefore a key population group requiring targeted lifestyle interventions

Some lifestyle behaviours can influence risk taking behaviour particularly in vulnerable groups and communities these may include alcohol and substance use, smoking, and physical or emotional insecurity. For example mental health, the crude rate per 100,000 aged 0-17 years for hospital admissions for mental health in 2015/16 in Sunderland was 149.2, which is significantly worse than the national rate of 85.9 and demonstrates a marked increase in 2015/16. Poor use of contraception is also associated with increased teenage pregnancy rates, many young people report not



favouring the use of condoms due to personal dislike and stigma. Even though Long Acting Contraception (LARC) has become more popular with young people they are used by only one in six teenage women (Wellings et al 2016).

There are other population groups which are susceptible to poor health outcomes and teenage pregnancy, these may include young people schooled in alternative provision there were 33 Sunderland children included on the 2017 census. Young people excluded from education are also at significant risk, along with those not in education employment or training (NEET) those in or leaving care, young people known to the criminal justice system, some ethnic groups and some with learning difficulties. It is therefore crucial to identify those population groups at risk and ensure professionals working with at risk groups have the skills to support the health and wellbeing of their service users.

What is evident is that having children at a young age can damage young women's health and well-being and severely limit their education and employment prospects. Although young people can be capable parents, studies show that children born to teenagers are more likely to experience a range of negative outcomes in later life, and are up to three times more likely to become a teenage parent themselves <u>Accelerating the Strategy to 2010 (DFES)</u>.

Since the implementation of the National Teenage Pregnancy Strategy (2010) reducing under- 18 conceptions remain an area of policy interest. The national sexual health best practice guidance <u>Framework for Sexual Health Improvement</u> further endorses to "Continue to reduce the rate of under-16 and under-18 conceptions".

The current Government has included the (age under 18 years) teenage conception rate as one of its three sexual health indicators in its Public Health Outcomes Framework (PHOF) and it is also one of the national measures of progress in tackling child poverty, therefore it remains a priority for Sunderland City Council and its partner organisations.



Strategic Needs Assessment

1) Use title of JSNA

Teenage Pregnancy

2) What is the need locally, both now and in the future?

National population projections by age and sex are provided for the UK by the Office for National Statistics (ONS) every two years. The projections are based on the most recently available mid-year population estimates and a set of underlying demographic expectations regarding future fertility, deaths and migration.

Changes to the population's age structure affect the planning and need for services; there are currently 17.3% of Sunderland's population aged between 0-15 years and 12.1% aged 16-24 years <u>Neighbourhood.statistics.gov.uk</u>. Projected population estimates show that between 2009 and 2020 the number of people aged under- 15 is estimated to increase by 2.6%. This trend will reverse by 2030, with the expectation that overall between 2009 and 2030 the number of people aged under 15 will reduce by 2%.

In 2014 there were 8,000 15-19 year old female population at risk (2014), the table below shows the total 15-19 year old population which would require preventative services including Sex Relationship Education (SRE).

Table 1:				
Age Structure (KS102EW)				
ONS updated 2013			Sunderlar	nd
			Metropoli	tan District
All Usual Residents	Count	Persons	Mar-11	275506
Age 15	Count	Persons	Mar-11	3326
Age 15	Percentage	Persons	Mar-11	1.2
Age 16 to 17	Count	Persons	Mar-11	6753
Age 16 to 17	Percentage	Persons	Mar-11	2.5
Age 18 to 19	Count	Persons	Mar-11	7708
Age 18 to 19	Percentage	Persons	Mar-11	2.8

Source: Current ONS population estimates 15yrs-19yrs: http://www.neighbourhood.statistics.gov.uk





Annual data released in March 2017 by the Office for National Statistics (ONS) showed that the England under-18 conception rate has more than halved since 1998, exceeding the goal of the National Teenage Pregnancy Strategy 2010; however there is significant variation across England and more to do to sustain the progress so far. <u>Good progress but more to do, teenage pregnancy and young parents (LGA; PHE)</u>. Evidence base which emerged from implementing the strategy identified key areas which contributed to the success of the strategy and should be considered at a national, regional and local level. They include, embedding teenage pregnancy in wider government programmes, creating opportunities for action, the importance of leadership to support the programme and develop evidence based plans, effective implementation of plans and regularly reviewing progress (Hadley et al 2016).

In 2016 the rolling annual rate for under-18 conceptions in England was 18.8 per 1000 females aged 15-17, compared to 24.6 in the North East and 31.9 per 1000 in Sunderland. This represents 135 conceptions in 2016 compared to 155 in 2015. The under-16 conception rate was 8.5 per 1,000 in 2014-16 compared to 8.9 per 1,000 in 2013-15 resulting in 105 conceptions compared to 113 for the same periods. However compared to our statistical neighbours Sunderland remains one of the top 4 North East local authorities with the highest teenage pregnancy rates.



Area	Recent Trend	Count	Value		95% Lower Cl	95% Upper Cl
England	+	19,080	20.8	ł	20	.5 21.1
North East region	+	1,199	28.0	H	26	.4 29.6
County Durham	+	219	26.4	H	23	.0 30.1
Darlington	+	48	25.1	H	18	.5 33.2
Gateshead	+	90	27.8	⊢−−−	22	.4 34.2
Hartlepool	+	62	35.8	H	1 27	.5 45.9
Middlesbrough	+	84	33.7		26	.9 41.8
Newcastle upon Tyne	+	112	26.1		21	.5 31.5
North Tyneside	+	80	24.9	├──	19	.8 31.0
Northumberland	+	116	22.5		18	.6 27.0
Redcar and Cleveland	+	77	33.7		26	.6 42.1
South Tyneside	+	62	25.0	⊢−−− −−−1	19	.2 32.0
Stockton-on-Tees	+	94	28.9	⊢−−− −−1	23	.4 35.4
Sunderland	4	155	34.6		29	.4 40.5

Source: fingertips.phe.org.uk/profile/sexualhealth/data

Although the under-18 conception rate of 34.6 in 2015 represents a reduction of 45.2% since 1998 currently Sunderland still lags behind England and many North East authorities Sunderland's rate fell during 2016 to 31.9, but has remained higher than many neighbouring authorities.

The graph below demonstrates Q1 & Q3 rolling progress made since 1998 in Under-18 Conceptions (1998 -2015) compared to the North East and England.



As evidence suggests the increase in teenage pregnancy rates locally is unlikely to be due to one single factor, increasing austerity measures, reductions in community support services, unemployment and changes to benefit systems are all likely to be contributing factors. In addition local council cuts in youth service provision, a crucial part of reaching young people most at risk outside school and the lack of SRE delivered in schools may all be factors which influence the direction of teenage pregnancy rates in the future.



According to the Department of Health (DOH) nationally the total number of abortions during 2016 has remained fairly constant, /statistics/report-on-abortion-statistics-in-england-andwales-for-2016 the crude rate for Under 18s in England was 8.9 compared to 13.0 in Sunderland. Figure 4: Percentage of conceptions leading to legal abortion by age of woman at conception, 1995, 2005 and 2015 England and Wales all ages under 16 under 18 under 20 20 to 24 25 to 29 30 to 34 35 to 39 40 and over 10 20 30 40 50 60 70 Percentage 2005 2015 1995 Source: Office for National Statistics

Source: Percentage of conceptions leading to legal abortion by age of woman at conception, 1995, 2005, 2015 <u>ons.gov.uk</u>.

ChiMat Data Atlas produce dynamic service snapshot reports for localities <u>http://www.atlas.chimat</u> which highlight in 2014 of the 163 under -18 conceptions 49.40% lead to abortion, the highest percentage of conceptions leading to abortion nationally was in under 16s, with 63% of conceptions leading to abortion this is similar to the Sunderland position. The percentage of repeat abortions by Clinical Commissioning Groups (CCG) for under -19s in 2013 was 6.9% in Sunderland compared to 10% in England. This position may be influenced by the local CCG termination pathway which should be monitored over time in terms of best practice. The chart below provides the updated picture for 2015 compared to our North East statistical neighbours.



	ons leading to a	bortion (%) 201	5			Proportion - 9
Area	Recent Trend	Count	Value			95% Upper Cl
England	+	9,769	51.2	н	50.5	51.9
lorth East region	+	486	40.5	H	37.8	43.3
County Durham	+	88	40.2	⊢−−− −	33.9	46.8
Darlington	+	21	43.8	<u>⊢</u>	30.7	57.7
Bateshead	+	45	50.0		39.9	60.1
lartlepool	+	23	37.1		26.2	49.5
liddlesbrough	+	34	40.5	⊢ I	30.6	51.2
lewcastle upon Tyne	+	43	38.4		29.9	47.6
lorth Tyneside	+	28	35.0	⊢−−−−	25.5	45.9
lorthumberland	+	44	37.9		29.6	47.0
Redcar and Cleveland	-	30	39.0		28.8	50.1
South Tyneside	+	25	40.3		29.0	52.7
Stockton-on-Tees	+	36	38.3		29.1	48.4
Sunderland	A 1	69	44.5		36.9	52.4

obuloe. <u>http://ingenips.pric.org.utvpronic/sexualitean/vala</u>

Whilst most young women are at risk of teenage pregnancy evidence suggests young people experiencing risk factors for teenage pregnancy are often highly concentrated within particular areas and among vulnerable groups and communities. Evidence suggests that personal as well as geographical disadvantage has an influence on variations in teenage pregnancy rates. The supporting infrastructure within localities and wards such as schools, youth provision and transport also plays a significant role.

Areas of deprivation often have the highest teenage conception rates and the lowest percentage of conceptions leading to abortions. Consequently, deprived areas have the highest number of teenage maternities and are therefore disproportionately affected by the poorer outcomes associated with teenage parents. The map below shows Sunderland under 18 conception rates by ward compared to England 2015, 14 out of 25 wards remain significantly higher than the England average.





Map 2: Source: Sunderland Council, ONS 2015.

Locally intra Sunderland inequalities exist, the rate of teenage conceptions varies significantly at ward level, mirroring the pattern of socio-economic deprivation. The trend in the rate of teenage conceptions at ward level varies each year. This is due to the small numbers that occur at ward level each year and the rational for Office of National Statistics (ONS) data being released on a three-year rolling aggregate basis.

However, the teenage conception rate in the 20% most deprived wards in Sunderland has consistently been significantly higher than the overall Sunderland rate. The following chart illustrates the variation in teenage conception rates across Sunderland wards, the lowest rate, 12.0 in Fulwell and 2.4 miles away the highest rate 64.1 in Redhill.





Map 3: Source: Sunderland Council, ONS 2013-15.

There are 4 wards where teenage pregnancy rates remain significantly above the Sunderland average, therefore to target effectively those most at risk of teenage pregnancy moving forward will require both a universal and geographical approach focusing on the early identification of vulnerable groups and individuals at high risk.

The chart below ranks the 5 most deprived wards in Sunderland with the highest 3 year aggregated data for teenage conceptions. Three wards, Hendon, St Annes and Pallion



follow the Sunderland pattern in sustaining year on year reductions in teenage conceptions. However this is not the case for Redhill and Sandhill where increases in teenage conception rates are evident for 2012-14.



		Rates per :	1.000							
Code	Ward	Under 18_2010- 12	Under 18-		Lower Cl_2010- 12	Upper Cl 2010-12	Lower Cl11-13	Upper Cl2011-13	Lower Cl2012- 14	Upper Cl2012-14
E36006744	Hendon	66.3	54.84	41.22	46.9	91.0	37.00	78.29	26.13	61.85
E36006749	Redhill	72.0	57.45	73.48	52.5	96.3	40.45	79.19	53.8	98.02
E36006755	St Anne's	57.2	45.06	41.31	39.6	80.0	29.44	66.03	26.47	61.46
E36006748	Pallion	60.7	55.19	52.36	43.2	83.0	38.22	77.13	35.58	74.33
E36006751	Sandhill	61.9	58.18	62.3	44.2	84.3	40.96	80.19	44.08	85.5
E08000024	Sunderland	46.2	40.43	37.8	42.8	49.8	37.29	43.85	34.75	41.13

Source: Sunderland under -18 conception rates by ward ONS, 2012 - 2014 conceptions aggregated data.

Risk Taking Behaviour

The high percentage of conceptions leading to abortion suggests in Sunderland many pregnancies were unplanned and indicates poor or no use of contraception and increased risk of sexually transmitted infections in under- 18s. There is a good economic case for prevention services in teenage pregnancy. For every £1 invested in contraception it saves the public sector £11 plus additional welfare costs. Yet the Sex Education Forum reports that 7% of 15-year-old boys and 9% of 15-year-old girls feel they have no trusted adult in their life



to whom they can go when they need advice on sex and relationships.

Surveys show that attendance at sexual health clinics in the last five years is highest among young women aged 16-24 with community based clinics being particularly important for protecting the sexual health of this age group <u>Association for Young People's Health (AYPH 2014)</u>. As approximately 10% of all teenage pregnancies in Sunderland are under 16 conceptions the accessibility and acceptability of advice and sexual health services for this age group requires consideration.

The causes of risky behavior among teenagers is a huge debate between professionals, however it is important to understand that all teenagers, even siblings in the same home have their own life experiences and set of circumstances that contribute towards the choice they make to participate in risky teenage behavior.

A literature review undertaken by (Kenny 2010) as part of a North East project on young people: alcohol and sexual risk taking found a number of key facts including:

- Young people are more likely to have risky sex when under the influence of alcohol
- Alcohol consumption is associated with an increased likelihood of having sex at a younger age
- Alcohol is the main contributing factor to first sex using no contraception
- Alcohol consumption can result in lowered inhibitions and poor judgement in relation to risk taking behaviour and sexual heath.

In 2014 a newly-established survey was commissioned by the Department of Health designed to collect robust local authority (LA) level data on a range of health behaviours amongst 15 year-olds. The Sunderland "What About YOUth" (WAY 2014) survey findings found 21.8% engage in three or more risky behaviours which is higher than the England average of 15.9%. Just over three in five young people surveyed reported they had previously had a whole alcoholic drink (62%) with 10.9% of 15-year-olds being regular drinkers; this is higher than the England average of 6.2%. www.hscic.gov.uk.

Locally alcohol and the high alcohol hospital admission rates in under -18s is a potential contributing factor to the prevalence of teenage pregnancy; other risk taking behaviours to consider are substance misuse and smoking. The table below shows admission episodes for alcohol-specific conditions under-18s (Persons) for the 12 North East authorities compared to the North East and England, Sunderland has the highest under-18 admissions in the England.



Area	Recent Trend	Count	Value A		95% Lower Cl	95% Uppe	r Cl
England	1	12,998	37.4			36.7	38.0
North East region	-	1,053	66.9			62.9	71.0
Sunderland	-	188	115.1			99.2	132.8
South Tyneside	(H)	83	94.4			75.2	117.0
Redcar and Cleveland	100	57	69.4			52.5	89.9
North Tyneside		82	67.6			53.7	83.9
County Durham	-	203	67.5			58.5	77.4
Gateshead	3 H	80	66.5			52.8	82.8
Middlesbrough		63	66,0	the second s		50.7	84.4
Northumberland	(m)	115	64.1			52.9	76.9
Darlington	1	40	58.7			42.0	80.0
Stockton-on-Tees	-	73	57.3			44.9	72.0
Newcastle upon Tyne		.52	30.9	H		23.1	40.5
Hartlepool	-	17	28.3			16.5	45.4

Recent 2015/16 data shows the overall under 18s alcohol-specific hospital admission rate is 115.1 per 100,000 this is the worst in the North East, and a deterioration from the previous 3 year pooled period, 2012/13 to 2014/15 where the overall figure for Sunderland was 92.9 per 100,000. Female alcohol admissions are worst at 126.3 per 100,000 compared to males at 104.6. The table below shows the trend in under- 18 alcohol admission episodes since 2006/07 and demonstrates an upward trend from 2010/11.



Source: Public Health England

The following map shows in more detail the local picture in relation to 2012/13 to 2014/15, under- 18s alcohol-specific hospital admissions. There were 183 emergency hospital admissions specifically due to alcohol, involving 153 individuals, this has increased to 188 admissions in the recent 2015/16 data. The map below shows Sunderland under- 18s emergency hospital admissions by ward. Overlaying this data with the ward data for teenage pregnancy shows there is a clear association between the alcohol use and the two







3) What are the effective interventions?

Assessing the impact of interventions aimed at reducing teenage conceptions at a local level is difficult as there is an unavoidable delay in reporting conception rates. Also prevention and many of the interventions aimed at reducing teenage conception impact over the medium and longer-term. However, there is national and international evidence on what aspects are most effective in reducing teenage pregnancy.

The factors influencing teenage pregnancy are multifaceted; there is no single intervention which is effective in reducing teenage pregnancy. However leadership and a robust partnership approach are seen as critical success factors in driving this agenda.

The diagram below highlights the ten evidence based factors for an effective teenage pregnancy strategy <u>www.national teenage pregnancy strategy</u>.



There is good evidence that Personal Social Health Education (PSHE) and school-based Sex Relationship Education (SRE), particularly linked to effective contraceptive services, are effective in preventing unintended teenage pregnancies. Effective sex and relationship education, both in the home and in the classroom, will empower young people and equip them with the knowledge, skills and confidence to talk to parents or carers, partners and health professionals about their sexual health and seek advice and support when needed.



There is good evidence that effective contraceptive services are cost effective in tackling teenage pregnancies (Swann et al, 2003). The National Institute for Clinical Excellence (NICE) compares the cost-effectiveness of medical interventions. NICE states that long Acting Reversible Contraceptive (LARC) methods (intrauterine devices, the intrauterine system, injectable contraceptives and implants) are more cost effective than the contraceptive pill particularly in client groups such as young people who are the least likely to comply effectively with oral contraception methods <u>National Institute for Health and Care Excellence</u>.

NICE guidance (2014) on NHS provision of contraceptive services for young people up to the age of 25 found strong effectiveness for the supply of Emergency Hormonal Contraception, the promotion of condoms, school-based provision, community outreach as well as tailoring services for socially disadvantaged young people.

The Department of Health (DOH, 2011) suggested that "there is also clear evidence that as well as giving young people the means to avoid early pregnancy, sustained reductions in teenage pregnancy rates will only be possible if action is taken to address the underlying factors that increase the risk of teenage pregnancy, such as poverty, educational underachievement, low aspirations and lack of engagement in learning post-16".

A review of research intervention reviews on teenage pregnancy and parenthood undertaken in 2007 on behalf of the National Institute for Health and Clinical Excellence also identified the following effective interventions in tackling teenage pregnancies (Trivedi et al 2007).

- Community based education and the development and contraceptive services.
- Youth development programmes focusing on education, personal and vocational development and family outreach programmes involving teenagers' parents.
- Interventions which can improve health and social outcomes for teenage mothers and their children including good antenatal care, home visiting and parental and psychological support such as that provided by Family Nurse Partnership (FNP).
- Early childhood interventions, youth development programmes and home visiting can be especially effective among vulnerable at risk groups.
- Incorporating risk reduction interventions such as alcohol brief intervention into routine care such as clinical services, children's services and education and career development services.

4) What is being done locally to address this issue and how do we know this is making a difference?

Wider Council and Partner Services

Schools and Children's services such as children's centres, youth services and strengthening families can all play a significant role in contributing to this agenda however in times of austerity demands on services often result in gaps in the prevention agenda being taken forward. Over recent years resources in the public sector have reduced significantly and are expected to continue to reduce in the coming years, therefore agendas such as teenage pregnancy needs to remain high profile and be built into existing service strategies and plans. There are opportunities in Sunderland to strengthen the sustainability of teenage pregnancy plans by integrating the agenda with the Children and Young People's Partnership and the council's vision for Together for Children.



Looked After Children (LAC)

Health assessments are complete for LAC young people annually, they are an opportunity to advise and support young people and to ensure they have access to all the information they require. 'Red flag' questions and age appropriate sexual health questions are included in the assessment, the importance of the assessments are often missed by key workers and young people. The LAC team are working towards strengthening these opportunities and ensuring Every Contact Counts. The new 'teenagers only' waiting room facility has recently opened after feedback from young people; this makes the assessment process and environment less clinical.

Care Leavers

For those young people leaving care, their 'Health Passport' contains information they may need to access services in the future. The team are also planning to work on pathways to ensure LAC & young people can access CASH services quickly and easily.

The Box Youth Project - Provident Good Neighbour Community Programme.

The projects offer for 11-19 year olds includes support with emotional health and wellbeing issues, lifestyle issues including sexual health, relationships and self-esteem._The project offers a Peer Education programme training young people aged 15-19 and a volunteering programme supporting young people to be actively involved in their communities.

Connexions

Connexions deliver statutory careers information, advice and guidance services on behalf of Sunderland City Council. They offer confidential advice and support services for young people aged 13-19 years and up to age 25 for young people with special needs. This service plays a crucial role in supporting many young people through the transition from school to employment.

Young Inspectors

Sunderland Young Inspectors have carried out inspection visits on Contraceptive and GUM services at the City Hospitals Sunderland. The first visit in 2013 made recommendations particularly making services more young people friendly. In 2017 services have been reassessed and demonstrated service improvements, the young inspectors identified further recommendations at the visit for further service improvements. Overall the Young Inspectors felt the services were offering a good service to young people currently. This process aims to improve the quality of service provision to young people; the service is now working towards You're Welcome Quality Criteria.

Sunderland College

Provision of sexual health and C-Card is via the School Nursing service, however this has seen a reduction over the last few years, currently each campus of study receives 1 hour provision per week. There is currently a gap in provision of PSHE for vulnerable students the college is currently investigating whether they can train up staff to deliver sexual health / relationships to students with learning difficulties / disabilities.

The college run themed weeks covered by Personal Development & Enrichment; these cover a whole range of Health & Wellbeing areas including sexual health, where information is shared with students on a voluntary basis.



<u>PSHE & SRE</u>

PSHE education is a planned, developmental programme of learning through which children and young people acquire the knowledge, understanding and skills they need to manage their lives now and in the future. As part of a whole-school approach PSHE education contributes to building young people's confidence and self-esteem, and to identify and manage risk. Ideally PHSE should be seen as a core continuum starting in early years through to post school education, supporting and shaping young people through the life course and key transitional stages. In Sunderland PSHE and SRE is variable and has experienced a loss of momentum in recent years due to national changes impacting on schools. Currently SRE within schools has been delivered through the Local Authority risk and resilience model, however the Teenage Pregnancy Action Group has noted that due to current capacity this resource is now limited. There is currently a gap in SRE provision in alternative education settings including Sunderland college. A strategic review of SRE is recommended with a particular focus on a model of targeted and universal provision.

C-Card Scheme

The Sunderland Condom Card or "C-Card" scheme is a preventative service commissioned since 2011 its overall aim is to support young people with positive sex and relationship advice and education. The scheme distributes free condoms and support to young people 13-24 years of age who have registered and been assessed by a trained adviser. The PHE document, C-Card condom distribution schemes, "Why, what and how" offers further guidance on the important of C- Card schemes to young people <u>Why, what how (PHE)</u>.

Given the crucial role the C Card Scheme plays in reducing teenage pregnancy a Health Equity Audit (HEA) of the current scheme was completed in 2016. The HEA reviewed patterns of access over a 3 year period 2013/14 and 2015/16. The HEA noted that whilst the service is well received by young people, total activity across Sunderland has fallen by over 50% between 2013/14 and 2015/16. Key finding relevant to this JSNA included:

- 93% of service users were aged between 14-19 years.
- The rate of access is highest amongst the younger age group (14s) and declines with age.
- The ratio of access was 60:40 in favour of females.
- Rates of access by area of residence are not proportionate to need.

Source: Patterns of access to Sunderland C-Card scheme compared to the profile of health need, Sunderland Council, 2016.

Live Life Well

The Live Life Well service is an adult based service commissioned by the Local Authority to support people with behaviour change. The service is currently broadening its scope to include young people; this includes C Card, Chlamydia screening, sexual health support and advice and brief intervention. The service also provides learning and skill development including training for health and non-health professionals and health champion training.



Sexual Health Services

The contribution comprehensive sexual health services plays in the prevention of teenage pregnancy is well documented however recent health equity audits have highlighted issues in relation to their accessibility and acceptability across some localities, this will need consideration in the recommendations of this JSNA.

A comprehensive sexual health service providing outreach community-based contraception and sexual health (CASH) clinics supported by the Young Persons contraceptive nurse is commissioned by Sunderland Council with the following preventative aims:

- to reduce the incidence (the number of new cases) of key sexually transmitted infections through the provision of barrier contraception and advice on safe sex
- to reduce the number of unplanned conceptions through advice and the provision and fitting of a full range of contraception methods
- to reduce the number of teenage conceptions through advice and the provision and fitting of a full range of contraception methods in a setting which meets the needs of young people under 24 years of age

In 2013 and 2014 a health equity audit of provision of sexual health services in Sunderland was undertaken in relation to young people and adults under 25 years, key findings relating to this JSNA were:

- 20% of young women 16-18 years of age across England accessed contraception clinics in 2012/13. In Sunderland the proportion was 14%, two thirds of the England rate.
- The number of emergency hormonal contraception (EHC) pills dispensed was highest among 20-24 year old women among whom the number of abortions is highest.
- The provision of long-acting reversible contraception in primary care is variable between individual GP Practices and there are some Practices in areas with high abortion rates where rates of prescribing are low resulting in a missed opportunity for prevention.
- Males are poorly represented among CASH clinic service users compared to the national average pattern. The ratio of female to male service users in Sunderland is 25:1 among young adults under 25 years. The national average ratio is 8:1 among people of all ages.

A recent equity audit of access specifically to EHC based on dispensing data from 2013/14 and 2014/15 noted the dispensing rate per 1,000 females 15-44 years fell by 20% between 2013/14 and 2014/15.

Source: Sunderland sexual health equity audit 2015, Emergency Hormonal Contraception, Sunderland Council.

GP and Pharmacy Services

LARC methods of contraception are considered to be more cost effective and effective in terms of compliance than user dependent methods, and their increased uptake could help to reduce unintended pregnancy. Provision in Sunderland is commissioned from primary care services to improve access to a wider range of contraception choices within the local community. In 2015, the rate of GP prescribed LARCs (excluding injectable) in Sunderland



was 20.6 per 1,000 women aged 15 to 44 years, compared to 24.5 in the North East and 29.8 in England <u>https://fingertips.phe.</u> Emergency hormonal contraception (EHC) is available through Sunderland pharmacies, in 2013/14, 21 out of 67 pharmacies in Sunderland dispensed EHC on 10 or more occasions this has reduced in 2014/15 to 19, work is ongoing to increase pharmacy access to EHC particularly in wards with high teenage pregnancy rates.

Healthy Child Programme: Health Visiting and School Nursing.

The Healthy Child Programme (HCP) are key universal public health services for improving the health and wellbeing of children 0-19 through health and development reviews, health promotion, parenting support, screening and immunisation programmes. The multidisciplinary school based service for children and young people is central to supporting good sexual health outcomes and reducing teenage pregnancies by providing information and practical support. A comprehensive offer for young people has been identified as a priority in the new Healthy Child Programme service specification which reflects the identified needs of young people.

Family Nurse Partnership

The Family Nurse Partnership in Sunderland is an evidenced based preventative programme; it is a voluntary home visiting programme for first time young mums aged 19 years and under. A specially trained family nurse supports the young mum from early pregnancy until the child reaches two years of age. Pregnancy and birth are key transition points when most families are highly receptive to behavior change and support. The programme aims to support the most vulnerable young parents to improve antenatal health, improve child health and development and improve life opportunities for new parents. The Sunderland programme delivers good outcomes for local young people however more recently has experienced capacity issues due to demand for the service.

Bump to Baby Plus (B2b+)

This project involves Sunderland Children's Services, Connexions Tyne and Wear, Sunderland Teaching Primary Care Trust, Teenage Pregnancy Board and Bridge Women's Project. The project works closely with young parents offering advice and support on a range of issues. This includes parenting, benefits and health issues for parents and their children, isolation, financial entitlements depending on individual circumstances, childcare, low selfesteem and confidence building. This project has been in existence for a number of years, due to its success this project continues to run.

5) What is the perspective of the public on this issue?

What About YOUth Survey.

What About YOUth? 2014 (WAY) is a newly-established survey designed to collect robust local authority (LA) level data on a range of health behaviours amongst 15 year-olds. Responses to the risk taking behaviour questions revealed 6% of young people did not engage in any risky behaviour, 16% of young people engaged in three or more risky behaviours while 5% engaged in four or more risky behaviours, for more information access. http://content.digital.nhs.uk/catalogue/PUB19244



Young People's State of the City Debate

The Young People's State of the City Debate in October 2013, as part of the Children and Young People Plan consultation identified sex education as a key priority for children and young people.

Health Related Behaviour Survey (HRBS)

In 2016 the council commissioned the SHEU, HRB survey, all primary and secondary schools across Sunderland were invited to take part. The secondary school survey was completed by 14 schools (5,489 pupils) and included questions relating to relationships and sexual health. A sample size of 3127 (1661 yr 8, 1465 yr 10) pupils responded to the survey, suggesting parents, school lessons, the GP, school nurse, friends and the internet should be the main source of information about relationships and sexual health. Approximately 15% of those surveyed would like to talk to school nurse about growing up and puberty and 9% would go to a school nurse for advice regarding sexually transmitted infections.

The survey also asked questions in relation to the C Card, overall 61% of boys had not heard of the C Card scheme and 70% did not know where to go for free condoms. In comparison to girls where 41% had heard of the C Card Scheme and 32% were aware where to access free condoms.

<u>NWA survey</u>

Sunderland Council (2016) commissioned NWA a social and market research organisation to undertake insight work in relation to user and stakeholder engagement. The insight work aimed to gather views from parents/carers, schools and children and young people who live and access services in Sunderland, and other stakeholders, to inform the specifications for future new models of provision for services for those aged between conception and 19 years. Over 1200 people contributed to the consultation via questionnaires and /or interviews or group discussions, and these included 736 children or young people, 334 parents, and over a 100 other stakeholders (school governors, school staff and others).

C-Card Young People Engagement, C Card review

A survey to seek young people's knowledge and views on the current C-Card service was undertaken in 2016. An online and paper based survey was designed and sent out via various communication routes for C-Card outlets and organisations to actively encourage young people to complete the Survey. 32 surveys were returned via the online method and 109 completed via paper method.

From the 141 young people who completed the survey 131 were aware of the C Card service. 53 young people had used the C-card service and 88 had not used the service. Of those that had not used the service 56% said they would like to use the service in the future and 43% said they would not like to use the service in the future sighting not sexually active and Don't like using condoms as the top two reasons for not accessing the service.

Non-service users were also asked where they would like to access the service if they did so in the future. Doctors, College, Youth Groups and Sexual Health Services were the leading access points however it should be noted as the survey was predominantly completed by the older age groups this may have influenced the findings.

Young people were also asked about their experience when accessing the C-Card service, the table



Experience when accessing the C-CARD Service	Yes	No
The venue was easy to find	27	11
The worker was approachable	29	10
The staff were comfortable talking to me about sexual health	30	10
You were given enough time to discuss the things that were important to you	29	10
The opening times were convenient	29	14

When asked why young people had accessed the C Card service the majority b wanted to protect themselves from Sexually Transmitted Diseases, avoid getting pregnant and access affordable condom services. Young people stated that main place they want get more information regarding C-Card in the future is from education settings including school, college and university (24) followed by their doctor (16) and the internet. Young people were finally asked what would encourage them to use condoms and access C Card services, the key young people's responses are identified below.

What would encourage you to use condoms more when having sex?	Number of young people responding
school health drop in that offer c-card	9
good sex and relationship education in schools	12
being able to talk to your partner	8
good advice from friends	6
more c-card information	9
more c-card venues	9
I'm not having sex	10
increase my self-confidence/self esteem	6
other	4

Sunderland Young People and Sexual Health survey and focus groups (2014).

The aims of the Young People's Sexual Health survey was to gain young people's views and perspective of current sexual health services for young people. To gain insight into access, information and usage and to understand young people's views and experiences of accessing services what shaping services for in the future.

Key findings included understanding ways young people would like to find out about sexual health and sexual health services, including their preferred communication method's with a health professional (57.5%) ranking this as their 1st choice followed by the followed by the internet and a telephone helpline. Their preference in where they would like to find out about sexual health and sexual health services included health care venues (pharmacies, GP surgeries and primary care centres) followed by community venues (e.g. community centres). The main reasons that young people put off accessing sexual health services is embarrassment (65.6%) followed by concerns about confidentiality and the perception that young people could not attend the GP without a parent being present under the age of 16. Young people in the focus groups also identified being seen by their peers accessing services as a concern in schools and not having a choice of male and female staff to confide



in.

6) Recommendations for commissioning and further needs assessment work

Unmet Needs and Gaps for future service improvement.

- The National Curriculum has not supported sex and relationship education (SRE) at Key Stage 3 (ages 11 to 14 years) since 2014. This is likely to have impacted on some teenagers understanding of sex, relationships and risk taking behaviour. Locally access to comprehensive SRE has been variable across schools and educational establishments. Whilst there are pockets of good practice this is inconsistent, with evidence of a lack of skills and resources across the system to deliver this.
- Pupils in Sunderland schools don't appear to have equitable access to sexual health services such as C Card, Emergency Hormonal Contraception (EHC) and advice and support on educational sites. This is due in part to schools acceptability of on-site provision but also the sufficient capacity within the school nursing provision to deliver this agenda within the healthy child programme.
- More awareness needs to be done to raise the profile of C Card with boys and young men.
- Explore opportunities to increase access to services for students at Sunderland College.
- There are gaps in local data processes due to the 14-month time delay in reporting teenage conception. It is important to collect more timely local data to accurately inform planning and commissioning decisions.
- Sunderland's high rate of teenage pregnancy is proportionate with Sunderland's demographic, health and wellbeing risk factors within the population. Leadership and long-term system strategies and partnerships are needed to reduce the wider determinant risk factors which impact on teenage pregnancy and improve employment opportunities for the at risk population thus reducing family poverty and improving health outcomes.
- Continued local qualitative research around young people's needs, this will help inform planners of issues in localities with sustained high rates of conception. Increased knowledge and insight will better inform targeted interventions with key groups at greatest risk of teenage pregnancy. It will also enhance our understanding of other wider issues affecting young people's ability to access services.
- It is not clear why many teenage parents do not return to education, training and/or employment. A better understanding of these reasons would enable school, colleges and employers to plan effectively to maximise opportunities for these young people.
- Whilst the majority of the school-age pregnancies are from a White British background as Sunderland demographics change and become increasingly diverse there may be more conceptions in pupils from BME communities which services will need to consider.
- Maximise public health contracted services contribution to improving education and skills for young people.

The following recommendations and commissioning intentions are aligned to the 10 key strategic priorities identified as best practice.



1.Strategic Leadership and accountability

- Review senior leadership, partnerships and accountability for teenage pregnancy across the local system.
- Explore opportunities to improve communication with schools in relation to pupil health and wellbeing
- Integrate teenage pregnancy prevention objectives into the planning of corporate policies, council services and contracts.
- Ensure joined up working between commissioners (e.g. Public health, Local Authority and Clinical Commissioning Groups).

2.Data for planning and monitoring

• Current data systems do not enable the collection of real time data for the planning of services, consider improving the current data monitoring and performance management process.

3.Communication and Marketing

- Ensure effective branding and promotion of commissioned services.
- Maximise relevant national and regional health promotion campaigns
- Work with communities and CYP to raise aspirations.
- Work to target young boys and men to increase access to services

4.Targeted Prevention

- Reduce Health Inequality (Geographical targeting of services and interventions)
- Ensure the new HCP contract strengthens universal provision by including robust improving sexual health and reducing teenage pregnancy objectives and performance measures within the new contract.
- Current and future service provision may need to adapt to meet the changing needs of more diverse communities.
- Improve access to contraception services for under 16s and under 18s in high risk communities.

5. Access to sexual health services

- Work to increase the uptake of LARC in under -25s.
- Undertake a strategic review of sexual health services to inform the new sexual health tender 2018/19
- Integrate universal provision of C Card into new provider contract
- Ensure the review has a specific focus on under 16s sexual health service provision
- Ensure the new sexual health contract strengthens universal provision by including prevention and reducing teenage pregnancy objectives and performance measures within the new contract.

6. Youth friendly sexual health services & condom schemes

- Implement the recommendations from the C Card and EHC health equity audits
- Implement 'Your Welcome' quality standards into young people's services
- Undertake options appraisal for the C Card Service provider
- Build on the Youth Health Champions model to increase access to peer support
- Increase access for young people through non-traditional health services such as schools, youth and leisure provision.



- Conceptions in under- 16s require further investigation (64.1% led to abortion in 2013 compared to 55.4% in the North East).
- Further consultation is required with young people into the acceptability and accessibility of sexual health services across Sunderland.

7.Comprehensive SRE / PHSE in educational establishments

- Review current SRE provision and benchmark against best practice
- Liaise strategically with schools to develop a new whole school approach to deliver PSHE/SRE (align with pending government recommendations).

8. Dedicated support for new young parents

• Review of Family Nurse Partnership (FNP) as part of the HCP review. 2017/18

9. Support for parents and carers to discuss sexual health & relationships with young people

- Consult with partners, young people and families to gain better understanding of the needs of this population group, some of this insight may be gathered through the HCP consultation and market testing events.
- Explore the role of the school nurse in providing support for parents and carers in relation to sexual health and relationships.

10.Training for health and non-health professionals

- Develop a public health training offer (capacity building framework) across all public health services and themes to develop knowledge, skills and competencies.
- Maximise opportunities in related lifestyle contracts and services to contribute to improving life skills education for young people.
- Ensure public health contracts include key performance indicators for staff training to build and maintain quality services.

<u>EIA</u>

Throughout this document consideration has been given to the issue of equality, from the perspective of disability, age, gender, race and sexual orientation. This JSNA also acknowledges that culture, religion or belief can also impact on a person's sexual health choices and therefore services need to respond appropriately. The following are areas highlighted throughout the JSNA process which needs consideration in the commissioning and designing of services.

Ethnicity

• The recent equity audits suggest there is good access to services from teenage ethnicities other than 'White British' this should be monitored as part of the performance management of services.

Religion

• There are often challenges supporting faith schools and youth facilities to deliver good quality and full range of SRE and access to sexual health services.

Disability

• Some issues providing SRE to those with learning difficulties, few resources or skilled staff



trained to do this, commissioners should be built into relevant contracts.

Gender

• Low uptake of sexual health services and support by young males, commissioners should built indicator into sexual health contracts

Age

• Teenage parents in particular are often socially excluded by other agencies and perceived negatively by press and members of the public. The need to avoid teenage pregnancies so that children are conceived by parents who are ready and able to parent them well is evident. This JSNA aims to promote the health and well-being of both children and teenagers and ensure that information on how to access sexual health and support services is available. Key preventative groups for teenage pregnancy are, high risk and the most vulnerable e.g. under 16s, young carers, young people not in education, employment or training (NEET), teenage parents, homeless, people with physical and emotional problems and those participating in risk taking behaviour.

Sexuality

• Some young people accessing services may have issues about their sexuality, lesbian, gay and bisexual (LGB) people are more likely to experience health inequalities and have higher need for sexual health services and support. Staff delivering such services should be trained in such issues.

7) Key contacts

Lorraine Hughes Acting Consultant in Public Health Lead for children and young people, sexual health and public mental health. Sunderland City Council 0191 5611978 <u>lorraine.hughes@sunderland.gov.uk</u>

Sue Perkin Public Health Lead Sunderland City Council 0191 5617813 Sue.perkin@sunderland.gov.uk

References



- Association for Young People's Health, Public Health England (2015) Improving young people's health and wellbeing: A framework for public health. Public Health England, London. <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/39939</u> 1/20150128_YP_HW_Framework_FINAL_WP_3_.pdf
- Chandra-Mouli, V Lane, C. Wong, S (2015) What Does Not Work in Adolescent Sexual and Reproductive Health: A Review of Evidence on Interventions Commonly Accepted as Best Practice. Global Health: Science and Practice; 3, 3, 333-340, 2015. www.ghspjournal.org
- 3. Department of Health (2011) Teenage Pregnancy National Support Team, Effective Public Health Practice, HMSO, London.
- 4. Girma S, Paton D, (2015) Is education the best contraceptive: the case of teenage pregnancy in England? Social Science Medicine, 131; 1-9.
- 5. Hadley A, Chandra-Mouli V, Ingham R, (2016) Implementing the United Kingdom Governments 10-year teenage pregnancy strategy for England (1999-2010): applicable lessons for other countries. Journal of Adolescent Health.

http://www.jahonline.org/article/S1054-139X(16)00102-6/pdf

6. Ermisch, J., Francesconi, M., and Pevalin, D.J. (2001). The outcomes for poverty of children. DWP Research Report 15.

https://www.spi.ox.ac.uk/fileadmin/documents/PDF/Barnett_Paper_20091_Duncan.p df

- 7. Kenny, S. (2010) Young People: Alcohol & Sexual Risk Taking. A Literature Review for the North East Region. Claire Cairns Associates Ltd.
- National Institute for Health and Care Excellence (2014) Contraceptive Services for under 25s. https://www.nice.org.uk/guidance/ph51/chapter/2-public-health-need-and-practice
- Office for National Statistics, (2014) Teenage conception rates highest in the most deprived areas. Short story published in Conceptions-Deprivation Analysis Toolkit. ONS. 2014. Office of National Statistics (ONS)
- Salam, R A. Faqqah, A. Sajjad, N.Lassi, Z S. Das, J K. Kaufman, M. Bhutta, Z A. (2016) Improving Adolescent Sexual Health and Reproductive Health: A Systematic Review of Potential Interventions. Journal of Adolescent Health, 59, 11-28 www.jahonline.org Accessed 19th April 2017
- 11. Swann C, Bowe, K McCormick G, Kosmin M (2003) Teenage pregnancy and parenthood: a review of reviews: Evidence briefing; Health Development agency
- 12. Teenage Pregnancy Unit, (August 2006). Under 18 conception data for top tier local authorities LAD1 1998–2004 (online). Available from: Teenage Pregnancy Unit.



- 13. Trivedi, D. Bunn, F. Graham, M. Wentz, R. (2007) Centre for Research in Primary and Community Care, University of Hertfordshire. Update on review of reviews on teenage pregnancy and parenthood, Submitted as an Addendum to the first evidence briefing 2003, On behalf of the National Institute for Health and Clinical Excellence. Centre for Research in Primary and Community Care.
- Wellings, K. Palmer, M. J. Geary, R. S. Gibson, L. J. Copas, A. Datta, J. Glasier, A. Scott, R. H. Mercer, C. H. Erens, B. Macdowall, W. French, R. S. Jones, K. Johnson, A. M. Tanton, C. Wilkinson, P. (2016) Changes in conceptions in women younger than 18 years and the circumstances of young mothers in England in 2000-12: and observational study. The Lancet; 388: 586-595, May 2016. <u>www.thelancet.com</u>