

# Bradford District

## Sexual Health Needs Assessment

### 2017

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## Executive Summary

This needs assessment seeks to describe sexual health in the Bradford District, looking at STIs, HIV, teenage conceptions and terminations, and to describe current service provision with regards to prevention, treatment and support. In doing so, this will help local leaders identify the type and level of sexual health need of the residents of Bradford, identify groups in greater need of preventative services locally; and provide recommendations to address gaps in services, address unmet need, and tackle inequality.

### *Key Findings – Sexual Health Needs in Bradford*

- Bradford's population is young, multi-ethnic, and rapidly changing through migration patterns. The District's wider determinants of sexual health, as defined by Public Health England, are poor, and it would be expected that higher rates of sexual health need would be seen in this kind of local area.
- Rates of Sexually Transmitted Infections (STIs) in Bradford are falling, and are lower than regional and national comparators. The reduction is driven by a decline in the rate of Chlamydia over the last 5 years. This is, however, only an indication of disease that is being identified within services.
- Rates of reinfection with an STI within twelve months (a sign of poor post-diagnostic support/information) are also falling, compared to a national rise.
- The proportion of the population tested for an STI each year in Bradford is rising, but still below regional and national comparators. The proportion of tests which are positive for disease is also lower, meaning that there are either lower levels of STIs in the population or those who come forward for testing are less likely to have an STI.
- The ethnic profile of those tested for an STI suggests that fewer people from an Asian or Asian British background are tested than would be expected given Bradford's population.
- Undiagnosed Chlamydia poses a substantial health and infection risk. A smaller proportion of the Bradford 16-25 year old population are screened every year through the National Chlamydia Screening Programme than national and regional comparators; a similar proportion are identified as positively infected. The number of tests carried out is the driver of the low Chlamydia detection rate, although the reducing trend in incidence in over 25s recently in the District may indicate that screening may not be the sole reason for lower incidence.
- Partner notification following Chlamydia screening is strong in the district. Locations of test are diverse and are increasingly online; given comparisons to national locations of screen, there may be benefit in increasing the number of community screens in the District.
- Bradford has seen increased Gonorrhoea incidence over the last 5 years, in parallel to rising national rates. High-level azithromycin resistant (HL-AziR) Gonorrhoea infections are a real risk given recent regional outbreaks, but so far, none have been recorded in Bradford. Syphilis

incidence has not risen over the last years, contrary to a large rise nationally and regionally; this may mean riskier forms of sexual behaviour are less common in the District.

- HIV prevalence in Bradford is below national and regional rates; highest use of support services is in the South and East areas of the urban city core. Incidence of HIV is declining, and an epidemiological transition is occurring similar to national trends where – because of advances in HIV treatment (Highly active antiretroviral therapy) – people are living much longer with the condition, so prevalence is stable/going up and will remain so for the next 10-20 years.
- An almost equal number of gay, bisexual or men who have sex with men and heterosexual people were diagnosed with HIV in 2014/5; more males than females are diagnosed, and the burden of disease is higher amongst black Africans. Late diagnosis of HIV is not significantly higher in Bradford than elsewhere, but still presents a challenge to health services and HIV treatment.
- Human Papillomavirus (HPV) vaccine uptake is good in Bradford, and cervical cancer rates are similar to national averages. Cervical cancer screening rates are lower than national and regional rates, driven by very low rates of screening uptake in Bradford City CCG area.
- The under-18 conception rate is falling, and rates are now similar to England averages; they are highest in South Bradford and in Keighley West. Historically, fewer under age conceptions led to abortions than in comparable areas; rates are now similar.
- The majority of young people have received RSE and information around STIs. However the results do not show how comprehensive the RSE was that they received. The young people also said they would go to their GP or the Bradford Sexual Health and Contraception Clinic (Locala) for an STI test.
- Thy key themes that came out from the older people's focus group were that there is no upper age limit, there needs to be different information for different ages/ outlooks on sexual health/ prevention, relationship abuse, recognition of LGBT relationships. Also, not understanding the outcome of sex without protection and what does sexual health mean to people with dementia and for carer's
- The main reason why service users attended Locala was for contraception and a new STI
- From the Locala data, more 15-24 years olds tested positive for Chlamydia than any other age group.
- The three CCG's – Bradford District, Bradford City, and Airedale, Wharfedale and Craven are in the lower half of prescribing contraception items compared to England, For contraception devices, NHS Airedale, Wharfedale and Craven are the highest prescriber The three CCG's are in the top half of prescribing emergency hormonal contraception.

## **Recommendations**

- To increase the number of community screens in the district.

- Information around free EHC and condoms to be more widely publicised to young people.
- The Bradford Sexual Health and Contraception Service (Locala) to continue promoting their service particularly focusing on young people.
- For all services that work with young people to be aware of choices if a young person becomes pregnant.
- More opportunities to make young people aware of the HPV vaccine, and for any missed opportunities to be picked up by a GP.
- To encourage more services, schools, FE colleges to promote the BASH website to young people.
- More information on what older people need in terms of their sexual health, in particular for those who are visually impaired, physical disabilities, learning difficulties, people with dementia and carer's.
- Continue to promote the BASH website to services who work with young people and adults.

# 1. Background

## 1.1 Why has this needs assessment been carried out?

One of the key elements of effective commissioning in sexual health, according to the Government's framework for Sexual Health Improvement in England, is 'good-quality intelligence about services and outcomes, which leads to 'challenging but achievable outcomes measures which are drawn up using robust data and needs assessment' (DH 2013). This sexual health needs assessment (SHNA) has been written in order to inform the commissioning and provision of sexual health services in the Bradford District, and to ensure that the most important trends in sexual health – and the extent to which needs are being met – is at the centre of future planning.

Guidance on conducting a sexual health needs assessment produced for the Department of Health in 2007 suggests that 'ideally you would undertake a comprehensive SHNA at least once every five years'. Since the last Bradford Sexual Health Needs Assessment, published in 2012, both the responsibility for commissioning of Sexual Health services and the configuration of providers in this area has changed. Additionally, there have been population-level shifts in sexual health behaviour, and new government policy. Thus the time is right to conduct a new SHNA for the District.

This SHNA has five key aims:

- Describe sexual health in the District, looking at STIs, HIV, teenage conceptions and terminations
- Describe current service provision with regards to prevention, treatment and support.
- Identify the type and level of sexual health need of the residents of Bradford
- Identify groups in greater need of preventative services locally.
- Provide recommendations to address gaps in services, address unmet need, and tackle inequality.

## 1.2 Methodology

The concept of 'need' has been defined as 'capacity to benefit' from a healthcare service or public health intervention – within the constraints of the resources available – due to a lack of health (Culyer, 1976). According to Bradshaw (1970), they can manifest as comparative needs between populations, felt needs of individuals, expressed needs of individuals (demand for services) and normative needs as judges by experts (e.g. clinicians).

Within sexual and reproductive health, our local population in Bradford has the capacity to benefit from any provision of service which increases prevention, uptake of testing, progression to treatment, on-going support, partner notification, and the prevention of reinfection with a sexually transmitted infection, and from services that support reproductive health and informed choice around conception.

We can gain insight into the need for sexual and reproductive health in our area by considering data on rates of diagnosis (how much disease do we know about?), sexual health testing carried out (how much disease is identified?), treatment contacts (how much disease is dealt with appropriately?), partner notification rates (how much onward transmission is stopped?), and contraception usage (what methods are being used to prevent unwanted pregnancy?).

To structure this approach, this needs assessment, a standard needs assessment framework has been used which considers:

- 'demography': the background structure and characteristics of the Bradford population
- 'supply': including where our sexual health services are located, and their configuration and referral pathways.
- 'need': including the epidemiology of diseases in the Bradford population and the distribution and determinants of those diseases
- 'demand': including the use of services and how people in the District are accessing them

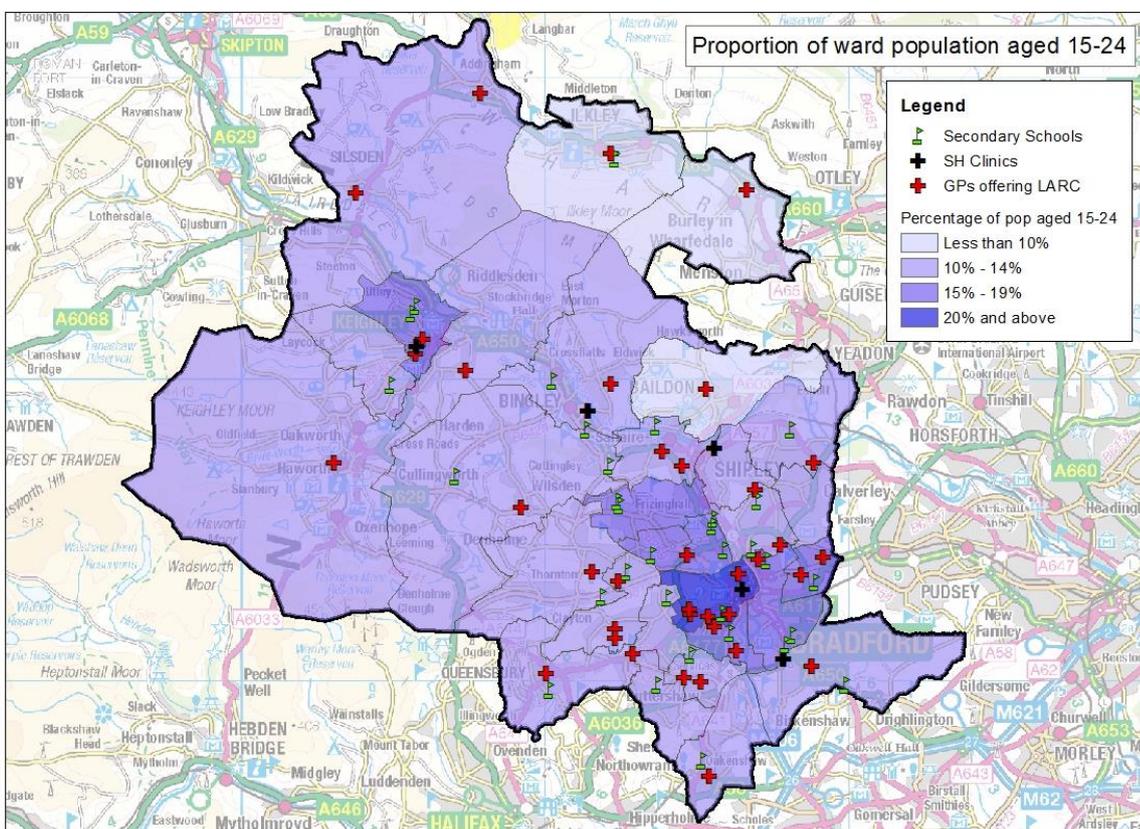
## 2. Bradford District: a brief demography

Bradford District is a metropolitan district with a population of just over 530,000 people. It contains within it a large rural area and comprises a number of discrete towns, including Bingley, Ilkley, Keighley and Shipley, many villages each with their own needs and differences, as well as the large urban city of Bradford itself, with its high levels of poverty, deprivation and health and social needs. Bradford district has many positive attributes but also many areas of severe disadvantage and associated health inequalities. Bradford district is within the most deprived 10% of local authorities nationally and is the most deprived authority in West Yorkshire. One in 25 residents (around 20,000 people) lives in the most deprived 1% of the country (IMD 2015), whilst parts of Bingley and Ilkley are among the least deprived 1%. The gap between the most deprived and the least deprived areas of the district is the 6th largest in the country.

### 2.1 Age

Age is a significant factor in the epidemiology of STIs, and infection rates are of higher prevalence in the 15-24 age group. Bradford's age profile differs across the district, with the electoral ward of City having the largest proportion of 15-24 year olds. The following map shows the proportion of individuals aged 15-24 residing in each ward, with the darker areas (greater proportion) around the Bradford City Centre and Keighley. Location of sexual health clinics, secondary schools, and GPs which fit Long Acting Reversible Contraception (LARC) are also show.

**Fig. 1: Proportion of individuals aged 15-24 residing in each ward in Bradford**



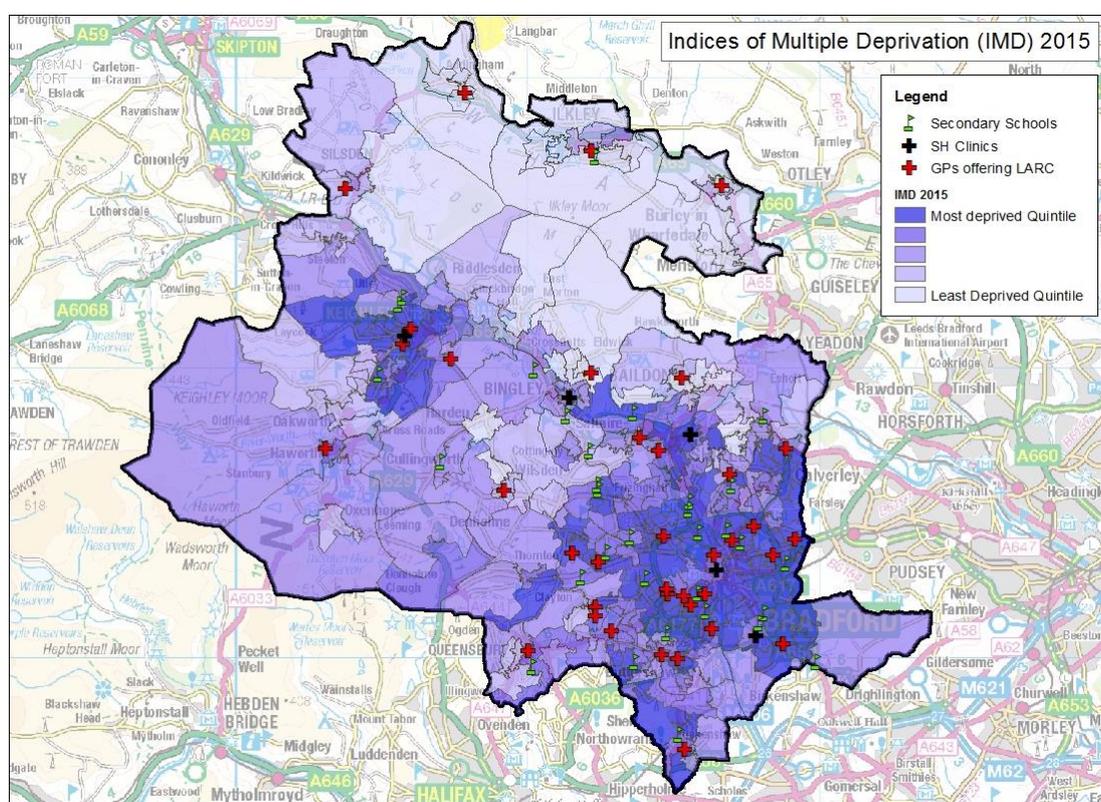
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## 2.2 Deprivation

- Deprivation is often given as proxy overarching indicator of need and is closely correlated with many outcomes, including sexual health.
- Deprivation is concentrated in a relatively small number of areas of Bradford.
- 44% of the Bradford district population live in the most deprived 20% of areas in England.
- Bradford also has some of the most affluent wards in the country – inequalities exist within the district as well as compared with the country as a whole.
- STIs and teenage conceptions are strongly associated with deprivation.
- The map below highlights the spread of deprivation in Bradford; the areas which are darker in colour are more deprived than the lighter shaded colours. Therefore this map indicates that areas in and around the City centre and Keighley are more deprived than areas which are more rural for example Ilkley.

**Fig. 2: Proportion of individuals aged 15-24 residing in each ward in Bradford**



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## 2.3 Ethnicity

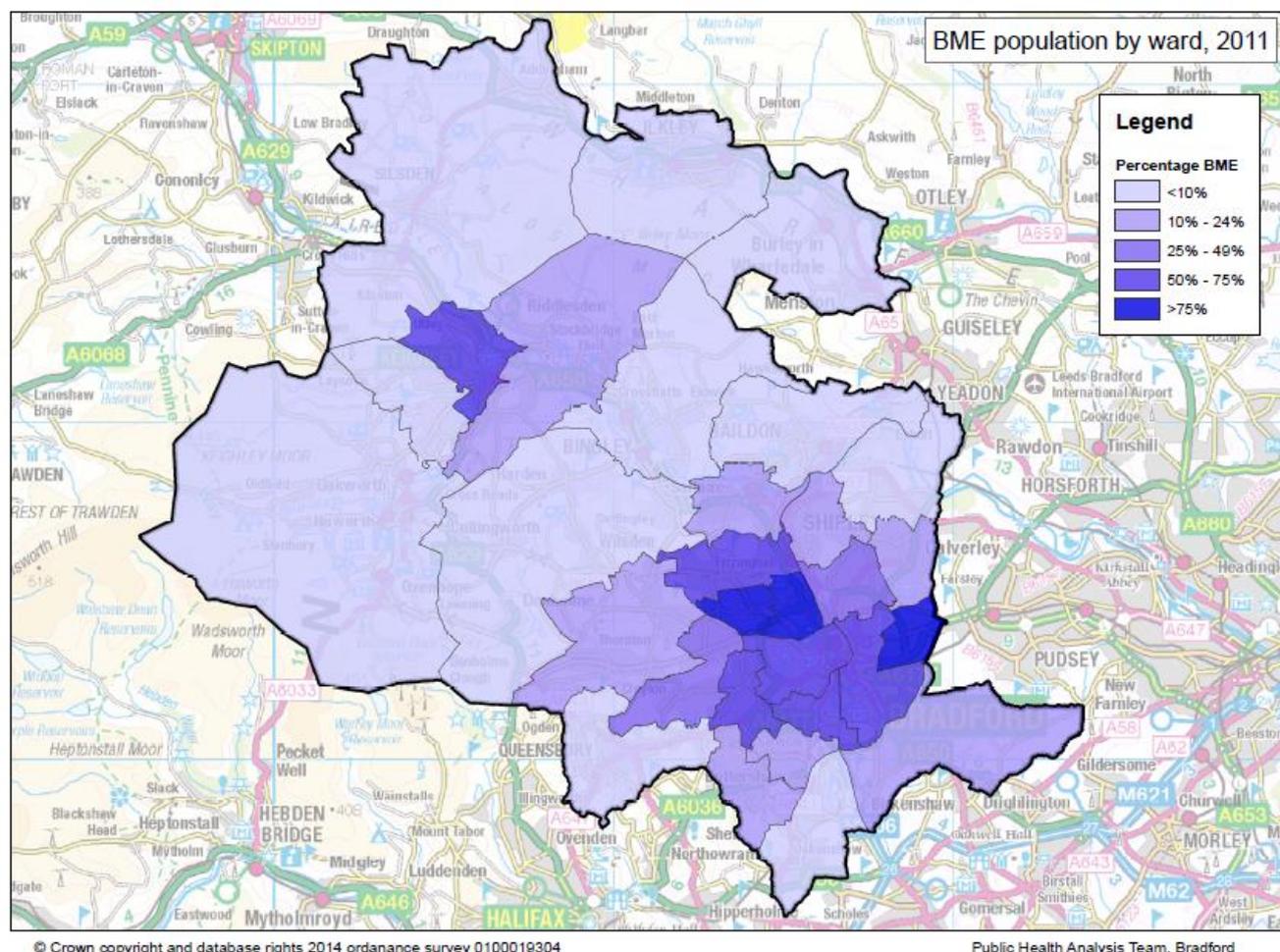
Bradford district has a diverse population with the majority of ethnic minority population residing in the inner city areas of Bradford and Keighley. The second largest ethnic group in Bradford Second to White British is Pakistani with 20% of the population identifying as Pakistani. Minority ethnic groups make up approximately 33% of the total current population. Of particular note in inner city areas of Bradford and Keighley:

- Significantly lower white population

- Significantly higher Asian/ Asian British population

The 2011 census showed that the wards with the highest number of non- UK born residents was in the City ward with over 11,000 residents having been born outside of the UK. Other wards with non UK born residents include Manningham, Little Horton, Toller and Bradford Moor.

**Fig. 3: Bradford wards with % BME individuals indicated**



## 2.4 Migration

It is estimated that between 4,500 and 6,000 long term migrants (those expected to stay over 1 year) arrived in Bradford in 2015, with the majority of migrants coming from Poland, followed by Pakistan and Romania. Net migration in 2015 is estimated at around 2,500, almost double the figure in 2014.

In 2014 a needs assessment was carried out on the needs of the Central Eastern European (CEE) community living in Bradford. The assessment found that there are at least 12,000 CEE individuals and 6,000 Roma living in Bradford District (this is likely to be an underestimate), and services across the district are seeing increasing need from these communities. The report emphasised the need for accessible services, support into employment, action to tackle trafficking, slave labour and child sexual exploitation, housing and homelessness issues, and the need to ensure safe sex education. STI rates in CEE communities were not obtainable, but the report did note that HIV incidence was lower in 9 out of the 11 EU accession countries from which recent migrants may have arrived.

### 3. Supply: what sexual health services do we offer?

#### 3.1 Commissioning of local sexual health services

Local authorities are responsible for commissioning most sexual health interventions and services as part of their wider public health responsibilities, with costs met from their ring-fenced public health grant. While they are able to make decisions about provision based on local need, there are also specific legal requirements ensuring the provision of certain services, which are set out in the Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013.

The commissioning responsibilities for CCGs and NHS England are set out in the Health and Social Care Act 2012. The commissioning responsibilities for sexual health are fragmented and while the majority sit within the Local Authority other elements are delivered by Clinical Commissioning Groups and NHS England, the details of which are summarised below:

Local Authorities	Clinical Commissioning Groups	NHS England
<p>Comprehensive sexual health services. These include:</p> <p>Contraception, including LESs (implants) and NESs (intra-uterine contraception) and all prescribing costs, but excluding contraception provided as an additional service under the GP contract;</p> <p>Sexually transmitted infection (STI) testing and treatment, chlamydia screening as part of the National Chlamydia Screening Programme and HIV testing;</p> <p>Sexual health aspects of psychosexual counselling; and</p> <p>Any sexual health specialist services, including young people's sexual health and teenage pregnancy services, outreach, HIV prevention and sexual health promotion, services in schools, colleges and pharmacies</p>	<p>Most abortion services</p> <p>Sterilisation</p> <p>Vasectomy</p> <p>Non-sexual health elements of psychosexual health services</p> <p>Gynaecology, including any use of contraception for non-contraception purposes</p>	<p>Contraception provided as an additional services under the GP contract</p> <p>HIV treatment and care (including drug costs for post-exposure prophylaxis after sexual exposure)</p> <p>Promotion of opportunistic testing and treatment for STIs, and patient-requested testing by GPs</p> <p>Sexual health elements of prison health services</p> <p>Sexual Assault Referral Centres</p> <p>Cervical Screening</p> <p>Specialist foetal medicine services</p>

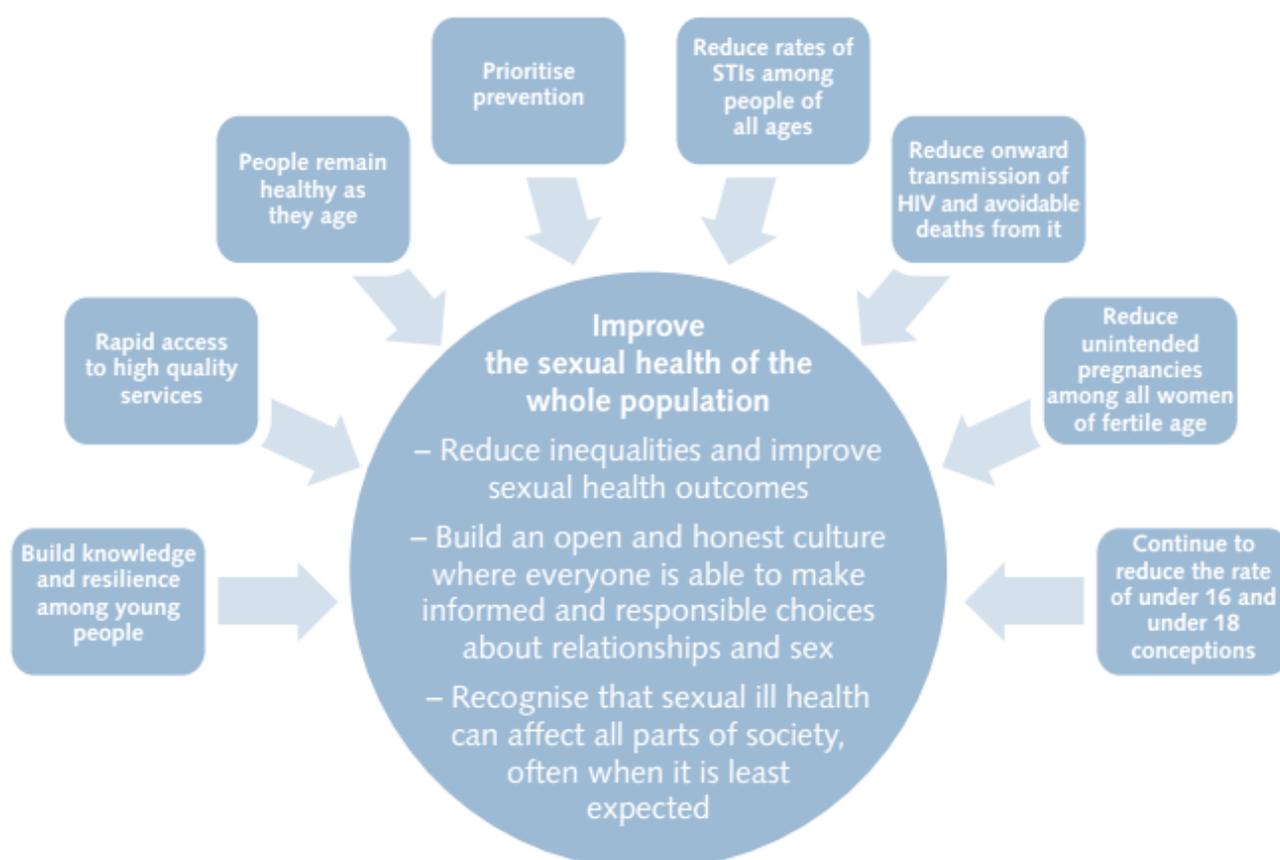
There are three indicators from the Public Health Outcomes Framework (PHOF) that have been prioritised and each represents an important area of public health. The indicators are:

- under 18 conceptions,
- chlamydia diagnoses (15-24 year olds); and
- People presenting with HIV at a late stage of infection.

### 3.2 Integrated Sexual Health Service: configuration in Bradford

Our ambition is to improve the sexual health of the population who live in the Bradford district. Achieving good sexual health is complex and there are variations in need for services and interventions for different individuals and groups. It is essential there is collaboration and integration between a broad range of interventions, including commissioning organisations, in order to achieve desired outcomes. Below is the national framework for sexual health improvement in England:

**Fig. 1: Framework for Sexual Health Improvement in England**



In September 2015, the public health department at the City of Bradford MDC commissioned a new integrated sexual health service, provided by Locala Community Partnerships CIC. The service, based on a Hub and Spoke model delivers the sexual and reproductive health responsibilities of the council in Bradford. The Service works in a variety of settings and links into voluntary sector agencies, NHS organisations and non-NHS organisations that provide outreach, sexual health testing, and treatment.

The Service is inclusive for the population of the Bradford District with staff trained to ensure services are targeted and delivered to communities and individuals regardless of age, race, gender, ethnicity, disability or sexuality who might be at risk of sexual ill health because of fears about stigma or discrimination e.g. lesbian, gay, bisexual, transgender people and sex workers.

The Service delivers health information, generic information on pregnancy, STIs and HIV prevention/safer sex advice, male and female condoms, and lubricant and Chlamydia screening for sexually active under 25 year olds.

Intermediate Care includes:

- Full sexual history taking and appropriate risk assessment;
- Motivational interviewing to address sexual health behaviour and reduce re-infection rates;
- Testing and treatment of uncomplicated Chlamydia (if treated as a result of a positive test in Basic or Outreach, the Service User must be offered a full sexual health screen);
- HIV and syphilis testing and pre and post-test discussions (with referral pathways in place);
- Outreach services for STI prevention and contraception linking with existing services in non-clinical settings as determined by the on-going analysis of national and local data.

Complex Care includes:

- Management of complicated/recurrent STIs (including tropical STIs) with or without symptoms;
- Management of HIV Partner Notification (PN);
- Management of HIV Post Exposure Prophylaxis (PEP) (refer to PEP pathway in conjunction with NHS England);
- Provision of Out of Hours PEP advice.

The providers of commissioned services for psychosexual counselling provide the sexual health elements of psychosexual health counselling in accordance with the National Service Specification for Psychosexual Counselling, which are:

- Contraceptive related problems which include the inability to find an acceptable method from any of those available; and
- Emotional and psychological after effects of sexually transmitted infections.

### 3.3 Voluntary and community services, including HIV prevention

The voluntary community sector (VSC) provides sexual health provision to identified groups that are at increased risk of poor sexual health outcomes.

The HIV prevention service provides a package of support to address the health, social and economic needs for people living with HIV/AIDS. They do this through ensuring timely access to specific interventions and support for service users and timely access to community based rapid HIV testing service point of care testing (POCT). They also provide condom distribution, information, advice and counselling and deliver training to a range of settings including schools.

The service also provides MSM (men who have sex with men) with sexual health advice, counselling, health promotion and training in order to promote good sexual health and lifestyle choices. They provide information, advice, support and counselling to service users on a range of issues in order to improve their sexual health and (mental and physical) wellbeing. They deliver information around safer sex, deliver outreach interventions (including virtually), ensure timely access to community based rapid HIV Testing, increase access to the condom distribution scheme and deliver a range of support groups.

The aim of the LGBT service is to improve the health and wellbeing of the Lesbian, Gay, Bisexual and Transgender community in the Bradford district by delivering information, advice, screening, training and other health and wellbeing focused activities. They provide information, advice, (sessional) support and referral (where appropriate) on a range of Public Health priorities, offer Chlamydia screening and deliver training to a range of professionals and develop appropriate resources.

### 3.4 Sexual health in primary care

The CCGs commission abortion services from a variety of providers including acute hospitals, an independent provider and a charity. Gynaecology and sterilisation services are commissioned from local acute hospitals whilst vasectomy services are commissioned from community based providers.

Long Acting Reversible Contraception (LARC) is delivered via local General Practices with the contracts for this managed via the new sexual health service provider, Locala.

Bevan Healthcare is a Social Enterprise and is committed to helping people get the health care that they need. At Bevan House Primary Care Centre they provide responsive NHS General Practice services designed to meet the needs of people who are homeless or in unstable accommodation; those who have come to Bradford as refugees or to seek asylum. Bevan House focuses on sexual risk taking, sexual health screening and women who have been trafficked and raped. They also offer designated clinics for working women where doctors do screening and LARC. The appointments are on a weekly basis and go out early morning to reach vulnerable women who have been trafficked, new sex workers or ones that are pregnant. The population that attend Bevan are at high risk of HIV and Hep C. They are going to be running a Hep C service from Bevan.

### 3.5 Sexual health for young people and adults

Outreach for young people is delivered via Step 2 and HALE with contracts for this managed by Locala. The service is delivered district wide and provides sexual health and contraception advice, condom distribution and chlamydia testing.

#### *Educational settings*

Relationships and sex education (RSE) programmes called Ur Choice and RSE Additional Needs are delivered to young people across a number of different educational settings from primary to secondary schools, special schools, pupil referral units and FE colleges across the district.

In March 2017 the government announced that compulsory sex education is to be extended to all secondary schools, and will be introducing relationships education for all school pupils from age four. The Education Secretary wants RSE and PSHE to teach children and young people how to stay safe and healthy, and how to negotiate some of the personal and social challenges they will face growing up and as adults. At the moment, too many young people feel they don't have the RSE they need to stay safe and navigate becoming an adult. (National Children's Bureau (2017)).

#### *Community settings*

RSE programmes called Speakeasy and RSE Additional Needs is delivered to parents in a community setting. The programme builds confidence, skills and knowledge in parents to support their children making positive sexually health choices.

Learning disability resources are also available in libraries to help support parents/carers when teaching about Relationships and Sex Education. Boardmaker Studio which is a communication tool for whom verbal communication is not an option has been rolled out across all level 1 libraries. It is easy to use and can prove invaluable for parents/carers to help their children/ young people learn about relationships and sex education and help keep them safe.

#### *Workforce Development Training*

Free relationships and sexual health training is made available to all professionals working across Bradford districts. The training has been designed to support professionals working across a range of services and with a wide variety of people. To help professionals decide what level of training they need the calendar is split into different tiers:

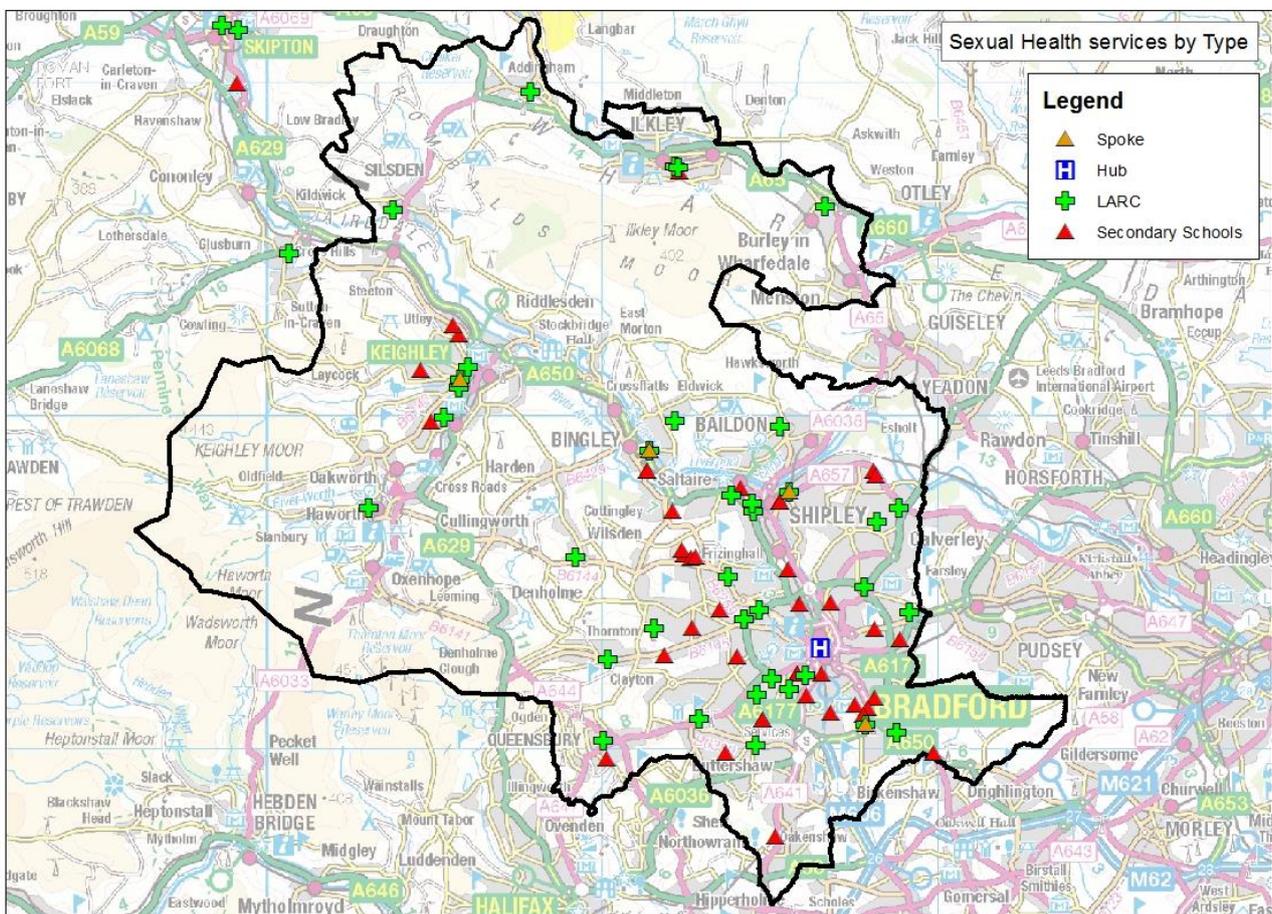
- Tier one includes introductory courses and is designed for those professionals who are new to relationships and sexual health.
- Tier two assumes a basic level of knowledge of relationships and sexual health and explores this in more detail.
- Tier three addresses specific issues in sexual health such as HIV and the impact of pornography.
- Tier four covers those aspects of sexual health that are more highly specialised

### 3.6 Pharmacies and sexual health

Community Pharmacies across the Bradford district provide free Emergency Hormonal Contraception (EHC) to 25 year olds and under. The EHC Plus service provides emergency contraception for all the pharmacy opening hours (core and supplementary). This includes the provision of Chlamydia screening and other pharmacies across the district provide EHC when an accredited pharmacist is present with limited access.

### 3.7 Mapping sexual health provision in Bradford:

The map below shows where the hub, Locala is based ( Howard House), and the spokes of Locala across the district. The green cross which represents Long Acting Reversible Contraception (LARC) provided by GP's show where LARC is offered and the red triangles represent secondary schools.



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There is a far distribution of LARC services and Locala spokes across the district which are in close proximity to secondary schools.

## 4. Need: What sexual and reproductive trends are we seeing?

This section considers the five major STIs in turn, discusses the epidemiology and prevention of HIV and HPV infection, and closes with a discussion of reproductive health.

### 4.1 Sexually transmitted infections in Bradford

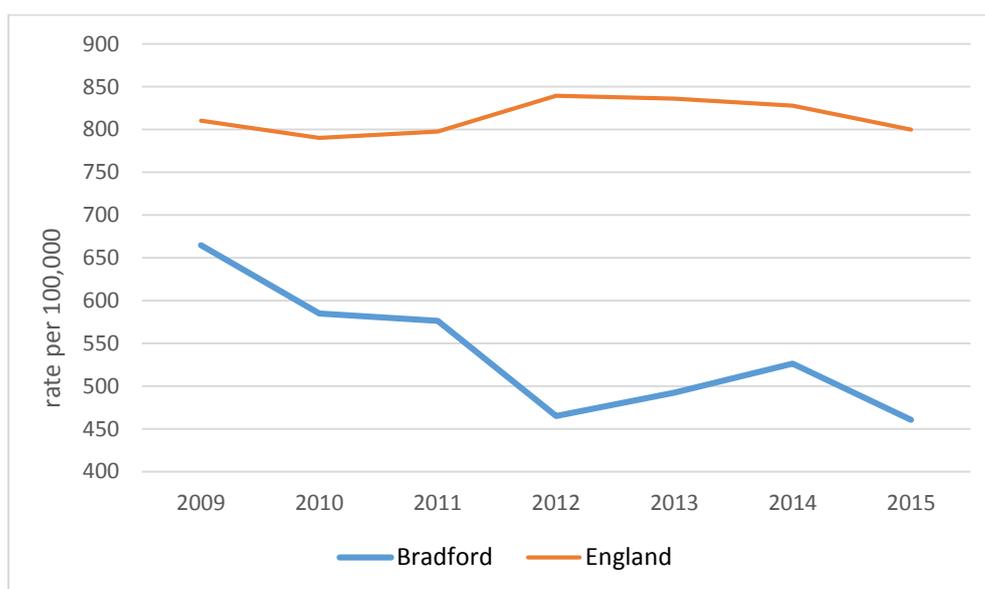
#### 4.1.1 The 5 acute STIs: overall rates and trends

The five STIs considered 'acute' STIs (along with HIV) are Chlamydia, Gonorrhoea, Genital Herpes, Genital Warts and Syphilis. In 2015, Bradford was ranked 270 (out of 326 local authorities in England; first in the rank has highest rates), for rates of new STIs (excluding those with Chlamydia aged 15-24). 2445 new STIs were diagnosed in 2015, at a rate of 436 per 100,000 residents, which is lower than England (767 per 100,000).

Bradford ranks as 14th out of 21 LAs in Yorkshire and Humber for new sexually transmitted infections per 100,000 populations. These rates have been on a downward trend over the last few years, falling by nearly a third between 2009 and 2015 from just over 650 new STI diagnoses per 100,000 down to just over 450 new STI diagnoses per 100,000, whilst national rates have fluctuated around a stable point of just over 800 new STI diagnoses per 100,000. However, it is worth noting a slight increase in the infection rate locally in 2013 and 2014, which has now reversed in 2015. This may be due in part to higher STI testing rates in 2014 (shown in figure x), meaning more STIs were identified in that year.

The following graph shows the rate of total STI infections, including the 5 acute STIs, HIV and other less common STIs:

**Fig. 1: New sexually transmitted infections (rate per 100,000 population)**



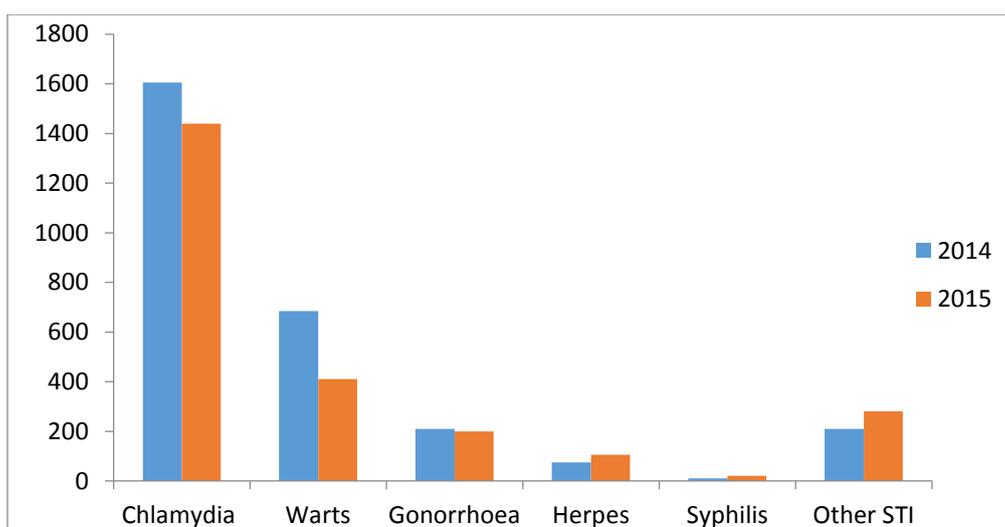
Nationally, Public Health England states that 'in 2015, there was a small (3%) decrease in STI diagnoses in England to approximately 435,000 cases. Fewer NSGI and genital warts diagnoses

contributed to this, but this overall decline in the number of STIs was primarily due to a sharp decrease in chlamydia diagnoses, as this comprised 55% of the roughly 15,000 fewer STI diagnoses in 2015 relative to 2014’ (PHE [health protection report](#)). The National Chlamydia Screening programme commenced in 2003, and after a phased rollout the community elements were increased in 2008. The effects of this programme may have had a substantial effect on reducing chlamydia incidence over the last decade; however, since screening detects more disease than was previously recognised, the crude Chlamydia incident rate alone does not tell the full story about the levels of the disease within the population.

#### 4.1.2 The 5 acute STIs: absolute numbers of cases

The downward trend in STI rates in Bradford is similarly driven by decreasing Chlamydia incidence, as can be seen in the analysis of Chlamydia in section x below. The following chart presents 2014 and 2015 absolute numbers of infections by STI, which shows that the number of diagnoses for the STIs with higher incidence (Chlamydia and Gonorrhoea) have fallen, while they have risen slightly for STIs with lower incidence.

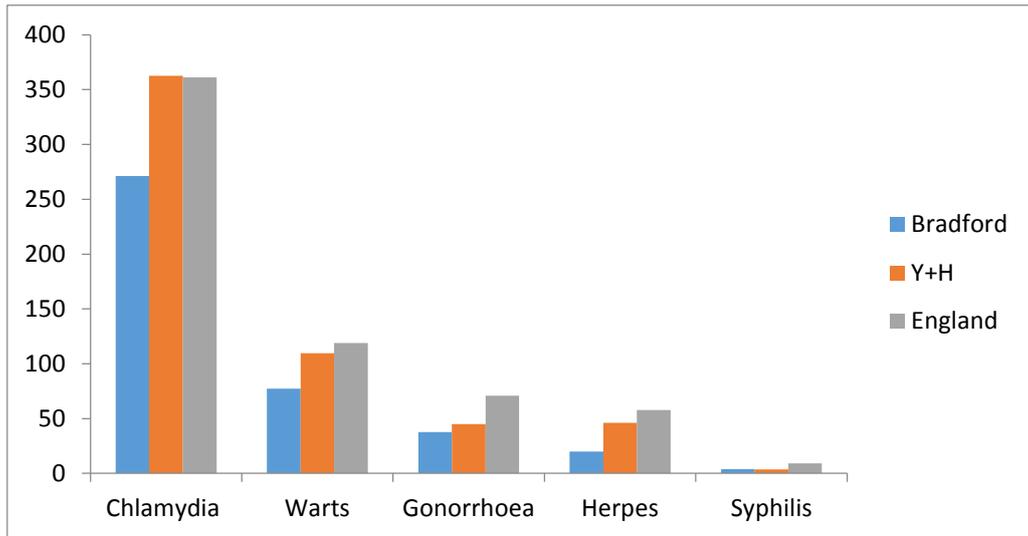
**Fig. 2: Absolute numbers of infections by STI, Bradford, 2014 and 2015**



#### 4.1.3 The 5 acute STIs: regional and national comparisons

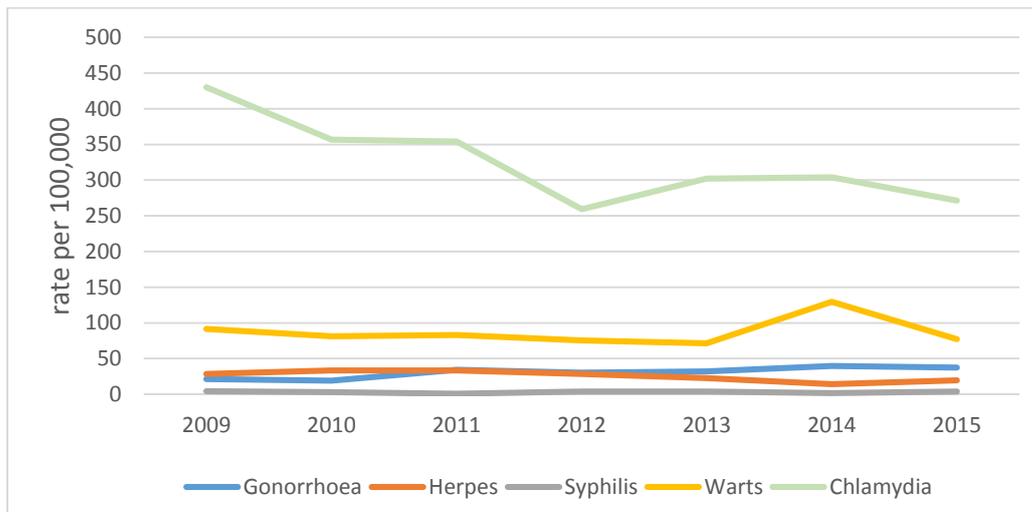
In comparison with regional and national benchmarks, Bradford saw a lower rate of STI diagnosis in 2015 for each of the 5 STIs. PHE note that ‘if high rates of gonorrhoea and syphilis in a population are seen, this reflects high levels of risky sexual behaviour’, suggesting that sexual behaviour in Bradford may be significantly less risky than regional and national comparisons.

**Fig. 3: Rates of the 5 STIs (per 100,000) in 2015 for Bradford, Y+H and England**



Over the last 7 years, rates of the 5 STIs have remained mainly stable in Bradford; the exception is a jump in genital warts diagnoses in 2014 (which returned to previous levels in 2015) and the steadily declining Chlamydia rates identified above:

**Fig. 4: Rates of the 5 STIs (per 100,000) in Bradford, 2009-2015**

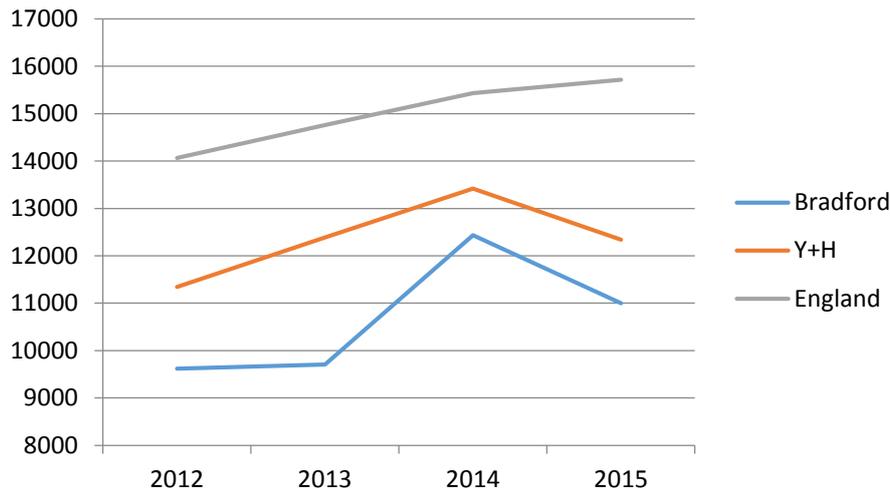


#### 4.1.4 Acute STIs and testing for disease

##### Overall testing rates

Data is collected through GUMCAD on testing rates for syphilis, HIV, gonorrhoea and chlamydia (aged over 25) among people accessing GUM services and, for chlamydia tests, primary care or community services. This deliberately excludes the national chlamydia screening programme as presentation for testing (opportunistic) differs fundamentally from other STI testing. In 2015, 36,958 of these tests were carried out in Bradford. Figure x shows the testing rate trend over the last 4 years in; these rates are likely to be an overestimation of the number of people tested as people may have multiple STI tests within one year, and in diseases like Gonorrhoea, Test of Cure is recommended for all cases.

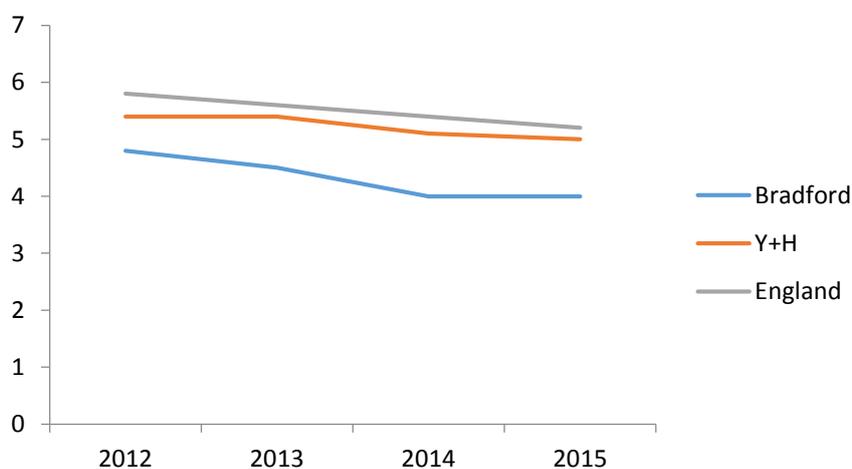
**Fig. 5: STI testing rate (excluding Chlamydia aged <25) / 100,000, 2012-2015**



Nationally, the number of tests are rising year on year; in Bradford, fewer STI tests are conducted per 100,00 population than either Yorkshire and Humber or England, but the rate is also increasing. Bradford's testing rate places it 11<sup>th</sup> out of 15 regional LAs. The gradual rise is interrupted by a sharp increase in 2014. In combination with the data given below at figure x which shows a lower proportion of 15-24 year olds tested for Chlamydia in Bradford, a picture emerges of low testing rates across all diseases, with fewer people coming forward for tests within health settings and within the community. There is due either to a lower rate of disease or to barriers (cultural or service) to accessing this healthcare; it is likely to contribute to the lower prevalence rates seen for all major STIS.

Figure 5 presents data on the % of these tests which are positive. 1,466 tests in Bradford were positive in 2015, around 4% of all tests. This is a lower proportion than regional and national levels, and has fallen since 2012 in a similar manner to comparators. Thus those coming forward for tests are less likely to be positive than would be expected; this may be due to lower prevalence in the population, or because testing is being carried out on those less likely to have an STI.

**Fig. 6 STI testing positivity (excluding Chlamydia aged <25) %, 2012-2015**



## 4.2 Chlamydia

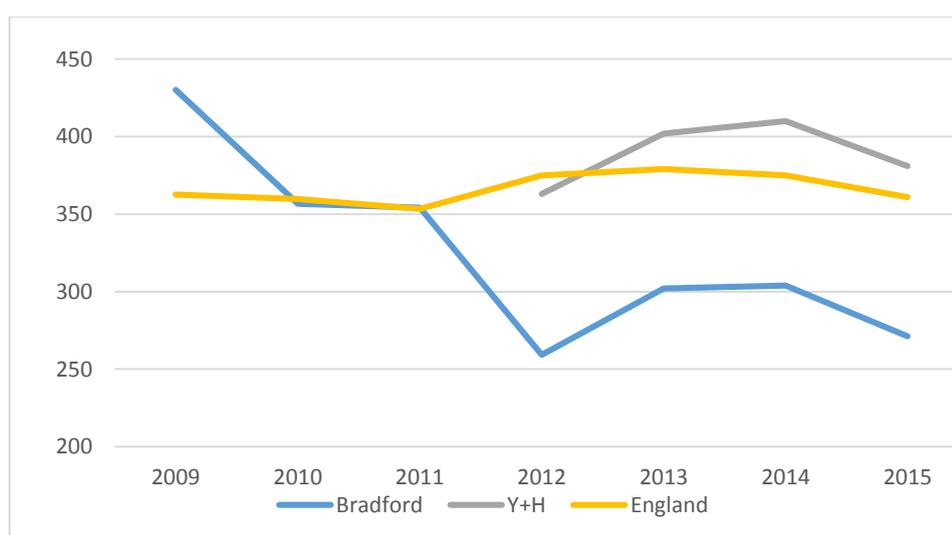
Chlamydia (infection with *C. trachomatis*) is the most common sexually transmitted disease in the UK. While the disease is curable through a course of antibiotics, if left untreated, cases may resolve spontaneously or persist and lead to severe complications, for example pelvic inflammatory disease (PID), epididymitis, reactive arthritis and pregnancy complications. Chlamydia infection has a high frequency of transmission, with concordance rates of up to 75% of partners being reported (BASH 2015).

The most at-risk groups are people who have recently changed sexual partner, men who have sex with men, and people with multiple sexual partners. Given that the National Survey of Sexual Attitudes and Lifestyles ([Natsal](#)), suggest that people aged 16-24 years are most likely to report a new sex partner or two or more sex partners of the opposite sex in the past year, people in this age range are specifically targeted within the National Chlamydia Screening Programme (NCSP) for community outreach screening and routine screening within sexual health services.

### 4.2.1 Crude rates

The following graph illustrates the crude incidence of Chlamydia in Bradford since 2009. The number of cases each year has reduced substantially between 2009 and 2015, down by around a third to just over 250 diagnoses per 100,000 population, the second lowest in our region. National rates have held steady over this period at just over 350 per 100,000; the Yorkshire and Humber rate is now significantly higher than England at 381 per 100,000.

**Fig. 7 Chlamydia diagnostic rate (per 100,000) in Bradford and England, 2009-2015**



These trends are, however misleading if interpreted on their own. With some estimates putting the prevalence of Chlamydia at between 2-3% of the population in the most at-risk groups (for example 15-24 year olds), and with many cases being asymptomatic, there will be a significant number of people in the Bradford population who are unknowingly carriers of the disease; in fact a systematic review and meta-analysis of studies focussing on variation of Chlamydia rates dating from 2013

demonstrates that rates show a significant social-demographic gradient, with people from deprived areas having higher odds of chlamydia infection; this suggests that in a deprived area like Bradford, Chlamydia rates may be higher than national averages ([Crichton et al., 2013](#)).

Undiagnosed Chlamydia poses a substantial health risk; with up to 16% of all people infected with chlamydia going on to develop PID (Price et al 2013), one of the aims of the NCSP and local screening efforts is to identify Chlamydia-infected members of the population who would otherwise be undiagnosed (and potentially infecting others), in order to offer treatment and reduce the overall infectivity in the population. This may mean that a low incidence rate is due to a lack of Chlamydia detection through the NCSP rather than truly low population rates.

#### 4.2.2 Screening

To explore the effectiveness of screening further, the following table shows for 2015 the number of chlamydia tests carried out in Bradford and the number of those tests which come back with a positive diagnosis, divided into 15-19 and 20-24 age bands. It also shows these numbers proportions of the population in those age bands.

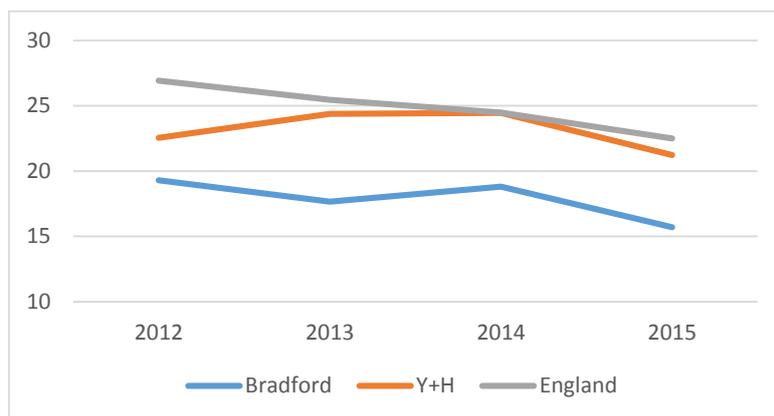
**Table 1: National Chlamydia Screening Programme - tests and positivity in Bradford, 2015**

	Tests				Positivity				
	Males (n)	Females (n)	All persons		Males (n)	Females (n)	All persons		
			n	Tests as % of pop.			Positivity as % of tests	n	Positivity as % of pop.
<b>15-19</b>	790	3,086	35393	10.95%	98	305	10.40%	35393	1.14%
<b>20-24</b>	1,750	5,149	33599	20.53%	202	338	7.83%	33599	1.61%
<b>All (15-24)</b>	2540	8235	68992	15.62%	300	643	8.75%	68992	1.37%

Source: CTAD

In 2015, 10,775 tests for Chlamydia were carried out as part of the programme; around one in ten 15-19 year olds were tested, and 1 in five 20-24 year olds, meaning 15.62% of the eligible population were tested, compared to 22.25% nationally and 21.23% in Yorkshire and Humber. This lower rate can be seen in past years, with a significantly lower proportion of the Bradford population screened than either regionally or nationally since 2012. This rate is also decreasing, in line with regional and national trends:

**Fig. 8 Proportion of 15-24 year olds tested for Chlamydia (per 100,000) in Bradford, Y+H and England**



The positivity of the screening test in Bradford was 8.75% in 2015, a similar level to that seen nationally (8.4%) and to 2014 (8.4%).<sup>1</sup> This strongly suggests that the proportion of tested individuals who actually have Chlamydia is not a strong driver of Bradford's low incidence rate, rather the number of tests carried out. Positivity is significantly higher in the 15-19 age band than the 20-24 age band (10.4% vs. 7.83%,  $p < 0.05$ ), which, together with lower testing levels, may indicate that take-up of the screening is more likely to be amongst sexually active individuals in this age band who have recently changed partner.

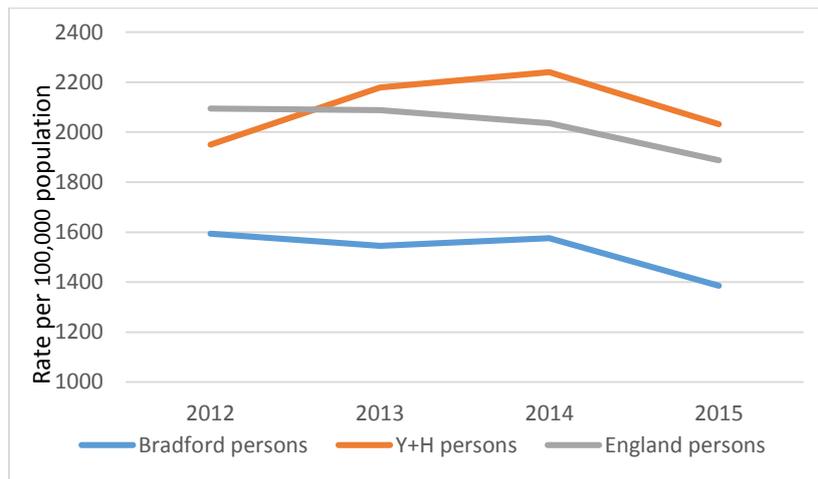
#### 4.2.3 Detection rates

The Department of Health has set a national target for local delivery of the NCSP to 'detect' at least 2,300 cases of Chlamydia per 100,000 resident population aged 15-24. This detection rate comprises the number of positive screens for the disease as a proportion of the population, and national modelling has shown that achieving this target will produce a decrease in Chlamydia prevalence, and show that the 'reach' of the screening programme is effectively picking up under-diagnosed Chlamydia. Test of Cure is not recommended in Chlamydia as bacteria may be still present 3-5 weeks after the infection has receded.

In Bradford the Chlamydia detection rate is below regional and national levels and the NCSP target; in 2015 it was 1385.7 per 100,000 population, placing Bradford 18<sup>th</sup> out of the 21 Yorkshire and Humber local authorities (average rate 2031.4 per 100,000) and 209<sup>th</sup> out of 326 English local authorities (average rate 1887). Around 20% of local authority areas achieve the national target; 19% detect between 2000 and 2299 cases per 100,000, and 61% fewer than 2000 per 100,000 population. Recent trends in Bradford and wider are shown below:

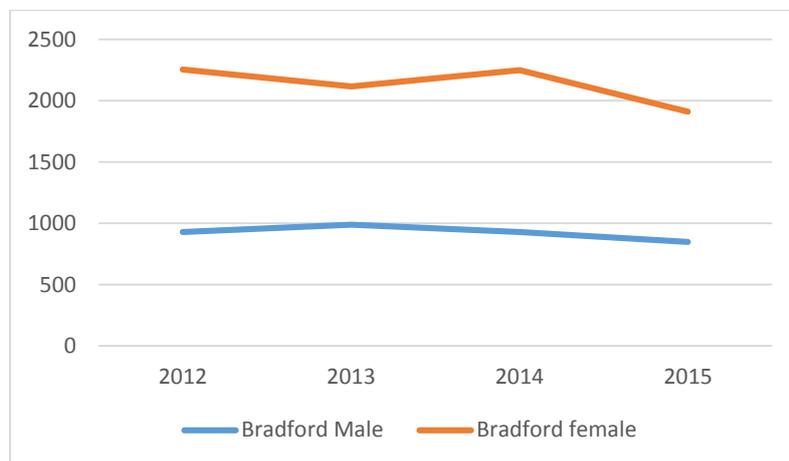
<sup>1</sup> Like most opportunistic screening tests, this test is designed to maximise sensitivity (the proportion of the population with the disease who are picked up by the test), and will therefore produce some false positives. Following a positive test, nucleic acid amplification testing can be used to form a definitive Chlamydia diagnosis.

**Fig. 9 Chlamydia detection rate (per 100,000) in Bradford, Y+H and England, 2012-2015**



The detection rate in females is more than twice that of males, and while male rates have remained stable across the last four years, female rates have decreased, driving the overall detection rate drop:

**Fig. 10 Chlamydia detection rate (per 100,000) in Bradford, males and females, 2009-2015**



As PHE's July health protection report notes, the NCSP sees 'a strong relationship between chlamydia testing coverage and chlamydia detection rates' (PHE HPR July 2016). Increasing the proportion of the population who are tested for Chlamydia may represent an opportunity to reduce true population incidence and to prevent further infection.<sup>2</sup> However, it should be borne in mind that those who are not being screened may have lower positivity likelihood than those who are. Additionally, over the last four years, the Chlamydia diagnosis rate for Bradford's over 25 population has slightly declined against a national and regional rising trend, suggesting that the low detection rate from screening may not be the sole driving factor in the lower diagnosis of Chlamydia in Bradford.

#### 4.2.4 Location of screening

One factor which may affect screening rates is the location the test is carried out. Table x shows that around a third of all screening tests are carried out in specialist sexual health services, with the rest

<sup>2</sup> Additionally, It is likely, given the policy recommendation for repeat testing following a positive test or change of sexual partner, that a proportion of people are tested more than once per year and, therefore, estimated coverage is likely to overestimate true population coverage; this however is an issue that effects all areas and regions to a similar extent.

being set in non-specialist services, primary care or community setting. A larger proportion of males being testing are screened in specialist services, meaning outreach work and access to community testing reaches women to a greater extent than men. Tests performed in sexual health services are assumed to be a combination of symptomatic tests and asymptomatic screens, whereas tests performed in community-based settings are assumed to be largely asymptomatic screens, with a higher likelihood of reaching prevalent chlamydia currently undetected. This is borne out by table x, which shows a higher proportion of GUM tests being positive.

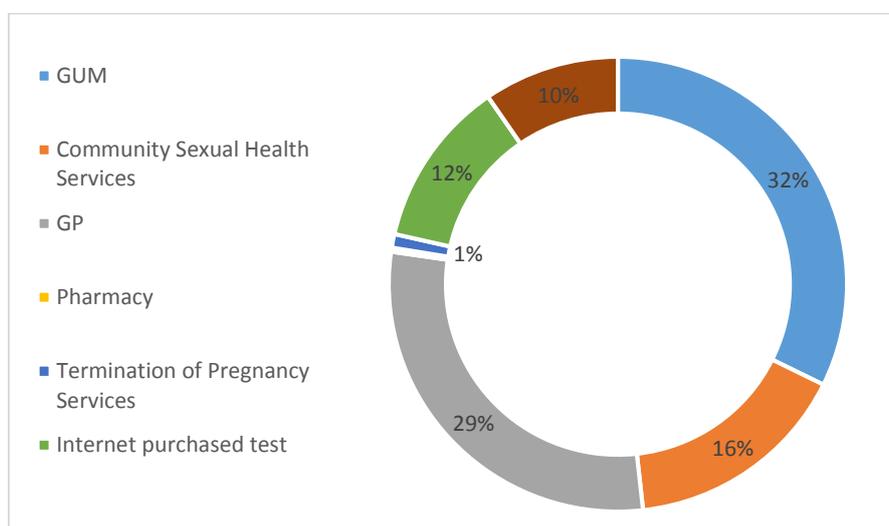
**Table 2: proportion of 15-24 year olds tested for Chlamydia and positive tests in GUM setting, 2015**

	Proportion of tests in GUM settings	Proportion of positive tests in GUM settings
<b>Male</b>	48.7%	57.0%
<b>Female</b>	27.4%	33.3%
<b>All persons</b>	32.29%	40.3%

Source: CTAD

Table 2 shows the proportion of screening tests by location. In 2015, 78.5% of screening occurred in Primary care, GUM or sexual health services, compared to 75.6% in England and 75.8% in the Yorkshire and Humber region; this is a small but significant difference, indicating that there may be scope to increase the amount of community screening in the District. PHE note that diagnoses within sexual health services have remained stable over the last few years, while ‘there was a 7% decrease in chlamydia diagnoses reported from community-based settings’ in 2015, ‘emphasising the need for increased scale up of opportunistic screening through the NCSP’ (PHE [health protection report](#)). It is also worth noting that 12% of chlamydia diagnoses in Bradford were made with a test supplied online; many of these will be through the commissioned service offered on the Bradford sexual health services website. Non-amplified nucleic acid (NAAT) tests are the gold standard in terms of sensitivity and are mostly frequently used in clinic-based services, whereas traditional swab/urine based tests are more often used in outreach work.

**Fig. 11 Proportion of 15-24 year olds tested for Chlamydia (per 100,000) in Bradford, 2015, by location**



Source: CTAD

#### 4.2.5 PID and secondary care

As already noted, one consequence of untreated Chlamydia is pelvic inflammatory disease. Hospital admission rates in Bradford for PID, at 258.7 per 100,000, are not statistically different from England (236.4) or Yorkshire and Humber (252.1). This statistic should be interpreted with caution, as not all cases of PID are treated in secondary care and some hospitals may differ in how they code admissions for this disease.

#### 4.2.6 Partner Notification

Finally, to prevent onward infection, a key element of disease control is partner notification, where patients or sexual health services contact recent partners of an infected individual to offer a chlamydia screening test. The BASHH standards recommend that:

- Services should have appropriately trained staff in PN skills to improve outcomes
- All patients identified with *C. trachomatis* should have PN discussed at the time of diagnosis by a trained healthcare professional.
- The method of PN for each partner/contact identified should be documented, as should PN outcomes.
- All sexual partners should be offered, and encouraged to take up, full STI screening, including HIV testing and if indicated, hepatitis B screening and vaccination

The BASH target for notification is that local areas should achieve more than 0.6 contacts per index case; in Bradford this figure was an average of 0.6 contacts per index case over the August '15 to July '16 contract year.

### 4.3 Gonorrhoea

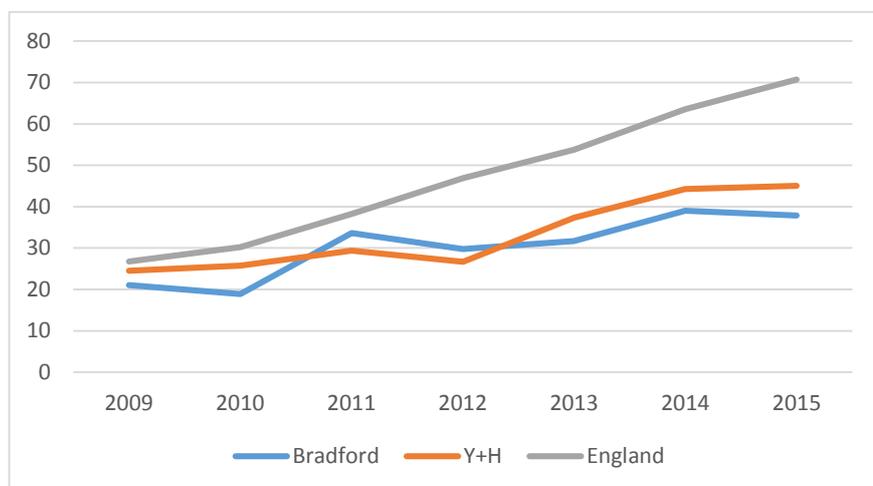
Gonorrhoea is a bacterial infection (*Neisseria gonorrhoea*) which is easily treated, but which if left undiagnosed can lead to epididymo-orchitis or prostatitis in men, PID (less frequently than Chlamydia), foetal blindness if pregnant, and infertility for both genders. The diagnostic test is simple and can be performed in clinic or community settings. There are no national or local screening programmes for Gonorrhoea. According to BASH guidance, 'there are no recent studies quantifying the risks of developing complicated gonococcal infections but reporting from genitourinary (GU) medicine clinics in the UK indicates that these conditions are uncommon.' (BASH 2011).

#### 4.3.1 Diagnoses

Nationally, Gonorrhoea diagnoses continued the sharp rise seen in recent years nationally, exceeding 40,000 cases in 2015. According to PHE, although improved test sensitivity and uptake may have contributed, increased gonorrhoea transmission is likely playing a major role ([PHE health protection report](#)). In Bradford, rates have seen similar but slower growth, and are around half that of national rates. PHE note that 'if high rates of gonorrhoea and syphilis in a population are seen, this reflects

high levels of risky sexual behaviour’, suggesting that a sustained increase in gonorrhoea over the next few years may indicate riskier sexual behaviour in our local area.

**Fig. 12: Rates of Gonorrhoea diagnoses (per 100,000) in Bradford, Y+H, England, 2009-2015**



Gonorrhoea is the most commonly diagnosed STI among MSM, and PHE note that 25% of patients ‘presented with rectal infections, suggesting significant numbers of transmissions occurred through condomless anal sex’.

#### 4.3.2 Antibiotic resistance

In 2015 there was a prominent outbreak of high-level azithromycin resistant (HL-AziR) infections which started in the north of England and spread nationwide:

The initial outbreak cases reported in Leeds were all heterosexual with the majority under 20 years of age. Between November 2015 and February 2016, cases were predominantly men who have sex with men (MSM), from a slightly older age range (18-31), with the majority resident in London or the South East. Since March 2016, cases have been mixed in terms of sexual orientation and geographically dispersed. (HP 2016)

Given that the outbreak started geographically close to Bradford, there is a potentially higher risk of untreatable gonorrhoea

#### 4.3.3 Partner notification

To prevent onward infection, a key element of disease control is partner notification, where patients or sexual health services contact recent partners of an infected individual to offer a Gonorrhoea test. The BASHH standards recommend that male patients with symptomatic urethral infection should notify all sexual partners within the preceding two weeks or their last partner if longer ago, and patients with infection at other sites or asymptomatic should notify all partners within the preceding three months. Sexual partners should be offered testing and epidemiological treatment, and the BASH target for notification is that local areas should achieve more than 0.4 contacts per index case; in Bradford this figure was an average of 0.5 contacts per index case over the August '15 to July '16 contract year.

## 4.4 Syphilis

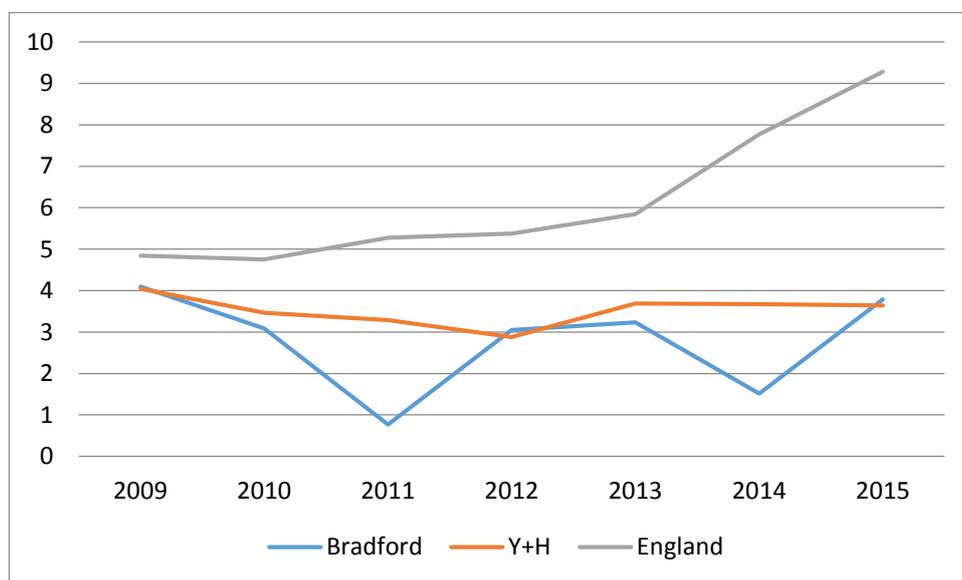
Syphilis (*Treponema pallidum* infection) is a bacterial infection which can, if left untreated, develop hepatological or neurological complications (secondary syphilis) such as acute hepatitis, meningitis, palsies, and neuropathy. Transmission can be vertical in utero, but is more often through sexual contact. Approximately one-third of sexual contacts of infectious syphilis will develop the disease. High rates of the disease are observed in MSM, often with HIV co-infection. Secondary stage syphilis can progress onto asymptomatic latent syphilis, which in 25% of cases recurs at a later point in life. Untreated early syphilis infections results in a high risk of poor pregnancy outcomes, including miscarriages, premature births, stillbirths, or infant death.

### 4.4.1 Diagnoses

Nationally, the largest proportional increase in STI diagnoses between 2014 and 2015 were reported for syphilis (20%). Nationally, the number of syphilis diagnoses in 2014 was the highest reported in England since 1949 (Mohammed, 2016).

In Bradford, 20 syphilis cases were reported in 2015, similar to recent years; rates are unstable because the small number of cases means random fluctuation plays a significant part. In 2015, 3.8 cases of syphilis were detected per 100,000 people.

**Fig. 13: Rates of Syphilis diagnoses (per 100,000) in Bradford, Y+H, England, 2009-2015**



While diagnoses numbers are not available by age bands, we know that nationally whereas rates of other STIs peak in the early 20s for both men and women and decline sharply after, rates of syphilis now reach a peak in the early 30s and stay broadly similar into the mid-40s, suggesting that syphilis will represent a significant proportion of the growing need for sexual healthcare in the over 40s (PHE HPR 2016).

#### 4.4.2 Syphilis in MSM

Syphilis affects many more men than women, and in 2015 84% of diagnoses nationally were in men who have sex with men, making this group the key target group for safe sex messages to prevent Syphilis infection. Additionally, the increase in Syphilis and gonorrhoea incidence is 'almost due to increased diagnoses among men who have sex with men (Mohammed 2016). PHE note that:

'There is growing evidence that condom less sex associated with HIV seroadaptive behaviours, as has been reported in on-going epidemics and outbreaks of LGV, Shigella spp and syphilis, is leading to more STI transmission in this population... In 2015, 40% (1,653/4,141) of syphilis cases ... in MSM were in HIV-positive men. This suggests that rapid STI transmission is occurring in dense sexual networks of HIV-positive MSM'. (PHE HPR 2016)

Mohamed et al. (2016) identifies that:

A focus on biomedical interventions, such as preexposure prophylaxis, for the control of HIV among MSM may have unintended consequences for transmission of other STIs, which highlights a need to ensure that robust STI prevention and control measures are in place

### 4.5 Genital Warts and Herpes

#### 4.5.1 Clinical characteristics

Anogenital warts are benign lesions caused by the human papillomavirus (HPV), which may in some situations be linked to later cancer development but most frequently resolve spontaneously within a year. Transmission is most often via sexual contact, or vertically during the labour process to new born babies. The HPV vaccine, offered to all girls age 13, as well as barrier methods of contraception e.g. condoms, are protective factors against warts. Treatment is via topical cream. Patients presenting with anogenital warts should have a full STI screen and while partner notification is not recommended, current partners should be informed and followed up for screening.

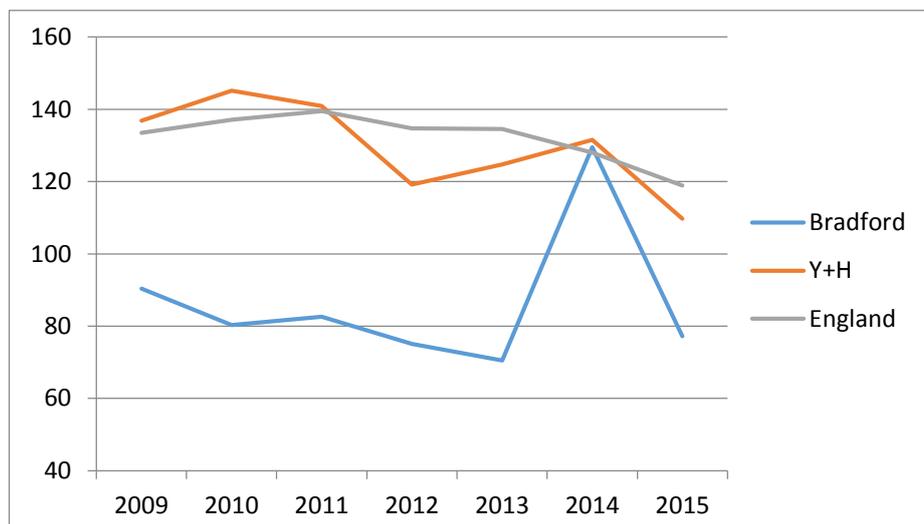
Infection with the Herpes Simplex Virus can occur at various sites in the body, including genital and oral areas. Many individuals are asymptomatic after infection and the virus remains latent and infectious to other people upon contact. Once symptomatic, painful lesions occur and then reoccur on average 4 times a year. In HIV positive individuals, shedding is increased and thus infection rates are higher. Complications of herpes include super infection of lesions, autonomic neuropathy, and aseptic meningitis.

#### 4.5.2 Diagnoses

In 2015 there were 410 diagnosed cases of anogenital warts in Bradford; this is similar to numbers in the last 6 years, however a surprising number of infections (685) were seen in 2014. As has been

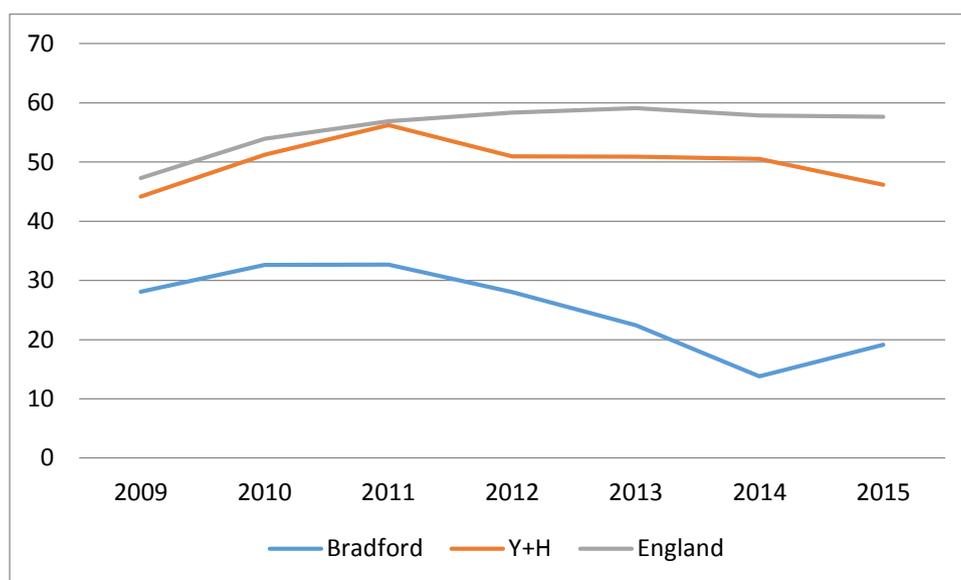
discussed, overall STI testing rates peaked in this year (figure x), which may mean more cases of warts were detected. A gradual decline in rates across all levels should be anticipated due to the personal and herd immunity effects of the HPV vaccine within the population. Although warts are readily treatable, recurrent presentations are common and make up over 40% of total diagnoses of genital warts (Hughes et al. 2015). Rates of wart infections are lower in Bradford than in England or Yorkshire and the Humber:

**Fig. 14: Rates of Genital Warts diagnoses (per 100,000) in Bradford, Y+H, England, 2009-2015**



In 2015 there were 105 cases of genital herpes in Bradford, similar to recent years. Rates have been falling since 2009 and are down by a third; the increasing use of NAAT tests might be expected to lead to rate increases, but these have not been seen in Bradford.

**Fig. 15: Rates of Genital Herpes diagnoses (per 100,000) in Bradford, Y+H, England, 2009-2015**



## 4.6 Other STIs

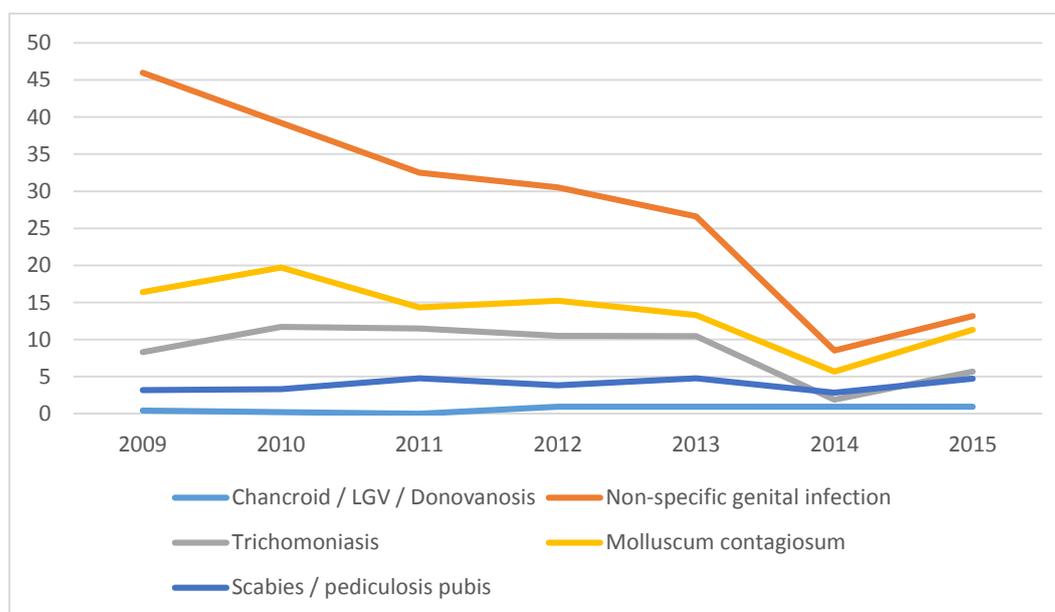
Clinical characteristics of other uncommon sexually transmitted infections, such as Trichomoniasis and LGV, are available in the BASHH clinical guidelines (BASHH 20xx). The following table gives the absolute numbers of uncommon STIs in 2014 and 2015 in Bradford

**Fig. 16: Absolute number of other STI diagnoses (per 100,000) in Bradford, 2014/2015**

Disease	2014	2015
Non-specific genital infection	45	70
Molluscum contagiosum	30	60
Scabies / pediculosis pubis	15	25
Trichomoniasis	10	30
Chancroid / LGV / Donovanosis	5	5

Rates of all Trichomoniasis, Molluscum contagiosum and Chancroid / LGV / Donovanosis have reduced or remained stable over the last 6 years (figure x). Scabies, a skin infection by mites which can be transmitted by close human contact (including sexual contact), has had stable rates. Non-specific genital infections have decreased markedly over the last 6 years; interestingly in 2014, although STI testing rates overall were markedly higher, there was a sharp drop in these uncommon STIs, meaning increased testing led to the detection of more severe and harmful STIs as a proportion of STIs rather than less severe infections.

**Fig. 17: Rates of other STI diagnoses (per 100,000) in Bradford, 2009-2015**



### 4.7.1 Overview

HIV is a preventable infection which left untreated leads to high levels of morbidity and premature death. HIV is a virus that infects and destroys cells responsible for combating infections, leaving the body susceptible to diseases it would normally be able to fight.

HIV is transmitted person to person through infected blood, semen, vaginal fluids or the breast milk of an infected woman with a high viral load. The majority of HIV transmissions are through condom less vaginal or anal intercourse or by sharing a needle/syringe with someone who is living with HIV.

Over the last decade there has been a continuous rise in the number of people living with HIV in the UK. Evidence would suggest a significant number of people are unknowingly HIV positive, contributing to a national trend whereby in 2015, 39% of the UK HIV population were diagnosed late. Public Health England estimates that 13% of the UK HIV positive population are undiagnosed and do not know about their HIV infection and are therefore at risk of passing on their infection.

Presenting for HIV testing at a stage beyond which treatment ought to have begun is termed 'late diagnosis'. The UK's definition of late diagnosis of HIV is having a CD4 count of fewer than 350 cells/mm<sup>3</sup> within 3 months of diagnosis (Anitori et al 2011). A late diagnosis is associated with:

- a 10 fold increased risk of death within one year of diagnosis compared to those diagnosed promptly (HPA 2012)
- treating an individual in the first year following a late diagnosis costs twice as much because of the higher rates of morbidity (NICE 2014).
- those diagnosed late will have been unaware of their HIV status for a lengthy period of time, increasing the risk of onward transmission to their sexual partners (Halve it 2011). It is estimated that 50% of new cases are a result of people undiagnosed having unprotected sex (Sanders 2005). People who don't know their HIV status are believed to be 3 times more likely to pass on the infection than those who know their status. They are also twice as likely to have unprotected sex (PHE 2012).

On an individual level, being diagnosed with HIV earlier is associated with improved health outcomes; less morbidity and mortality. There is evidence to suggest people who know their HIV status are more likely to practice safer sex, thus reducing the risk of transmission. In addition if these individuals are successfully maintaining their antiretroviral therapy their viral load will be reduced to undetectable levels. Highly active antiretroviral therapy (HARRT) has transformed treatment of HIV infection – life expectancy on treatment is almost normal. Timely diagnosis and treatment will decrease an individuals' viral load making the infection virtually undetectable, and reducing the risk of onward transmission.

Expansion of HIV testing is a critical response to the challenge of controlling the HIV epidemic and reducing late HIV diagnosis (PHE 2014; HPA 2011). Many studies in the UK and France have demonstrated the effectiveness and cost-effectiveness of HIV testing. Testing uptake in GUM services and antenatal clinics are high (70% and 97% respectively). Evidence from a variety of health care services has also shown patient acceptability (Elmahdi et al 2014; Rayment et al 2012). Increasing HIV testing is a key strategy in controlling the HIV epidemic in the UK and will address the issues of rising prevalence, onward transmission and late diagnosis.

#### 4.7.2 The national picture – estimated number of people living with HIV

There are an estimated 101,200 people living with HIV in the UK in 2015. This equates to an estimated UK prevalence rate of 2.1 per 1000 aged 15-74. There are more men diagnosed with HIV than women. Further analysis of the number of people living with HIV shows that there is a larger number of gay/bisexual men living with HIV compared to heterosexual men or women. HIV amongst the heterosexual population is concentrated within the Black-African population. These figures are shown below in table x.

**Table 1: Prevalence of HIV in the UK**

UK Population	Prevalence rate per 1000 people aged between 15-74
Overall	2.1
Men	2.3
Women	0.98
Gay/bisexual men	58.7
Heterosexual population	1.0
Black-African men	22.2
Black-African women	42.6

In 2015 there were 6095 new diagnoses of HIV in the UK. Most people (71%) diagnosed were aged between 25 and 49 years, and 52% were born in the UK. Over half of the diagnoses were acquired by gay/bisexual men, with a median age of 33. Approximately 2000 of which were acquired their infection in the UK.

#### 4.7.3 Role of local organisations in HIV testing and treatment

The services that provide a HIV testing service were altered as a result of the Health and Social Care Act 2012. The commissioning of HIV testing services is now the responsibility of three different commissioning bodies.

Local authorities are responsible for the commissioning of testing in sexual health clinics, as part of the responsibility of commissioning open access sexual health services; community settings and the routine screening for public health purposes in primary and secondary care. Clinical commissioning groups are responsible for testing in all relevant secondary care specialities for clinical indicator

conditions and testing in termination of pregnancy services. NHS England commissions testing in primary care as clinically indicated or when requested by a patient; testing in Sexual Assault and Rape Centre's (SARCs); testing in ante-natal care; testing in other NHS England commissioned services as part of patient care pathways and in prisons and military medical services. NHS England also commissions all treatment services to be provided by GUM.

#### 4.7.4 Prevalence of HIV in Bradford

In Bradford, over 400 people received HIV-related care in 2015. As a district Bradford has an overall prevalence rate of 1.24 per 1000 population (aged 15-59). This means that for every 1000 people (aged 15-59) living in Bradford, 1.24 individuals have been diagnosed as being infected with HIV. As figure x shows, Bradford compares similarly to other local authorities across Yorkshire and Humber. Prevalence rates in Bradford are lower than for than of Yorkshire and Humber (1.32/1000) and England (2.26/1000).

**Fig. 1: Prevalence rates of HIV, 2015 by Yorkshire and Humber local authorities**

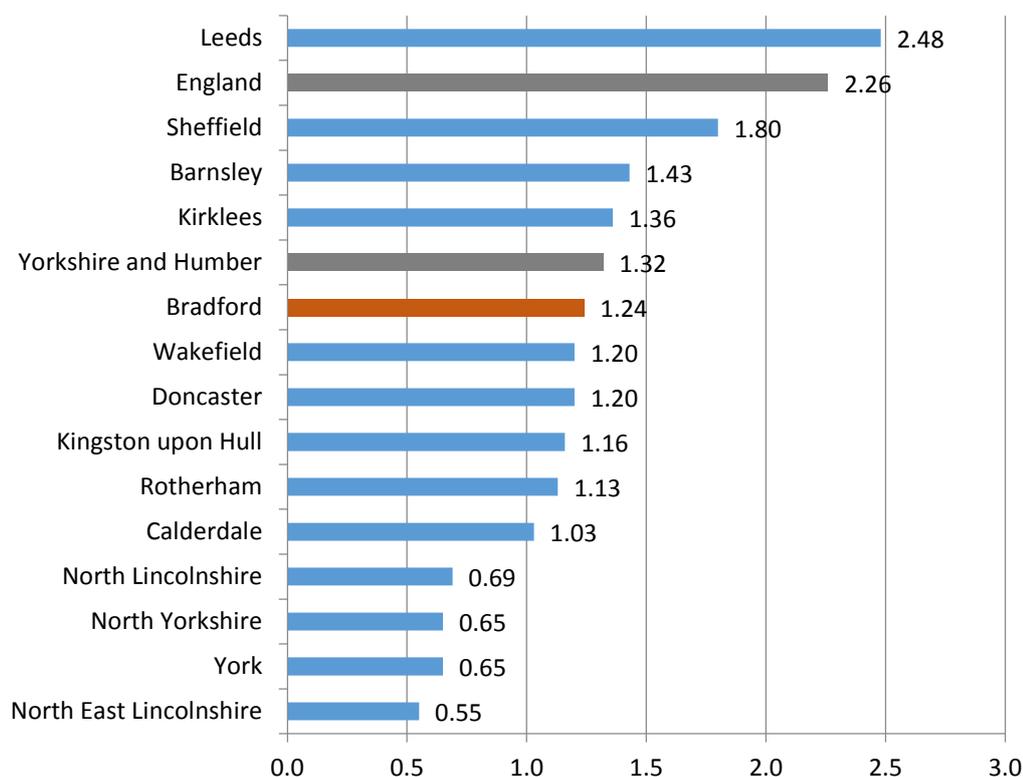
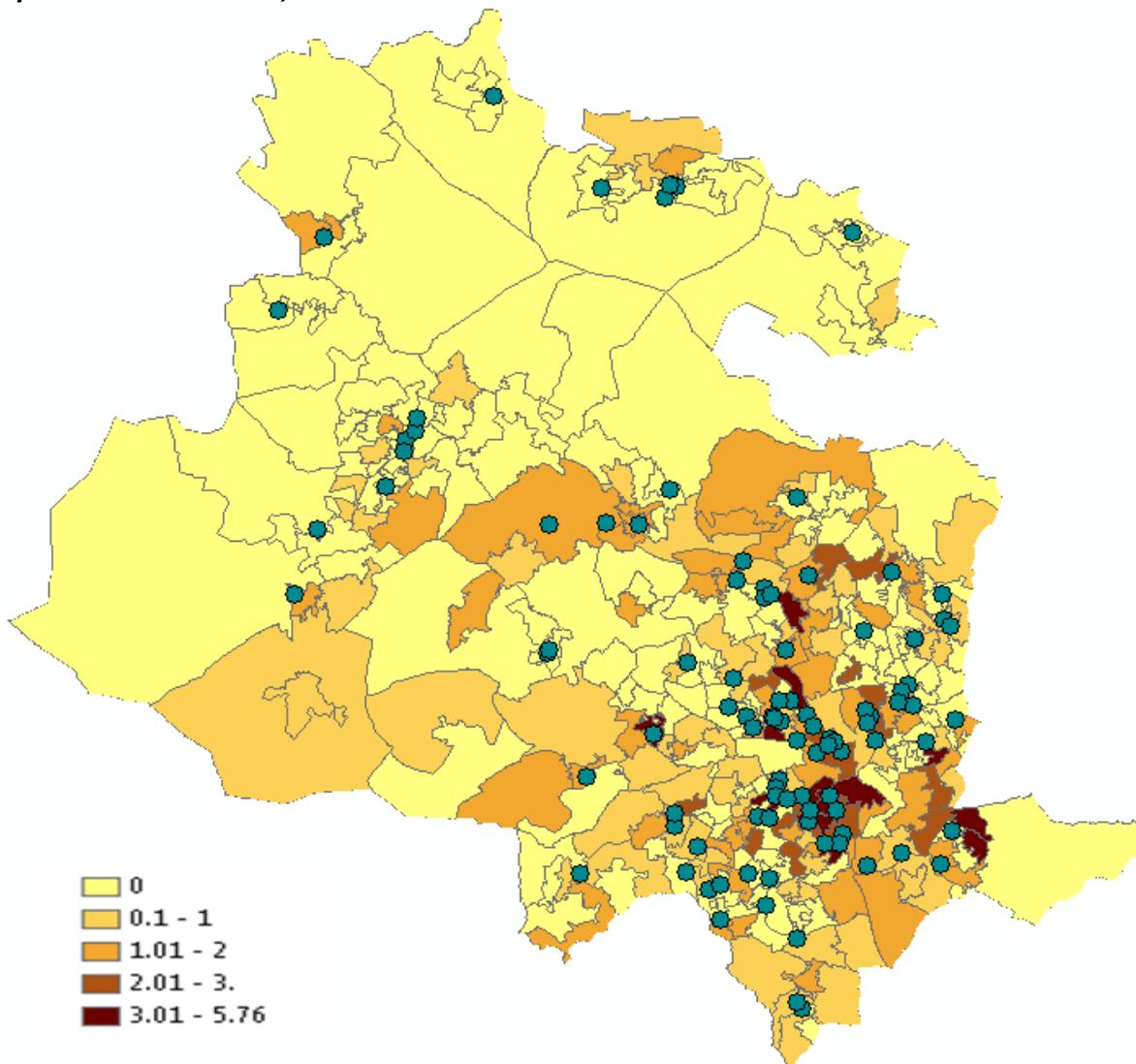


Figure 1 shows the distribution of patients accessing HIV care in Bradford in the year for which latest data was available (2012). Lower Super Output areas are small areas containing between 1000 and 3000 residents. This map does not show incidence or prevalence but rather service use; it can be seen that higher use of services for HIV occurs in the south and east of Bradford urban core. There are no discernible high use HIV service areas with gaps in primary care (GP) provision.

**Fig. 2: Rate per 1000 resident population of patients accessing HIV care, mapped by Lower Super Output Area for Bradford, 2012**



Source: SOPHID, rates based on Mid-2010 population estimates.

#### 4.7.5 Incidence (new diagnosis) of HIV

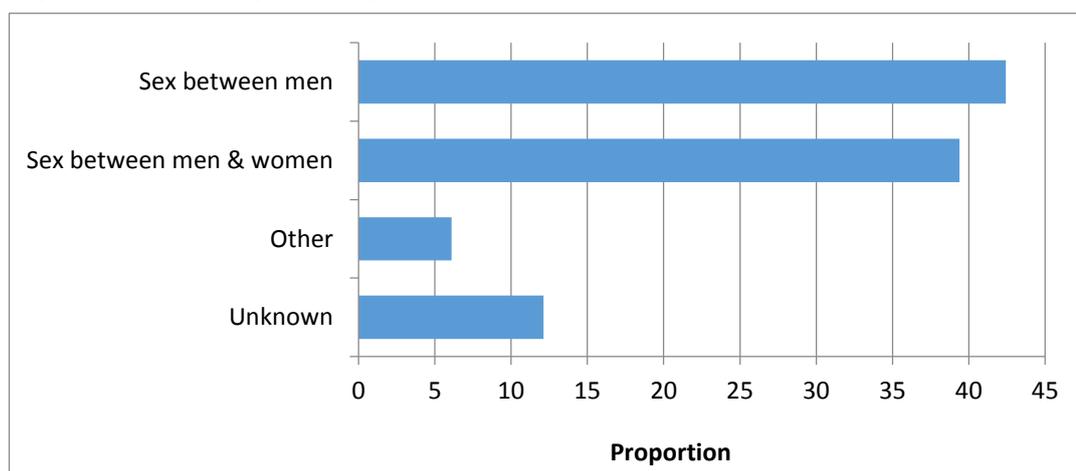
Trend data for the preceding 10 years shows HIV incidence is decreasing across Yorkshire and Humber; the same trend is visible in Bradford. New diagnoses in Bradford have halved from 60 in 2005 to 31 in 2013. In the past four years the number of HIV cases in Bradford has continued declining, reducing to 23 newly diagnosed HIV cases in 2015. This equates to an incidence rate of 5.6 per 100,000; equivalent to the rate for Yorkshire and Humber (5.5/100,000) and lower than the rate for England (12.1/100,000).

These rates demonstrate that the underlying trend in the epidemiology of HIV in Bradford is similar to other local areas: incidence is now decreasing, but because of advances in ARV treatment people are living much longer with the condition, so prevalence is stable/going up and will remain so for the next 10-20 years. After that point the number of people living with HIV will start to decrease through death from other causes, and prevalence will begin to decrease.

The following information on the characteristics of HIV incidence cases is based upon data collected from Bradford HIV treatment services in 2014. This information is based upon approximately half of Bradford residents diagnosed with HIV. The remaining residents with a HIV diagnosis are assumed to be seeking treatment elsewhere.

In Bradford in 2014-15, there were an almost equal number of gay, bisexual or men who have sex with men (42.4%) and heterosexual people (39.4%) diagnosed with HIV (figure x)

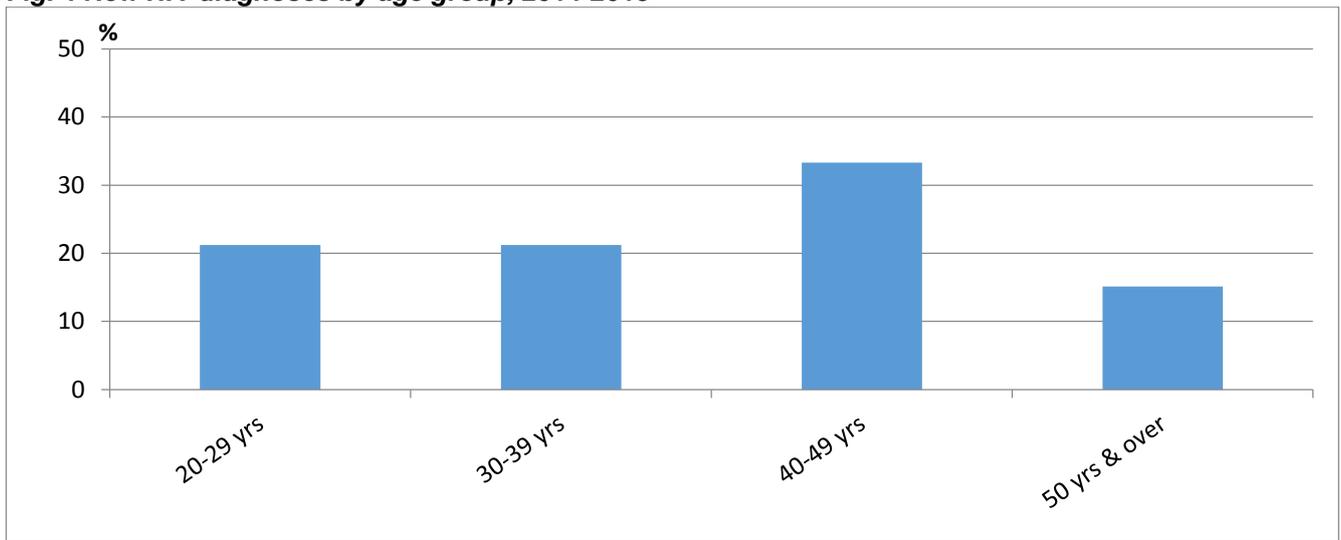
**Fig. 3: New HIV diagnoses by route of exposure, 2014-2015**



Source: Trinity data

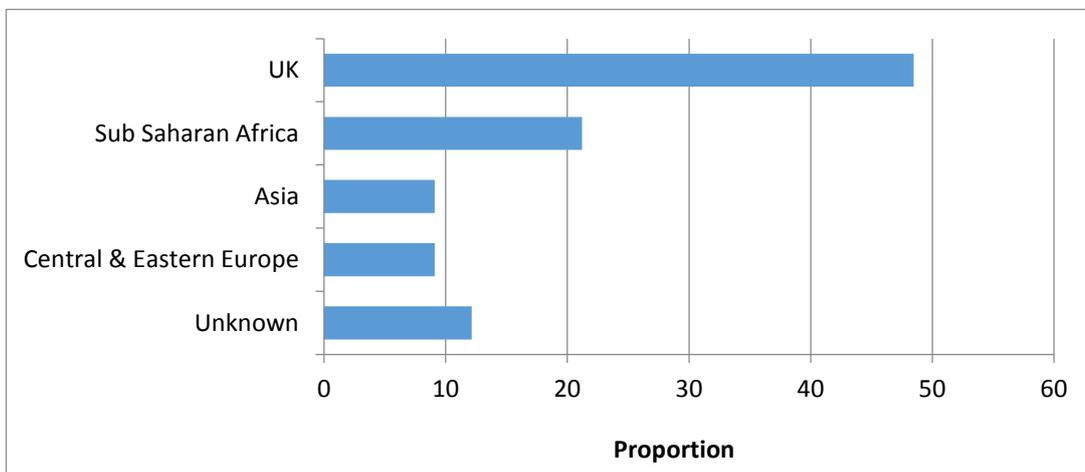
Overall those individuals receiving a HIV positive diagnosis tend to be aged between 40-49 years old as shown in figure 4. Local diagnosis rates confirm there are more males diagnosed with HIV in Bradford than females. Between 2013 and 2015, 48.5% of Bradford residents who received a HIV diagnosis reported the UK as their country of birth and 21% reported being born in a country in Sub Saharan Africa. Figures identifying the country of exposure indicate a similar picture. The majority of HIV infections in Bradford are with those individuals who report the UK as their place of birth and their place of exposure. However 1.8% of Bradford's resident population report their ethnicity as Black-African. From this community, 18% (6/33) have received a positive HIV diagnoses, in the past 3 years. This indicates a high burden of HIV infections within this community.

**Fig. 4 New HIV diagnoses by age group, 2014-2015**



Source: Trinity data

**Fig. 5: New HIV diagnoses by country of birth, 2013-2015.**



Source: Trinity data

#### 4.7.6 Late Diagnosis

In Bradford, between 2013 and 2015, 43.1% of HIV diagnoses were late (PHE 2016). This higher than the national rate (40%) and lower than the regional rate (48.2%); however neither of these differences in rate is statistically significant. Local data from 2014 showed 9 cases attending the Bradford HIV centre being diagnosed with HIV with a CD4 count <350 and in 2015 there were fewer than 5 patients.

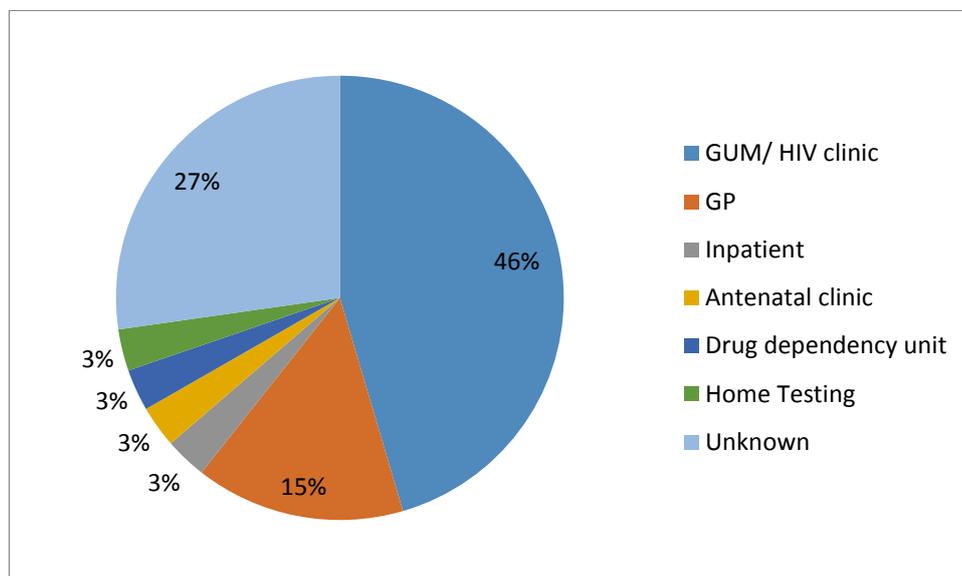
Of those people receiving a late diagnosis of HIV, 30% reported being heterosexual, with 9% reported being gay, bisexual or MSM. This information would strongly suggest that efforts in Bradford to tackle HIV late diagnosis in gay, bisexual and other men who have sex with men are successful.

#### 4.7.7 Testing sites

Amongst those people testing positive in Bradford, the majority of people (45%) received their earliest positive test at GUM services. Other settings where the earliest positive test was accessed were

GP's, drug dependency unit, antenatal services and home testing. Reasons for testing were concern, a known positive partner, symptoms, antenatal and risky behaviour.

**Fig. 6: Settings for the earliest positive HIV test**



In 2015 there were no new cases of HIV diagnosed at the Bradford HIV centre for those who inject drugs.

#### 4.7.8 HIV support and treatment – national issues

A diagnosis of HIV is strongly associated with stigma and discrimination. Stigma and discrimination occurs at the societal, community, and individual levels and can result in poor access to healthcare, including testing and treatment, isolation from friends and family and limited employment opportunities which often leads to poverty.

The British HIV Association produced the Standards of care guidelines (2013). These guidelines are endorsed by Public Health England. Contained within these guidelines is a section relating to self-management. Self-management involves people with HIV developing an understanding of how HIV affects their lives and of how to cope with the issues and symptoms which it presents. Self-management services provide support which encourages people with HIV to make daily decisions that improve health related behaviours and outcomes.

For people with HIV, self-management can help with at least four interconnected major areas: Physical health and well-being, including both HIV-specific and general health matters; mental health and well-being; economic inclusion and well-being, including access to financial and employment support and social inclusion and well-being, including peer support.

Sigma Research, funded by Terrance Higgins Trust and the Department of Health conducted a nation-wide survey which included a final sample of 1777. Respondents were asked to report their personal perceptions of their capacity to benefit from further help or support. This was outside clinical or information needs. The tops 5 needs related to anxiety and depression (56%); self-confidence

(54%); sleep (51%); sex (50%) and skills and training (44%). Although these needs represent the most commonly reported needs, there were a range of needs identified. It is also noteworthy to mention that the majority of respondents reported multiple needs. In the past year, 34% identified between 4-8 needs, a similar proportion identified between 8-12 needs.

Of interest to those in decision-making roles is the people and places, those individual with HIV tend to turn to for help and support. Friends and HIV organisations were cited as the most frequently used places. HIV organisations made the greatest contribution to needs concerning immigration, housing, money and friendships. Likewise, when respondents were asked if they wanted to learn more about living well with HIV, out of the 64% who replied positively, more than half said they wished to do that via talking to other people with HIV, and attending support groups.

In summary, to live well with HIV requires strong self-management skills. These skills have a protective effect against the most commonly cited problems faced by people living with HIV, namely anxiety, depression and self-confidence. Self-management services provide support which encourages people with HIV to make daily decisions that improve health related behaviours and outcomes.

#### 4.7.9 HIV Support in Bradford

Several organisations combine to provide an HIV testing treatment and support service in the District. Currently HIV treatment services are provided at a different location to HIV testing services. Treatment is provided at the Trinity centre in Bradford but a significant number of people with HIV also receive treatment outside the district. Yorkshire MESMAC is the main organisation, commissioned by CBMDC, providing support for those living with HIV in the district. Yorkshire MESMAC are also commissioned by CBMDC to carry out education and point of care testing in outreach locations.

Yorkshire MESMAC provide HIV support services in Bradford. Each service user has an individual needs assessment and a tailored approach to supporting people living with HIV. Support options include:

- counselling
- access to weekly peer support groups for people living with HIV
- information delivered using social media and leaflets
- training courses
- support in returning to education and employment
- access to formula milk for babies under one year old with mothers who are HIV + to prevent HIV transmission via breast feeding.
- People living with HIV in Bradford have access to three grants through Yorkshire MESMAC social support services, each having their own eligibility criteria:
  - Hardship Fund – open to people living with HIV experiencing hardship or transitional changes i.e. changes in employment or family support

- Vicar's Relief Fund – open to people living with HIV, who are in danger of becoming homeless, who are currently homeless, destitute and/or vulnerable, and those attempting to establish or maintain a tenancy
- Health Support Grant– open to people living with HIV, used to empower service users to improve their own health, i.e. gym memberships or swimming lessons

#### 4.7.10 Future Challenges

As the PHE Health promotion for sexual and reproductive health and HIV strategy highlights, in terms of future prevention and harm reduction for HIV,

...a combination approach is likely to be most effective. This should include biomedical, behavioural and social/structural components, and combine interventions such as condom promotion, behaviour change and increased HIV testing. HIV testing, especially in populations most at risk, is a central component of the current HIV prevention strategy.

Within this approach, some immediate challenges include:

- Pre Exposure Prophylaxis (PrEP), a course of drugs taken by HIV negative people to reduce the chance of contracting HIV. In November 2016 the Court of Appeal upheld a ruling that NHS England has the legal power to fund PrEP. NHS England committed to funding a trial of PrEP for HIV prevention. The findings of the trial could have implications for public health. (PHE 2016).
- The development and popularity of point of care testing and online home testing kits, which have the potential to increase access to early diagnosis and reaching vulnerable groups who do not currently access services, but may limit the ability of services to support and offer on going treatment.
- Tackling HIV exposure through route of injecting drug use. Improving treatment and care services is a key action in the Collaborative Tuberculosis Strategy for England 2015-2020. Increasing the proportion of TB cases offered an HIV test is a key indicator. In 2015 95.3% of TB patients in Bradford were offered an HIV test, compared to 94% in Y+H and 96.2 in England.

Human papillomavirus (HPV) is the name for a group of viruses which are very common sexually transmitted infections. They can cause genital warts and, in a small number of cases, is linked to the growth of cancerous abnormalities in female cervical cells, progressing to cervical cancer. There are more than 100 types of HPV, of which at least 13 are cancer-causing (also known as high risk type). Those most at risk of HPV infection include people who regularly change sexual partner, MSM, and those aged under 25.

### 4.7.7 Rates

An estimation of the prevalence of HPV in the Bradford population is not possible as routine screening is not carried out. Prior to 2008, Howell-Jones et al. (2012) estimated that a large proportion of the 16-24 year of population have contracted the disease:

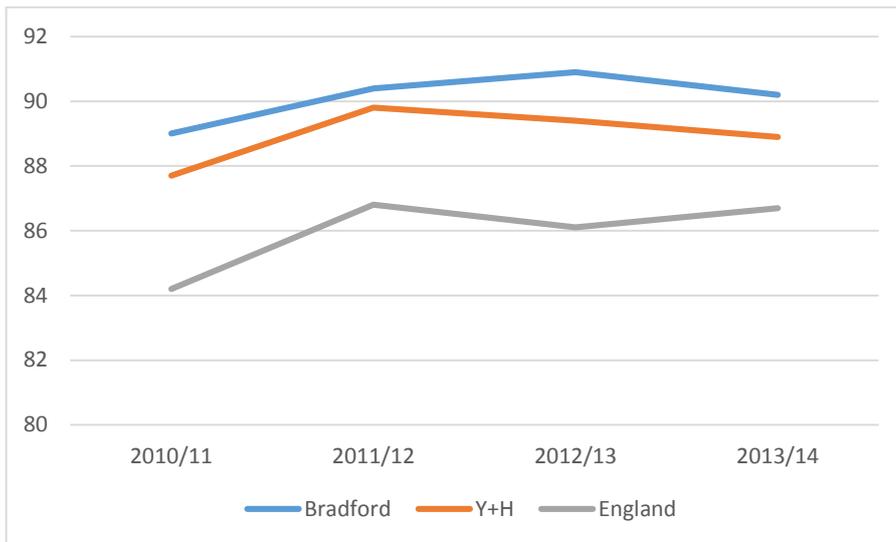
The prevalence of total HR HPV infection, of HPV 16 and/or 18 (16/18) infection and of five HR HPV types closely related to HPV 16/18 (HPV 31, 33, 45, 52 or 58) amongst 16-24 year old NCSP participants was 35% (95% CI 33-37%), 18% (95% CI 16-19%), and 16% (95% CI 14-18%), respectively. Risk of HR HPV infection increased with age during the teen years and was higher in women who reported two or more sexual partners in the last year and in women with chlamydia infection.

### 4.7.8 HPV vaccine

In 2008, a mass immunisation programme was introduced for females in school year 8 (aged 12-13), delivered through school nursing immunisation programme. Since then it is likely that national and local rates of infection have declined, and this is reflected in the decrease in genital warts incidence reported in Bradford and nationally above. There have since been calls for males to be included in this programme to increase the control of the infection within the whole population, and to boost herd immunity. PHE are currently trialling the use of the HPV vaccination in MSM delivered through GUM and SHS clinics, in recognition of their higher rates of infection with the disease.

Prior to 2014, the HPV vaccination was offered as a three dose programme. Coverage of the eligible population in Bradford against national and regional coverage is presented in fig x; Bradford has achieved increasing coverage and currently has a higher rate (90.2% coverage) than both national and regional comparators. It has the sixth highest coverage in Yorkshire and Humber.

**Fig 1: Population vaccination coverage – HPV vaccination coverage for 3 doses (females age 12-13)**



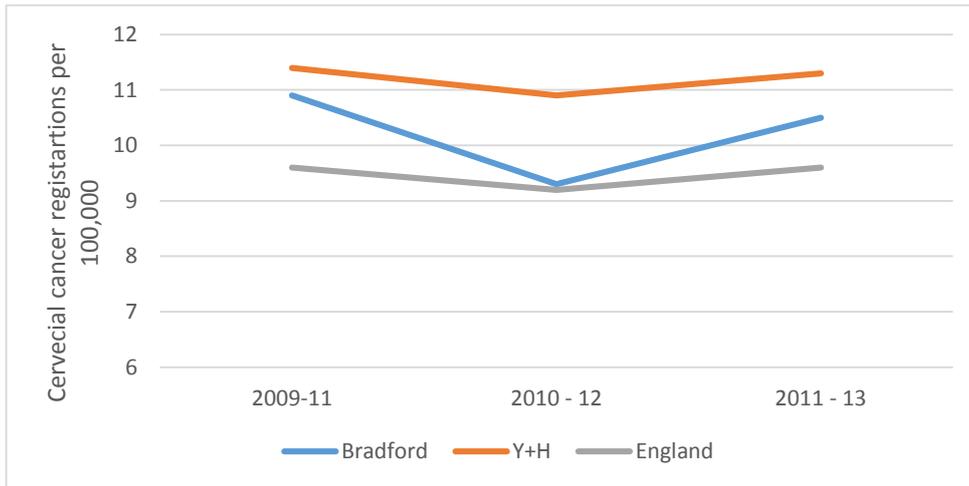
In 2014 the national programme changed to a two-dose programme, and in 2014/5 Bradford achieved 91.5% coverage of its eligible population. Looking forward, Public Health England note that ‘during the 2015/16 academic year, the commitment to deliver on the childhood flu vaccine programme (extended to school years 1 and 2), school leaver booster programme (diphtheria/tetanus/polio vaccine), and the MenACWY routine and catch-up programme may have impacted on the capacity of school immunisation providers to deliver the HPV vaccination programme in some areas’ (PHE 2016)

#### 4.7.9 Cervical cancer

Cervical cancer is a rare but aggressive cancer which can sometimes lead to premature mortality, particularly if diagnosed late. Ten year cervical cancer survival in England in 2010-11 was 63%, and has increased markedly over the last forty years. (Cancer research UK website) Virtually all cases of cervical cancer are caused by HPV, and just two HPV types, 16 and 18, are responsible for about 70% of all cases (National Cancer Institute, 2016)

In 2011-13 the average cervical cancer registration rate in Bradford was 10.5 cases per 100,000 females, the 9<sup>th</sup> highest rate in Yorkshire and Humber. As figure x shows, Bradford has a lower rate than regional but higher than national, and trends appear stable (although numbers of cases at around 30 per year, making comparisons difficult)

**Fig 2: Cervical cancer registration rate per 100,000 females**

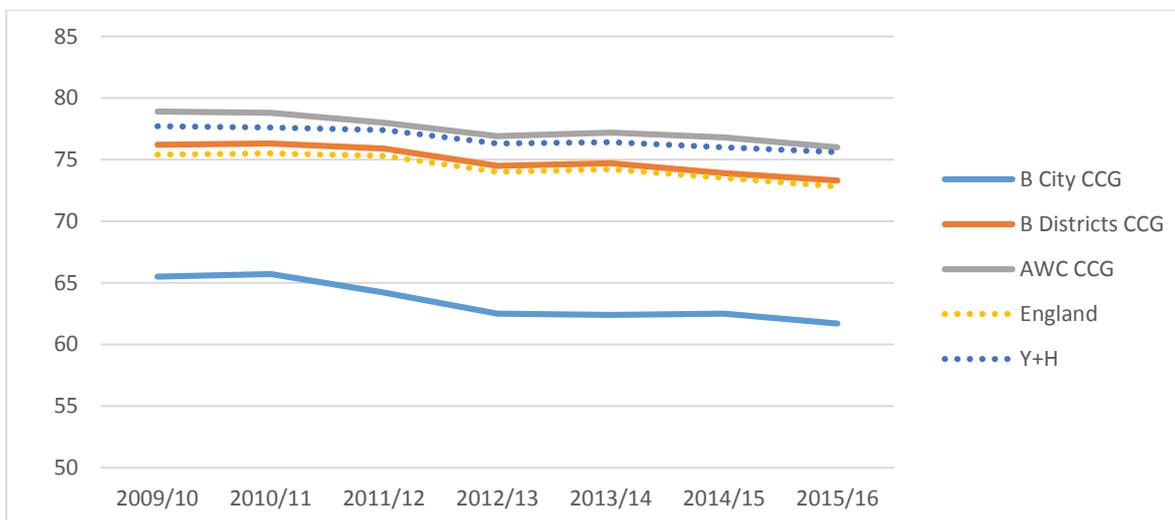


As well as vaccination against HPV, the other major preventative measure against cervical cancer is the national cervical screening programme, which invites females aged 25-64 to come forward for cervical cytology testing to detect the growth of abnormal cells in the cervix which may require further investigation for possible cancer. Women aged 25-49 are invited every 3 years, and women aged 50-64 are invited every 5 years.

Bradford has the lowest coverage of cervical screening (percentage off the eligible population screened within the target period) in Yorkshire and Humber, with 71% compared to an average of 72.7 in England and 75.4 in Yorkshire and Humber for 2016. Coverage of the eligible population has declined steadily over the last 5 years from 74.7% in 2010, a similar trend to declining England rates (75.5 in 2010) and regional rates (77.7 in 2010).

This local rate is heavily influenced by very low rates of screening in Bradford City CCG area; as fig x shows, City CCG is ten percent below the national average, and following the trend of declining screening coverage overall. Bradford's two other CCGs are above the national average and Airedale, Wharfedale and Craven is above the high regional rate.

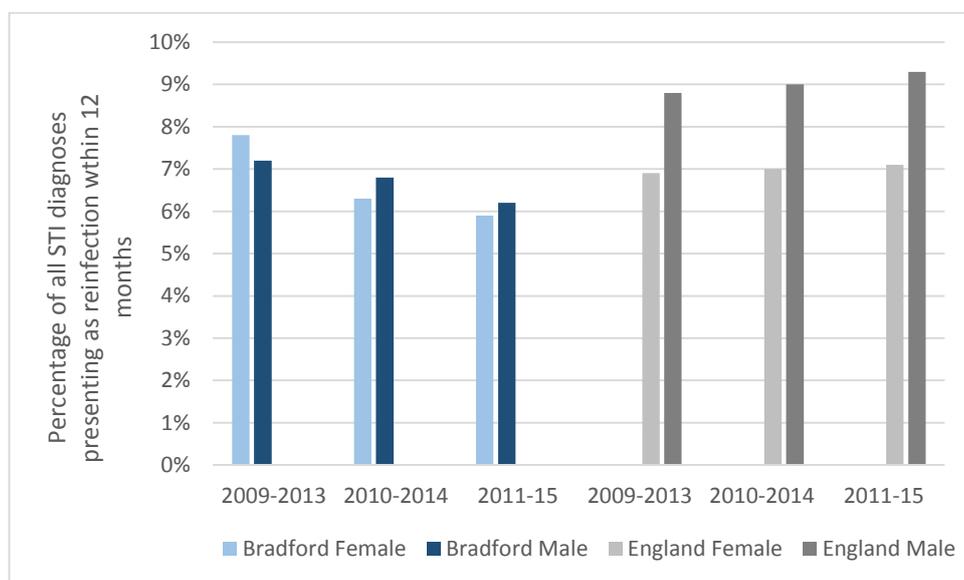
**Fig 3: Females, 25-64, attending cervical screening within target period (3.5 or 5.5 year coverage, %)**



## 4.8 STI Reinfection

Reinfection with an STI after effective treatment shows sexually risky behaviour may be persistent in an individual. Data is collected on a five year rolling basis, and the rate of reinfection is decreasing in Bradford against an increasing national rate (fig x). In Bradford, an estimated 5.9% of women and 6.2% of men presenting with a new STI at a specialist SHC during the 5 year period from 2011 to 2015 became reinfected with a new STI within 12 months. Nationally, during the same period of time, an estimated 7.1% of women and 9.3% of men presenting with a new STI at a specialist SHC became reinfected with a new STI within 12 months.

**Fig 1: Percentage of all STI diagnoses as reinfection within 12 months, Bradford and England**



Gonorrhoea reinfection is particularly concerning, given the potential for strains of the disease to develop antibiotic resistance in individuals who have recently been subject to a course of antibiotics. In Bradford, an estimated 3.5% of women and 4.4% of men diagnosed with gonorrhoea at a specialist SHC between 2011 and 2015 became re-infected with gonorrhoea within 12 months. Nationally, an estimated 3.9% of women and 10.6% of men became re-infected with gonorrhoea within 12 months.

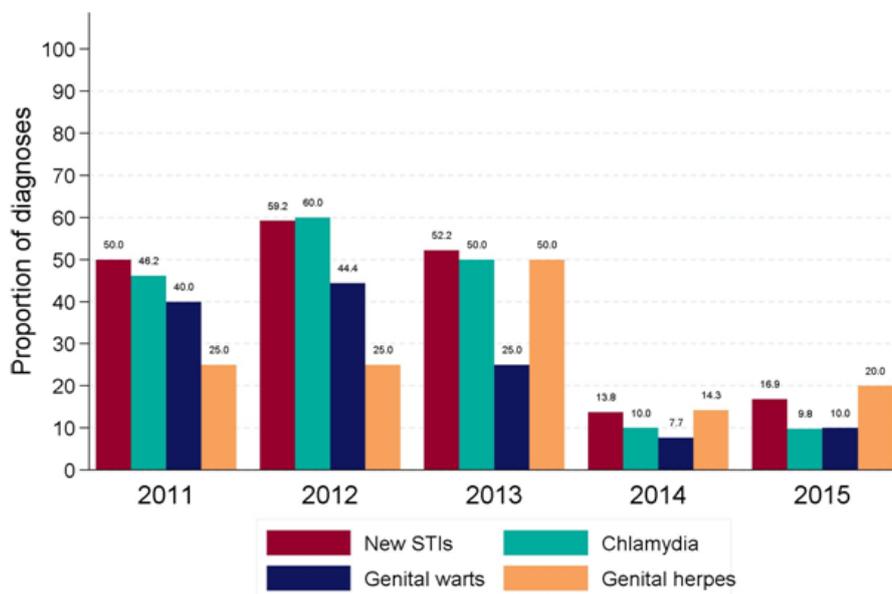
According to Aghaizu et al. (2014), 'annual incidence and redetection rates of chlamydia infection in women in the community are high, particularly among sexually active teenagers'. Young people are more likely to be re-infected with an STI in Bradford: 8.3% of 15-19 year old women and 8% of 15-19 year old men with a new STI at a specialist SHC became re-infected within 12 months.

All major STIs are more common in MSM than in the population at large; as Hughes and Field explain:

MSM are disproportionately affected by STIs. MSM tend to report higher rates of partner change than heterosexual populations and they are more likely to belong to complex, densely connected sexual networks that facilitate rapid STI transmission [63]. Although only 2.6% of the male British population reported a male partner in the past 5 years [29], in England in 2012, approximately 79% of syphilis, 58% of gonorrhoea and 17% of chlamydia diagnoses in men in GUM clinics were in MSM

Recently, national trends in STI infections within this community have seen a continuing and rapid rise in syphilis and gonorrhoea among MSM, which ‘strongly suggests high levels of condom less sex’, and includes the ‘practice of engaging in condom less sex with partners believed to be of the same HIV status, increasing the risk of infection with STIs, hepatitis B and C, and sexually transmissible enteric infections like Shigella’ (HPR2016).

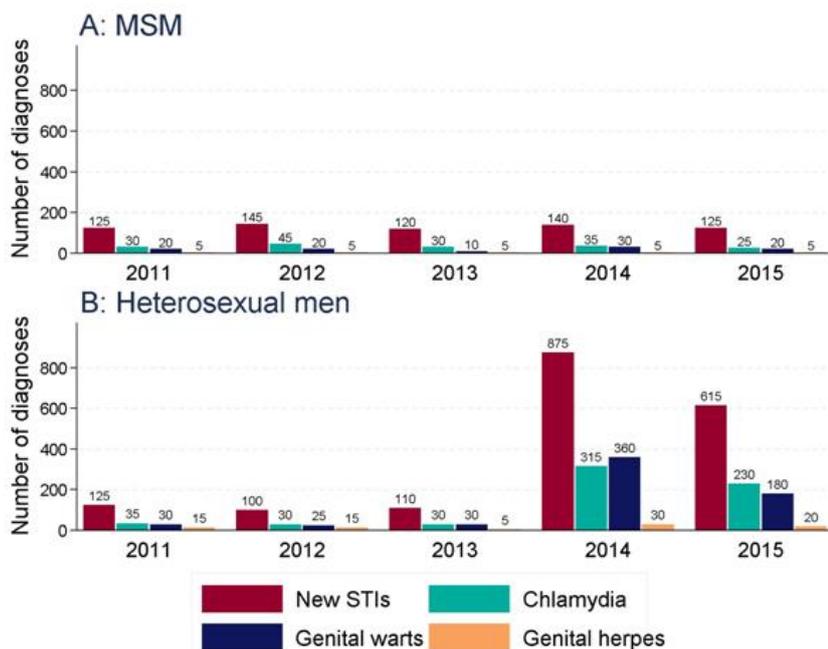
**Fig 1: Proportion\* of new STIs, chlamydia, genital warts and genital herpes in MSM among men in Bradford (specialist SHC diagnoses only): 2011-2015**



Source: Data from specialist sexual health clinics  
 Excludes chlamydia diagnoses made outside specialist SHCs  
 For cases in men with known information on sexual orientation  
 See Figure 5 for denominator  
 \*Please note that to prevent deductive disclosure the number of STI diagnoses in this figure has been rounded up to the nearest 5

As figure 1 shows, in Bradford, the number of new STIs diagnosed across the last 5 years in MSM has remained stable, with 125 cases (rounded to the nearest 5) in 2015. The proportion of diagnoses of STIs in MSM out of all STI diagnoses has fallen in the last two years, as a result of an increased number of new diagnoses in heterosexual men (figure x).

**Fig 2: Number\* of new STIs, chlamydia, genital warts and genital herpes in MSM and in heterosexual men in Bradford (specialist SHC diagnoses only): 2011-2015**



Source: Data from specialist sexual health clinics  
 Excludes chlamydia diagnoses made outside specialist SHCs  
 \*Please note that to prevent deductive disclosure the number of STI diagnoses in this figure has been rounded up to the nearest 5

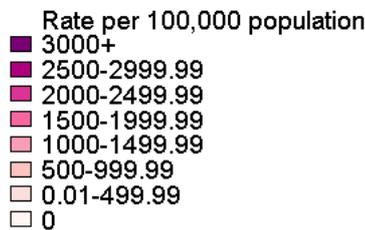
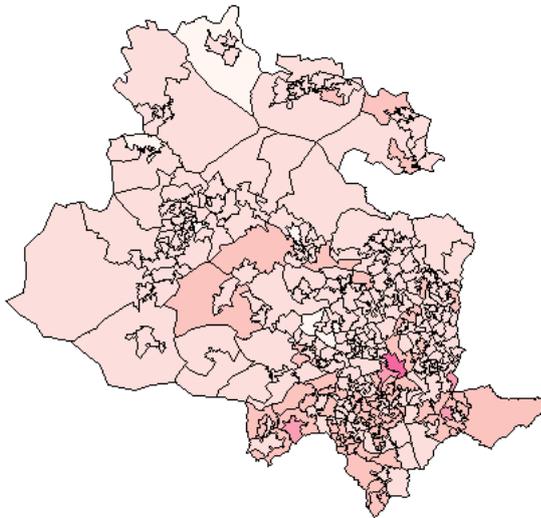
#### 4.10 STIs and deprivation

As Furegato (2016) has demonstrated, there is a clear link between higher rates of STIs and the deprivation profile of a local area mapped by the Index of Multiple Deprivation. PHE have found that across the UK ‘rates were highest in residents of urban areas, especially in London, reflecting, to a large extent, the distribution of core groups of the population who are at greatest risk of infection and living in areas of higher socioeconomic deprivation’ (HPR).

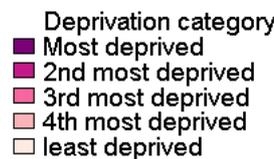
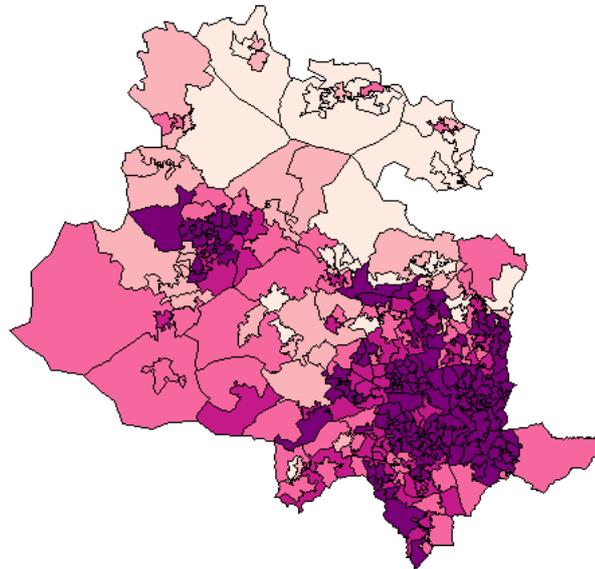
The PHE LASER report presents a map of Lower Super Output Areas within Bradford District alongside new STI rates for each area. While interpretation of this map is subject to caveats (for instance, artefacts introduced by using arbitrary geographical boundaries), it is clear that there is evidence for slightly raised STI rates in the smaller and poorer urban LSOAs of Bradford city centre, with no similar effect in the other major urban centre of the District (Keighley).

**Fig 3: Geographical spread of STIs in Bradford**

Distribution of rates of new STIs by LSOA



Distribution of deprivation by LSOA



Source: Data from specialist sexual health clinics. Rates based on the 2011 ONS population estimates.

Deprivation quintiles generated from Index of Multiple Deprivation (IMD) scores 2011

If LSOAs are grouped by index of multiple deprivation quintiles (table x), it can be seen that the greatest number of STI diagnoses occur in the most deprived communities in Bradford, and the trend follows a clear social gradient from poorest to richest areas of the District. This means that STIs infection disproportionately affect more deprived individuals in Bradford. However, when converted into rates (right hand column), because Bradford contains a larger number of deprived LSOAs than national averages the rate of STIs in deprivation categories is broadly similar, apart from a lower rate in the least deprived (most well off) areas. This means that although the burden of STI cases is seen in the poorer parts of the District, there is no evidence of worse sexual health in poorer parts of Bradford.

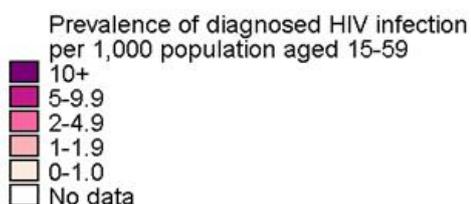
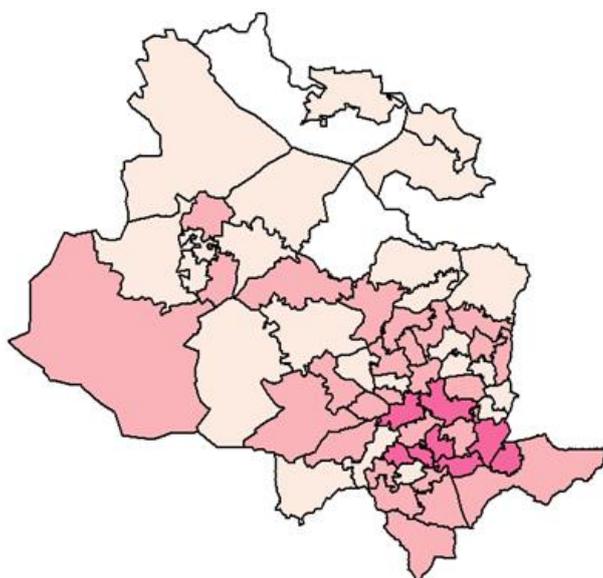
**Table 1: Cases and Numbers of STIs in Bradford by LSOA IMD quintiles**

Deprivation Category (IMD quintiles)	Number of cases	Percentage of cases in category	Rate in category
Most deprived	755	47.5%	322 per 100,000
4 <sup>th</sup> least deprived	330	20.8%	308 per 100,000
3 <sup>rd</sup> least deprived	240	15.1%	282 per 100,000
2 <sup>nd</sup> least deprived	170	10.7%	307 per 100,000
Least deprived	95	6%	207 per 100,000

Data shown is for specialist SHCs only, and excludes chlamydia diagnose made outside specialist centres

In terms of HIV prevalence, the LASER report for Bradford also maps the number of people living with the condition against slightly larger geographical boundaries, Middle Super Output Areas (MSOAs). As figure x shows, 14% of the MSOAs in Bradford had a prevalence rate higher than 2 per 1000 (15% in 2013 and 18% in 2015), the BASH/PHE goal for HIV prevalence across the country. In a similar manner to STI rates, HIV is more prevalent in the inner-city urban core of Bradford city centre.

**Fig 4: Geographical spread of HIV in Bradford**

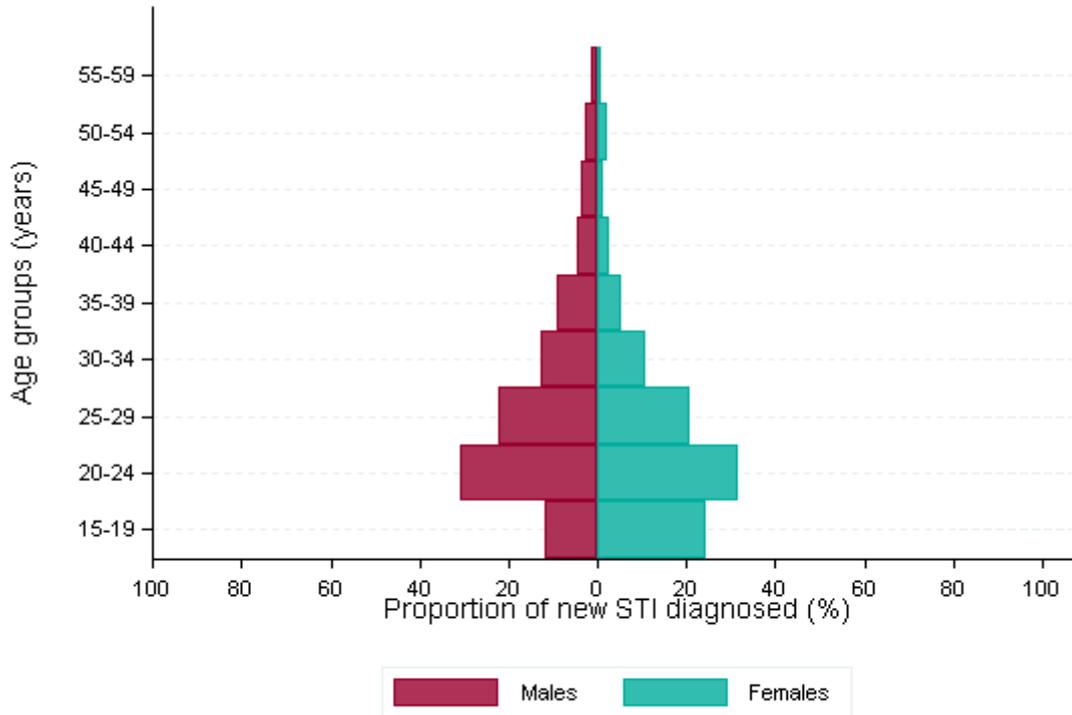


Source: HIV and AIDS Reporting System (HARS)

#### 4.11 STIs and age/gender

The age and gender breakdown of STI diagnoses (all STIS) in 2015 is presented below. This age pyramid shows that a higher proportion of female STI cases are in under-20 year olds compared to male cases; there are approximately the same proportion of male and female cases in 20-24 year olds (the peak age by proportion of cases), again the approximately the same proportion of male and female cases in 25-29 year olds, and proportionally fewer STI cases in female over 30s than male over 30s. More than half of all STIs occur before the age of 30 for both males and females. The evidence for STI diagnoses disproportionately affecting younger people is strengthened if the 2015 Chlamydia diagnostic rate for those over 25 (139 cases per 100,000) is compared to the rate for people aged 25 and over (272 per 100,000).

**Fig 1: proportion of new STI cases by age group and gender, 2015**



Source: Data from specialist sexual health clinics  
 \*Please note that to prevent deductive disclosure the number of STI diagnoses has been rounded up to the nearest 5

Trends over time, however, see a decreasing proportion of STI cases in young people aged 15-24: the proportion was 59% in 2013, falling to 52% in 2014, and 49% in 2015. These changes may be driven by the declining Chlamydia detection rate over this period (fig x).

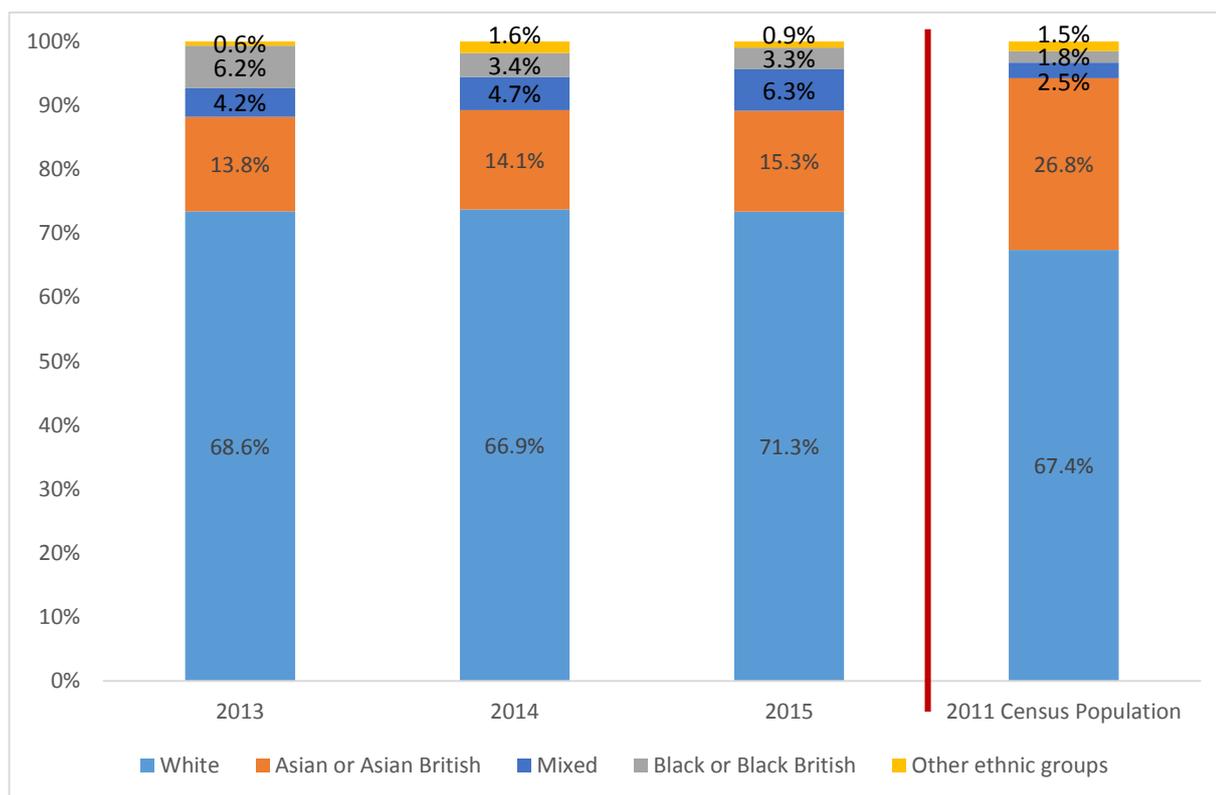
#### 4.12 STIs and ethnicity

STI rates vary across ethnic groups in the UK, with a number of notable trends clear from the literature, including higher rates of STIs in recent migrant populations where individuals have come from countries with higher STI prevalence, and higher rates of STI diagnoses, particularly late HIV diagnoses, in the Black African community (Prost, 2006). The ethnic breakdown of Bradford is shown in the Bradford demographics sections at figure x.

Figure x shows new STI diagnoses in Bradford in 2013-15 by broad ethnic categories: the 2011 census population ethnic breakdown of the District is given as a comparison<sup>3</sup>.

<sup>3</sup> An up-to-date breakdown of the Bradford population by ethnic categories is not possible between census years.

**Fig 1: Proportion of new STI diagnoses by ethnic group (specialist SHC diagnoses only)**



Source: GUMCADv2

The proportion of STI diagnoses stay stable over this three year period, and small fluctuations are likely to be through annual variation due to chance. The most notable aspect of this data is that Asian or Asian British diagnoses represent a much smaller proportion of total diagnoses than would be expected given the proportion of that ethnic group in the population (13.8% in 2013 compared to 26.8%). This may indicate that Bradford’s South Asian population have a lower incidence of STIs, but it may also indicate they are less likely to be tested and diagnosed.

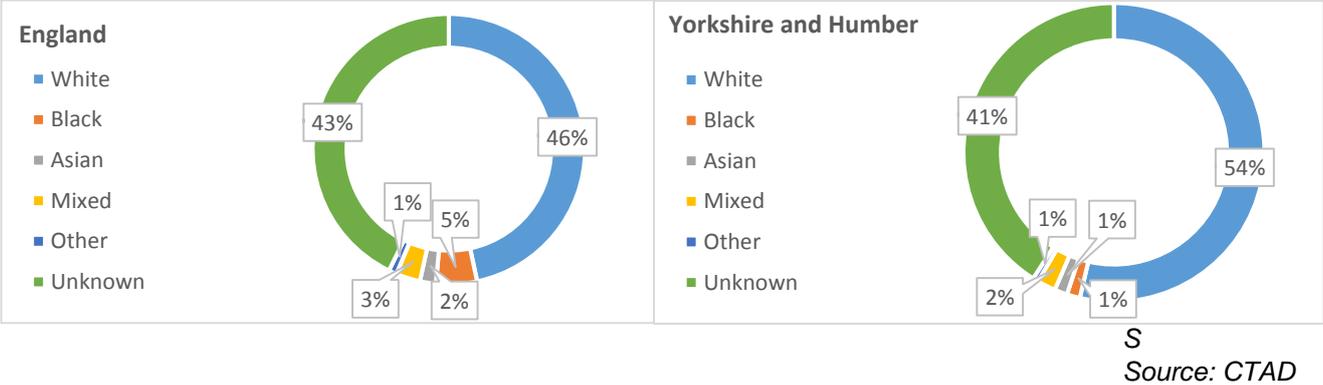
In terms of accessing sexual health services, there is evidence in the literature that in the UK people from minority ethnic communities are underrepresented in terms of service attendances (Forbes 2008, Tariq 2007). This applies to all minority groups to some, in comparison to those of white British ethnicity, and for instance Prost (2006) identifies late HIV testing and diagnosis, and barriers to accessing healthcare and social services increased by uncertain immigration status, social isolation, discrimination, and HIV-related stigma in Black African communities in the UK and Europe. In Bradford, given the high South Asian population, an overview of studies by Griffiths et al. (2008) discusses a number of relevant factors:

Poor awareness of specialist sexual health services (i.e. GUM) is a common theme across studies, and many South Asians have expressed the need for more accessible information about services ... In terms of service preference, one study found general practice to be the most preferred setting for sexual health care among Indians, Pakistanis and Bangladeshis ... That the reason for a visit can be concealed and that GPs are local and conveniently situated are the cited advantages of general practice for sexual health. However, concerns about the

confidentiality of GPs are prevalent, particularly among Indians. Family GPs, often of the same ethnic background, are perceived as potentially disclosing information to other family members. Having a service provider of the same cultural or religious background has also been found to be problematic with some people feeling that this provider may judge them if their behaviour is seen as deviating from cultural or religious norms. Moreover, it is perceived that a person of the same ethnic and cultural background may have links with the local community, thus undermining feelings of confidentiality and privacy. Having a provider that understands cultural norms has been found to be important however. Matched gender is also important, particularly for females.

Data for local areas is not available on the national Chlamydia screening programme by ethnicity; however it is captured nationally and regionally, although half of all participants do not disclose their ethnicity. As figure x shows, the screening population is more diverse nationally than regionally, with a larger proportion of Black British people screened and smaller proportion of white British.

**Fig 2: Chlamydia screening by ethnic group, 2015**



**4.14 Wider determinants of Sexual and reproductive health**

The Public Health Outcomes Framework suggests a number of other population indicators which may acts as ‘wider determinants’ of good sexual health in a local area. Data and trends for these wider determinants are summarised in the table below. As has been noted, Bradford has high levels of deprivation, and this inevitably leads to many of these wider determinant factors comparing poorly to England.

**Table 1: 'Wider determinants' of sexual health in Bradford, 2015**

	Bradford	Yorkshire and Humber	England	Trend	Compared to England
<b>Under 18s alcohol-specific hospital admissions rate /100k</b>	33.5 (2012-15)	33.4	36.6	 (2010-15)	●
<b>Percentage people living in 20% most deprived areas in England</b>	44.4 (2014)	28.1	20.2	 (2012-14)	●
<b>Under 16s in poverty (%)</b>	28.1 (2014)	22.5	20.1	 (2006-14)	●
<b>GCSEs achieved (% 5 A*-C inc. English and maths)</b>	47.5 (2014/15)	55.3	57.3	 (2013-15)	●
<b>16-18 year olds not in education employment or training (%)</b>	3.5 (2015)	4.8	4.2	 (2011-15)	●
<b>Pupil absence (%)</b>	5.11 (2014/15)	4.79	4.62	 (2010-15)	●
<b>First time entrants to the youth justice system rate /100k</b>	433.6 (2015)	425.8	368.6	 (2010-15)	●

Alcohol-specific hospital admissions, at 33.5 per 100,000 population per year, are lower in Bradford than England, though not significantly, but have shown a rising trend in the last 5 years.<sup>4</sup> There is evidence higher levels of intoxication are linked to unsafe condom less sex; one recent systematic review examined the association between blood alcohol content (BAC) and self-perceived likelihood of using a condom during intercourse, and found that

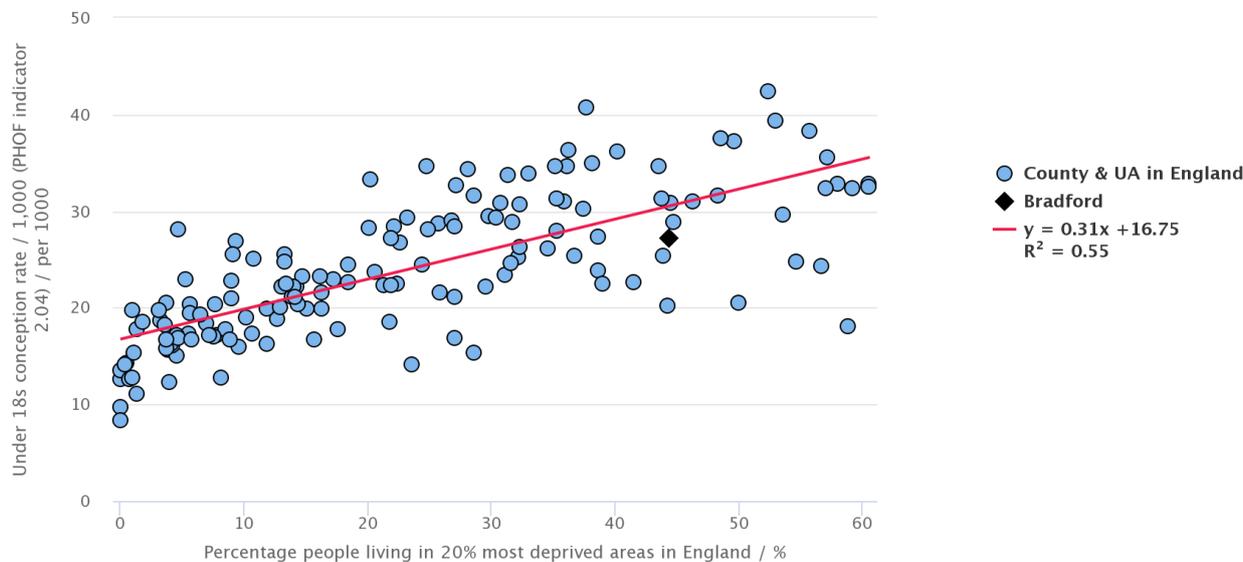
An increase of 0.10mg/ml blood alcohol would result in a 2.9% increase in the participants' likelihood of reporting that they would engage in unsafe sex (95% confidence interval 2.0–3.9%); compared with if they had consumed no alcohol (Rehm 2012).

The percentage of people living LSOAs which are in the bottom quintile of the Index of Multiple Deprivation in Bradford is 44.4%; this compares to 20.2% nationally, meaning that over twice as many people in Bradford live in a deprived area than across England as a whole. The IMD ranking was produced in 2015, so the trend indicated is based on the changing mid-year census population estimates for 2013-15, rather than any underlying shift in deprivation; what it does show is that the population of Bradford's deprived areas is growing at a faster rate than its less deprived areas. Higher deprivation is strongly linked to a number of sexual health issues, although the precise mechanism and the direction of causality is complex. One example is teenage pregnancy; as figure x shows, the under 18s conception rates of English local authority areas are moderately correlated with the percentage of people living in the 20% most deprived areas. A similar correlation exists for children under 16 living in poverty, an income indicator which measures the proportion of children living in families in receipt of out of work benefits or tax credits where their reported income is less than 60%

<sup>4</sup> Alcohol-related admissions are a 'proxy' rather than a direct measure for levels of alcohol consumption in the general population, and should be interpreted with caution.

median income. This proportion has declined since 2007 to 24% in 2013, but rose significantly in 2014 to 28.1% in line with a similar national rise.

**Figure 1: Under 18s conception rates vs. % of people living in the 20% most deprived areas (England)**



GCSE results in Bradford are worse than regional and national averages, with fewer than half (47.5%) of pupils achieving 5 or more A\*-Cs including Maths and English, compared to 55.3% regionally and 57.3% nationally. Again, there links between attainment and good sexual health are complex, but it is likely that rather than poor attainment being a predictor of poor sexual health, the casual pathway works in reverse, with the educational consequences of an STI diagnosis or an under 18 conception often being profound; Kane et al. (2013) found 'educational consequences of teen childbearing, with estimated effects between 0.7 and 1.9 fewer years of schooling among teen mothers'.

Absence rates from education – defined as % of half days missed by pupils due to overall absence (incl. authorised and unauthorised absence), are higher in Bradford at 5.11% compared to national (4.62%) and regional (4.79%) figures; the trend in this area is, however, a reducing rate of absence. The proportion of 16-25 year olds not in employment, education or training (NEET) has fallen consistently in Bradford over the last five years, and currently stands at 3.5% in comparison to 4.8% and 4.2% in Yorkshire and Humber and England respectively. Bradford's position out of the 152 Local Authorities was joint 47<sup>th</sup>, with 1<sup>st</sup> being the lowest NEET level; in 2015 Bradford had the lowest NEET rate in West Yorkshire. Both absence from education at school age and from engagement with education, employment or training in later teens/early twenties can be correlated with increased risk of early pregnancy. Finally, the rates of 10-17 year old juveniles receiving their first conviction, caution or youth caution is 433.6 per 100,000 in Bradford, significantly higher than the rates nationally (368.6) or locally (425.8), but with a reducing trend.

The overall picture painted here is that Bradford's demographic makeup and the social and health behaviours of its young people mean that social factors are present which make higher teenage conception and poorer sexual health more likely.

### 4.15.1 Under 18 conceptions - background

Reducing conception in under 18s is a well-established global health policy and a key part of ensuring good sexual health in a local area. Although mothers who conceive and give birth in teenage years often go on to have happy and healthy lives and children, it is recognised that poorer educational and health outcomes are associated with conception under 18; teenage mothers are more likely than older mothers to require extensive support from a range of local services (e.g. accessing supported housing or engaging in education, employment and training), and suffer an economic deficit through lost access to work and education, leading to exclusion and social inequality. PHE note:

Children born to teenage mothers have a 45% higher risk of infant mortality and a 63% higher risk of living in poverty. Mothers under 20 have a 30% higher risk of mental illness two years after giving birth ... Twenty-one percent of the estimated number of young women aged 16-18 who are not in education, employment or training, are teenage mothers; and by the age of 30, teenage mothers are 22% more likely to be living in poverty than mothers giving birth aged 24 or over. Young fathers are twice as likely to be unemployed aged 30, even after taking account of deprivation. (CHIMAT 2015)

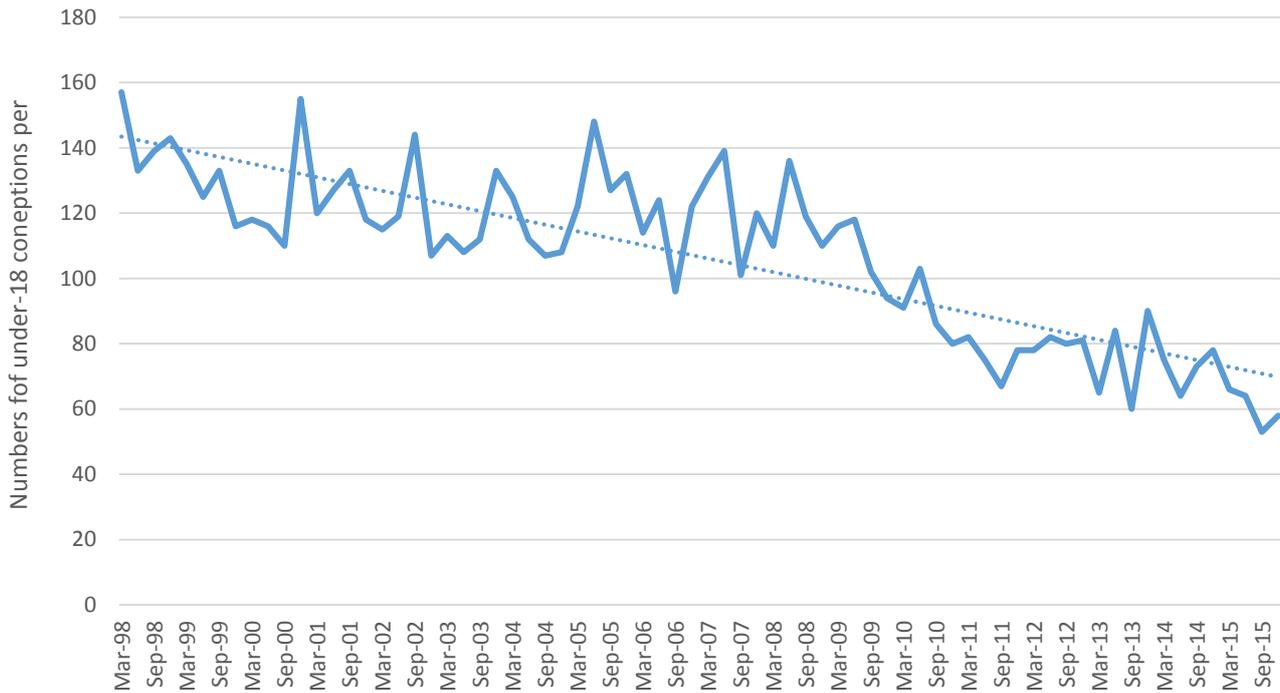
Because of this there is much to be gained from investing in reducing teenage pregnancy through a sensitive multi-agency prevention approach centring on access to contraception and education. Such an approach has been taken nationally over the last 15 years through the government's Teenage Pregnancy Strategy (1999), leading to a reduction in under 18 conceptions. However the UK still has more than twice the rate of teenage conceptions than many other EU countries, for example Italy, France, Germany, Holland and the Scandinavian countries

In 2014, Bradford had a population of 17,233 girls aged 15-19 years, which is 6.4% of the female population, compared to England where 5.7% of the female population falls into this age range. This is in line with the already noted fact that Bradford is a very young local authority, and thus the number of teenage conceptions is likely to be higher than other areas in real terms. This likelihood is increased when research from the ONS is considered showing a strong correlation between deprivation at local area level and teenage conception rates (ONS 2014).

### 4.15.2 Under 18 conceptions – numbers and rates

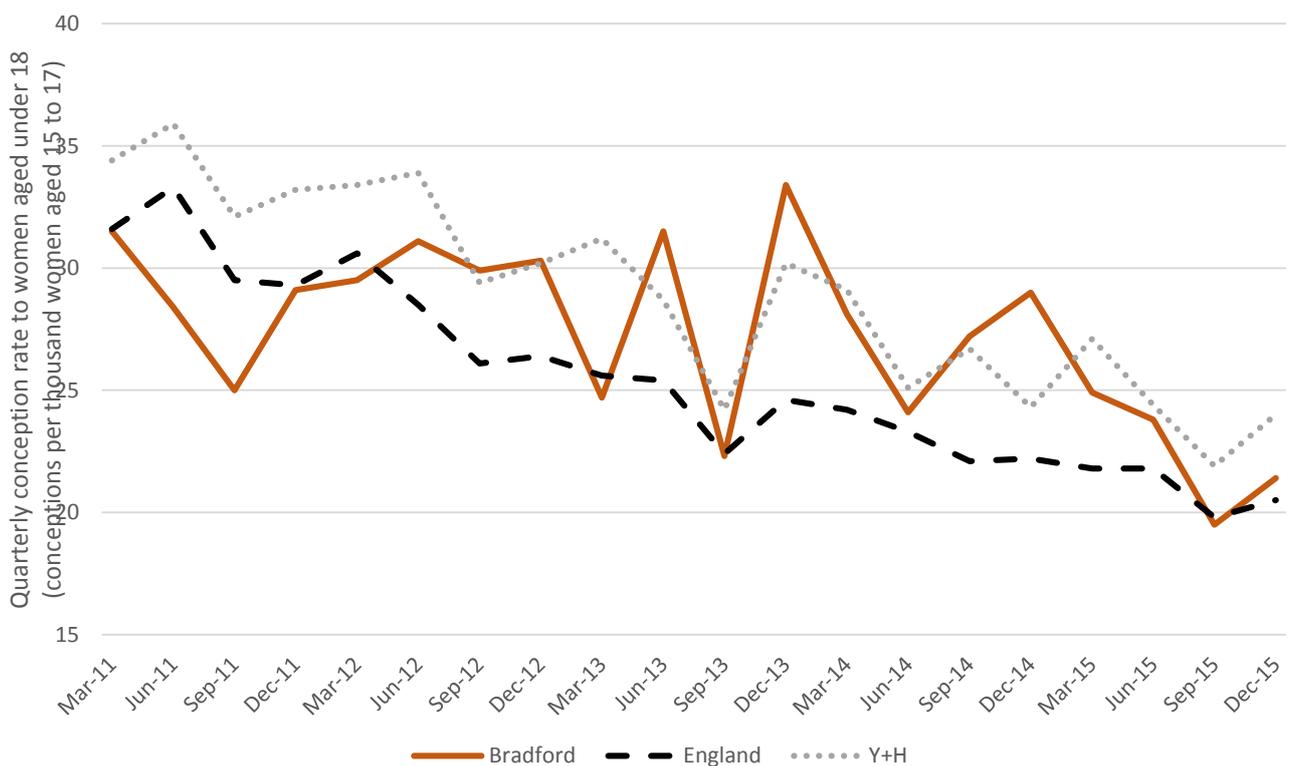
There were 241 under 18 conceptions in 2015 in Bradford. Figure x shows the raw numbers of conceptions measured every quarter since 1998; as can be seen, a significant reduction can be observed from an average of over 150 to an average or around 60 per quarter; rates are at a third of the level they were at the start of monitoring.

**Fig. 1: Number of under 18 conceptions in Bradford per quarter 1998-2015**



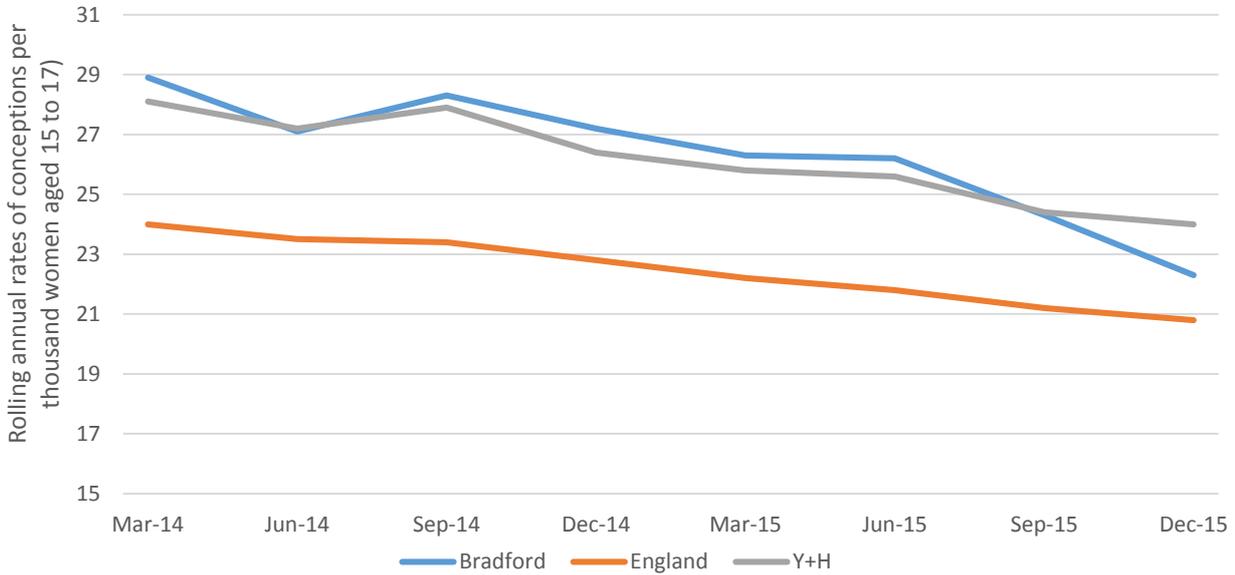
When conception rates per 1000 females between 15 and 17 are considered, instead of raw numbers, there is similarly a downward trend in recent years. Between 1998 and 2010, Bradford was for many years above the England rate, but dropped below it in 2010. As fig x shows, it rose above national and regional rate again in 2012, but has since fallen and is now below the rate in Yorkshire and Humber and at parity with England and Wales

**Fig. 2: rate of under 18 conceptions in Bradford per thousand women aged 15 to 17**



Given the sharp variation in numbers of conceptions each quarter, the ONS publishes 'rolling rates' which smooth off the peaks and troughs in this data; this shows a consistent fall in rates, with the last quarters of 2015 in particular seeing a reduction which future data may confirm as a sustained trend.

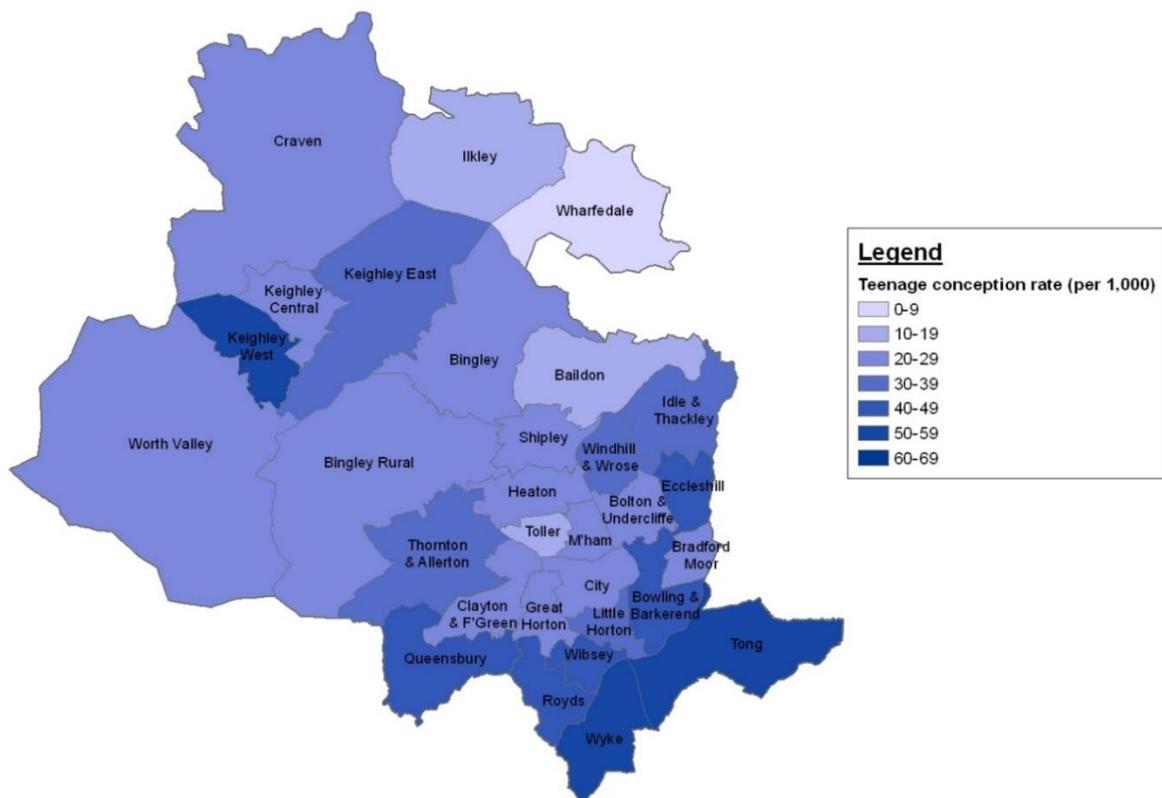
**Fig. 3: Rolling annual rates of conceptions to women aged 15-17 (conceptions per thousand)**



Source of Fig x x and x: ONS Under 18s conception data 2015

Some data is available at a lower level to understand the patterns of teenage conception in Bradford electoral wards. Rates per ward between 2010 and 2012 can be seen at figure x, and show that South Bradford city centre wards, as well as Keighley west, see the highest rates locally.

**Fig. 4: Under 18s conceptions in Bradford 2010-12**



More recent data released by CHIMAT compares under 18 conception rates across Bradford electoral wards and assesses the statistical significance of that difference within Bradford and between each ward and the England average.

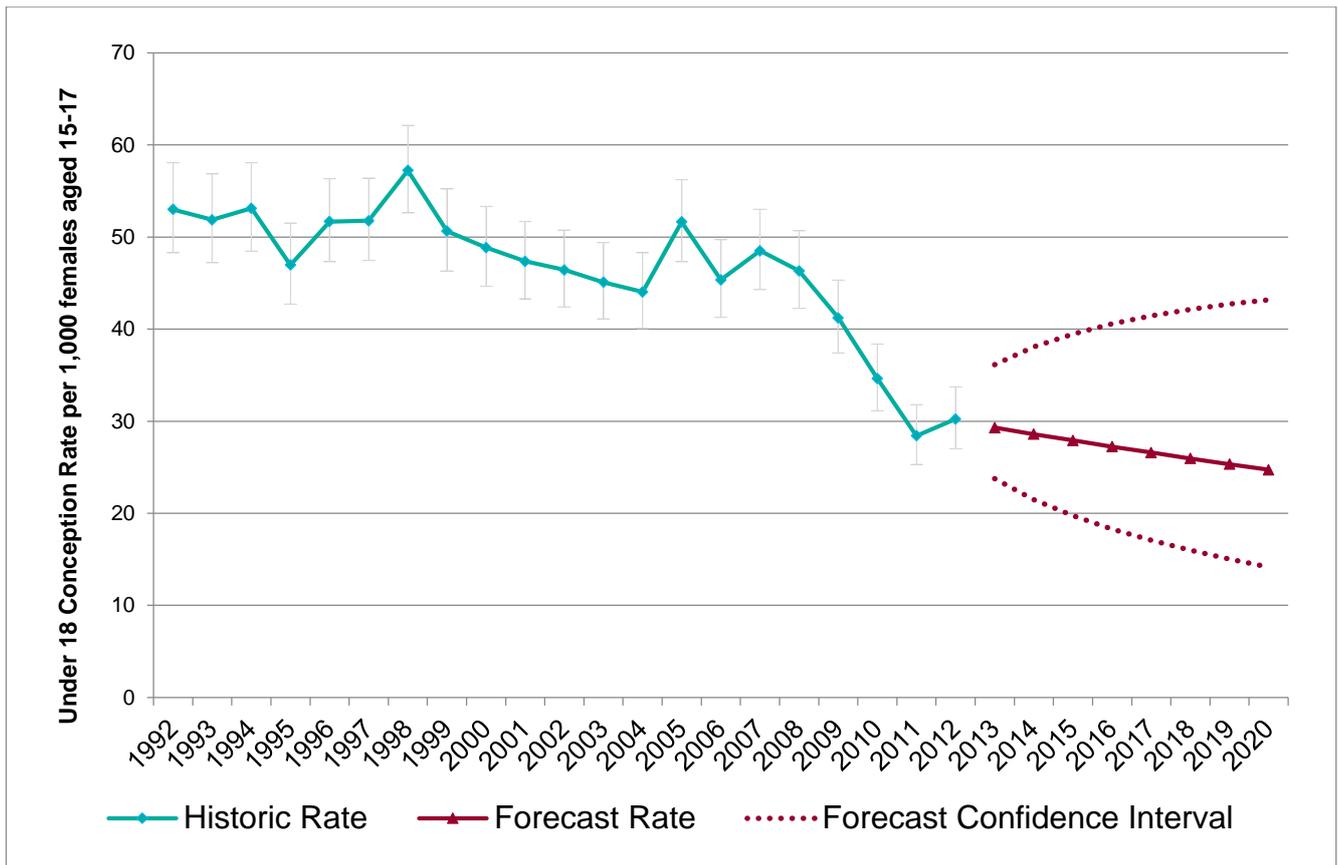
**Table 1: Significance of the difference between under 18 conception ward rates and Bradford/England rates (2012-14)**

Ward	Significantly different to Bradford	Significantly different to England
Baildon	↓	→
Bingley	→	→
Bingley Rural	→	→
Bolton and Undercliffe	→	↑
Bowling and Barkerend	↑	↑
Bradford Moor	→	→
City	→	→
Clayton and Fairweather Green	→	→
Craven	→	→
Eccleshill	↑	↑
Great Horton	→	↑
Heaton	→	→
Idle and Thackley	→	↑
Ilkley	↓	↓
Keighley Central	→	→
Keighley East	→	→
Keighley West	→	↑
Little Horton	→	↑
Manningham	→	→
Queensbury	→	↑
Royds	↑	↑
Shipley	→	→
Thornton and Allerton	→	→
Toller	↓	↓
Tong	↑	↑
Wharfedale	↓	→
Wibsey	↑	↑
Windhill and Wrose	→	↑
Worth Valley	→	→
Wyke	↑	↑

↑ = significantly higher conception rate → = not significantly different ↓ = significantly lower (Source: CHIMAT)

Public Health England have published a tool which forecasts future under 18 conception rates for each local authority given historical trends and population growth estimates. As figure x shows, it is likely that rates will continue to fall to around 25 births per 100 women between 15 and 17 by 2020.

**Fig. 5: Forecast under 18 conception rates for Bradford**



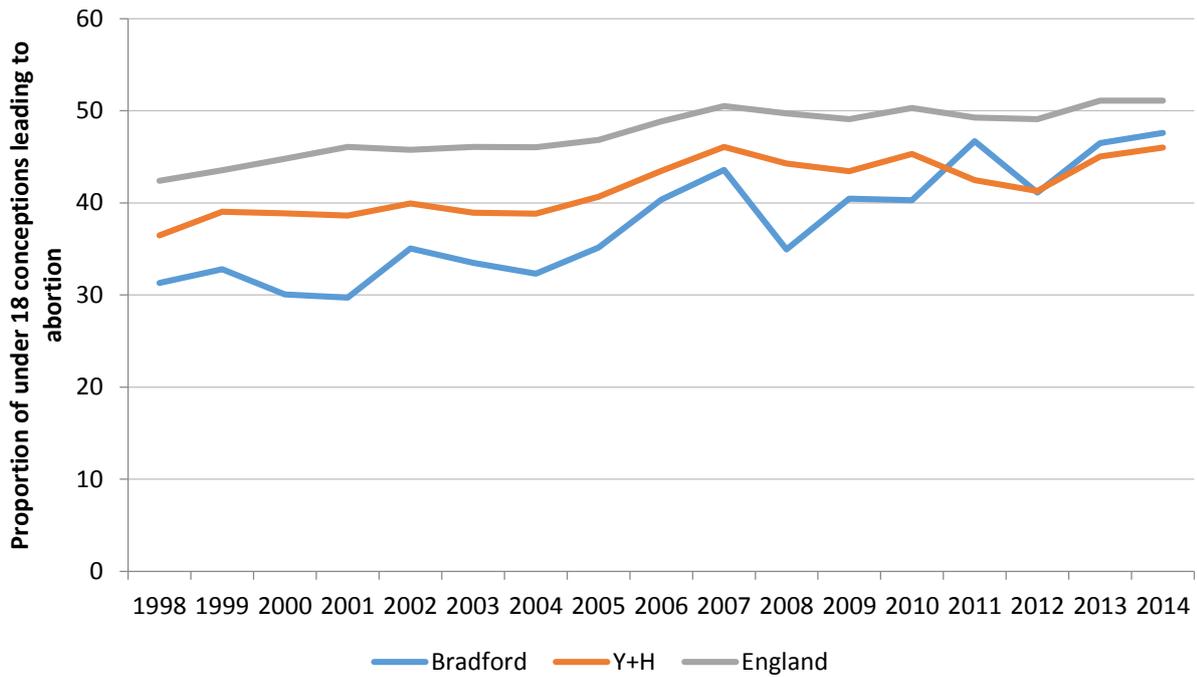
**4.15.3 Under 18s termination of pregnancy and births**

Data above has been presented on conceptions; following conception, two options open for women are to carry the baby to term birth or to seek a termination of pregnancy. More women in Bradford and nationally opt for the latter, and in 2014 there were 290 under 18 year old conceptions, with 87 under 18 year old births and 138 under 18 year old abortions.<sup>5</sup>

The rate of under 18 conceptions leading to termination of pregnancy is seen at figure x. Bradford has had a historically lower rate than national or regional trends, which may indicate access to sexual health services and advice/information on pregnancy options amongst younger people in the District has been less than optimal; however this rate has increased faster than regional and national rates, and is now at 47.6%, higher than Yorkshire and Humber at 46% and slightly lower than England at 51.1%.

<sup>5</sup> Remaining conceptions are accounted for by mothers who reach 18 between conception and giving birth.

**Fig. 6: Under 18 conceptions leading to abortion**



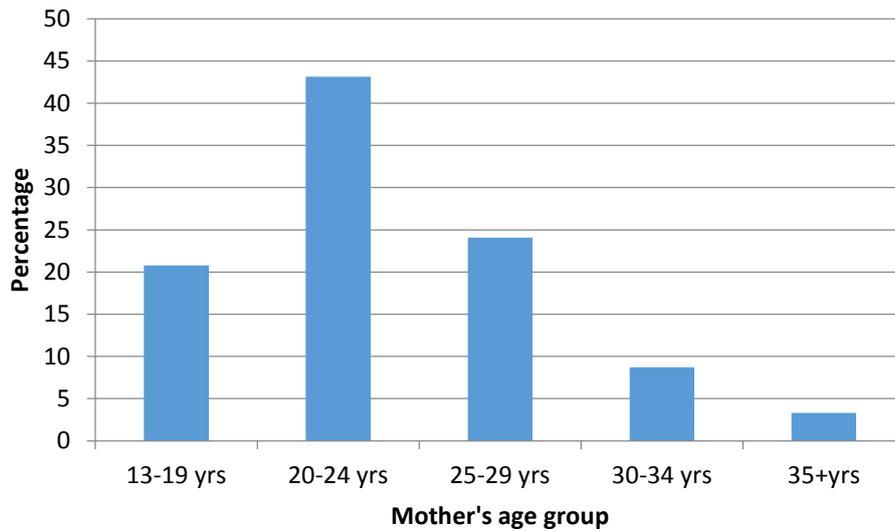
The rate of live births to mothers under 18 in Bradford in 2014 was 8.2 per 1000 15-17 year old women in the District; this rate has reduced markedly from 17.9 per 1000 in 2009 and is higher than the national rate of 6.7 per 1000 and lower than the regional rate of 8.9 per 1000.

#### 4.15.4 Average age at time of pregnancy

A breakdown of age at time of pregnancy is not routinely reported in national data sets. However in Bradford the Born In Bradford Cohort study, consisting of around 12,000 mothers and families, has published data from its baseline recruitment period (2006-2009), which shows the breakdown of birth by age bands; this dataset obviously has limitations as it is not a full sample of the population, and is several years out of date.

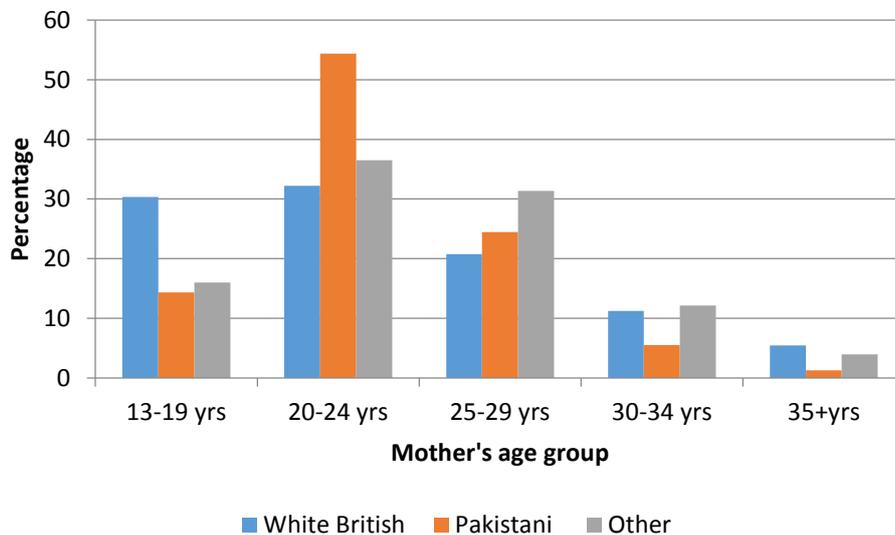
As figure 7 shows, the most common age range at birth of first child in the study was 20-24; the second was 25-29. Nationally, the average age of first time mothers was 28.5 years in 2014, compared with 28.3 years in 2013. The average age of all fathers increased to 33.1 years in 2014, compared with 32.9 years in 2013. For mothers the average age was 30.2 years compared with 30.0 in 2013. (ONS 2014) This means first time mothers in Bradford are significantly younger than national comparisons.

**Fig. 7: Mother's age at birth of first child, BiB cohort study**



An ethnic breakdown of these groups is shown at figure 8, which separates out the white British population from Pakistani mothers and those from neither category. As can be seen, teenage pregnancy is more common in White British mothers, but of those mothers who do not give birth under the age of 20, Pakistani mothers tend to give birth at a younger age (20-24).

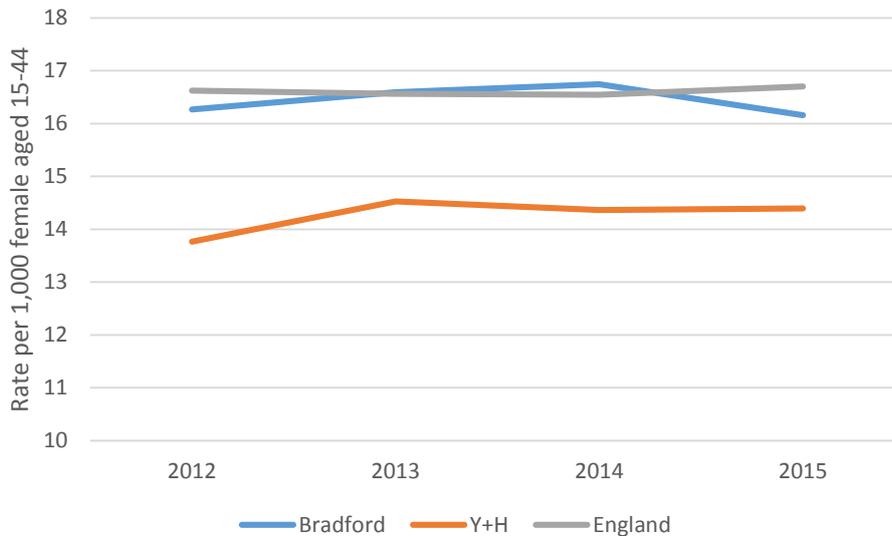
**Fig. 8: Mother's age at birth of first child by ethnic group, BiB cohort study**



#### 4.15.5 Termination of pregnancy (all ages)

There were 1717 terminations of pregnancy in Bradford in 2015. Figure 9 shows the rate per 1000 women over the last four years; Bradford has a higher rate of abortions than regional comparators, but a rate similar to the England one; this has remained stable over recent years.

**Fig. 9: Termination of pregnancy rate per 1000 females aged 15-44, Bradford, Y+H, England**



Within the under 25s group, who are mostly likely to terminate a pregnancy, 29.4% of terminations involved a women who has had a previous abortion in any year in 2015 (a ‘repeat abortion’); this higher than regional (24.9%) and national (26.5%) rates, but this difference in not statistically significant; rates have historically been similar to comparators. In 2015 there were 299 abortions following a previous birth in under 25s in Bradford; this means 39% of women aged under 25 years having an abortion have previously had a birth. This rate is significantly above regional (33.6%) and national (28.2%) rates. Taken together, these statistics may suggest contraception services in Bradford should seek to increase awareness of post-partum and post termination contraception need.

Data on under 18s repeat conceptions leading to abortion is unavailable at local authority level due to the small number of cases involved and the risk of identification if published. However CCG data for two of Bradford’s CCGs shows that in 2014, 13.7% of under 19s abortions in Airedale, Wharfedale and Craven CCG and 11.4% of under 19s abortions in Bradford Districts CCG were ‘repeat’.

McDaid et al (2015) note that

nearly one in four teenagers presenting for an abortion have already been in contact with health services for a previous birth or abortion. Greater policy emphasis must be placed on...developing more effective “secondary prevention” interventions to help the first-time pregnant and parenting teenagers manage their future reproductive lives and prevent further unplanned pregnancies.

The stage within pregnancy at which termination takes place is an important aspect of reproductive health; with fewer medical complications the earlier the abortion is conducted. In 2015 80.21% of abortions in Bradford were performed with the baby at less than 10 weeks gestation, with year on year increases since 2011. Nationally, the proportion is virtually identical (80.3%), and the Bradford proportion is higher than regional (78.7%). The Framework for Sexual Health Improvement in England (2013) states that women who request an abortion should have early access to services if legally

entitled to an abortion under the Abortion Act 1967, and thus data on the percentage of terminations under 10 weeks may indicate whether local contraception and sexual health services are providing timely signposting and information services.

Termination of pregnancy can be conducted either through medical or surgical means, with the latter usually occurring at an earlier stage of pregnancy and being less invasive than a surgical procedure, carrying less risk as it does not involve instrumentation or use of anaesthetics. Medical abortions are also cheaper than surgical interventions, but surgery may be chosen by women for a number of other reasons. In 2015, a significantly higher proportion of women in Bradford (79.1%) chose a medical procedure under 10 weeks gestation than nationally (62.7%) or regionally (71.2%). A similar proportion of women in Bradford chose the medical route after 10 weeks gestation (17.7% vs. 19.2% nationally).

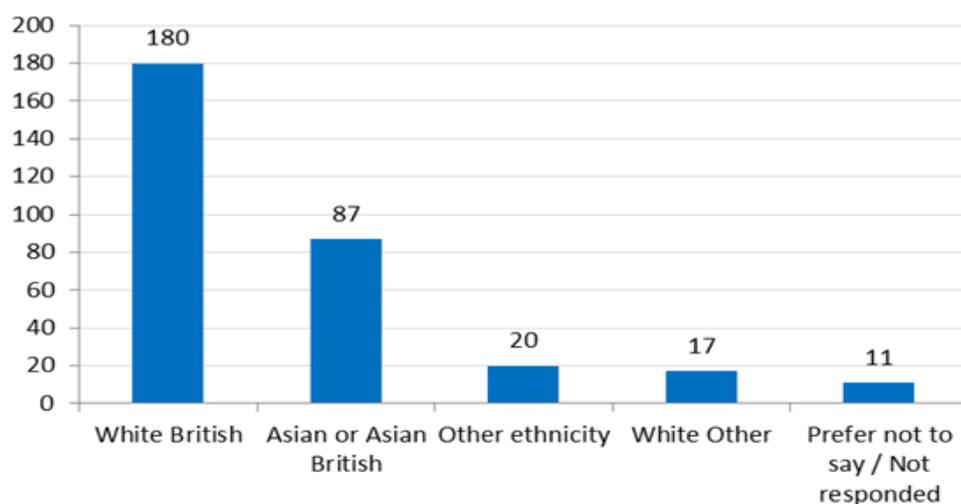
#### 4.16 'Felt needs': the views of Bradford residents

##### 4.16.1 Consultation: sexual health between 15 and 24 years old

A consultation was designed to obtain the views of young people, in particular targeted at those aged 14 to 25 years old in relation to their sexual and reproductive health; this was carried out via an online questionnaire. There was a good response rate of 347 who completed the questionnaire. After omissions, the overall response rate was 315, due to some of the young people being outside of the age range. There was almost an equal split between gender of 149 females and 152 males, and the main age of the young people were between 16-19 years old.

##### Ethnicity

**Fig 1: Young people were asked options best describes your race, ethnic or cultural origin**



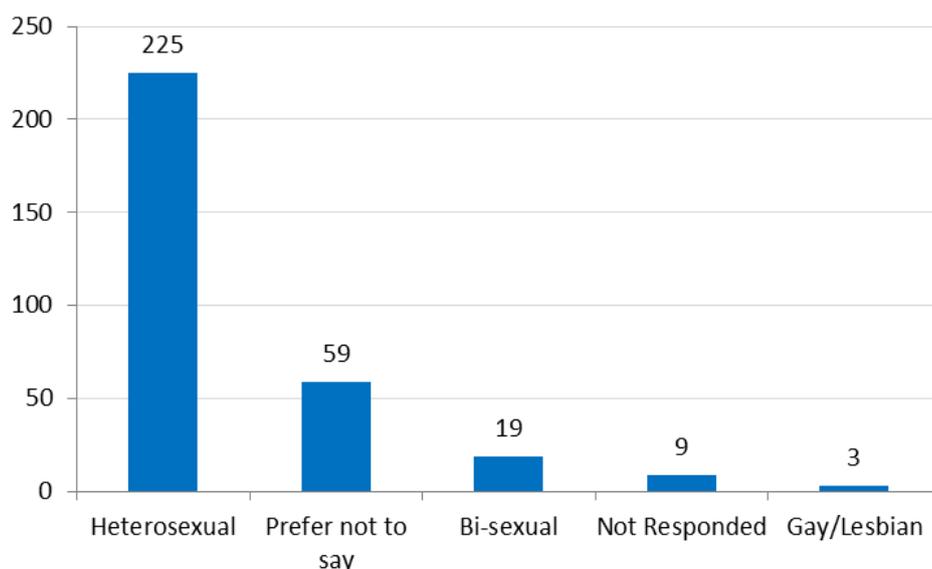
57% (n=180) young people said they were White British, 28% (n=87) said they were Asian or Asian British, 6% (n=20) young people said Other and 5% (n=17), said White Other.

## Postcode area

The majority of the young people who completed the consultation were from Keighley Central (106 responses), Bingley Rural, Keighley Central, Keighley West, Worth Valley (72 responses) and Craven (23 responses).

## Sexual orientation

**Fig 2: Young people and sexual orientation**



71% (n= 225) of young people said they were Heterosexual, 19% (n=59) said they prefer not to say and a small percentage said they were Gay/ Lesbian.

## Relationships and Sex Education

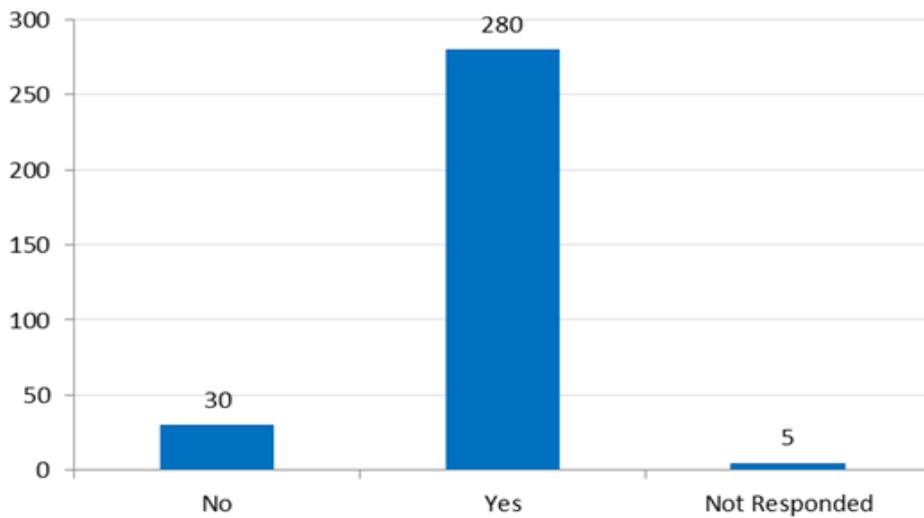
Young people were asked if they had received Relationships and Sex Education (RSE) at school. 80% of respondents said yes and 20% said no. 70% of young people said they felt they received enough information around sexually transmitted infections (STIs), 29% said no, and a small percentage of young people did not respond.

## Contraception

The young people were asked whose responsibility is it to use contraception when having sex .87% (n=274) young people responded with both people are responsible in using contraception before having sex, 8% (n=24) said male and 5% (n=16) said female..

Young people were asked if they were diagnosed with an STI it would make them more likely to use a condom the next time they had sexual intercourse.

**Fig 3 Diagnosis of an STI and condom use**



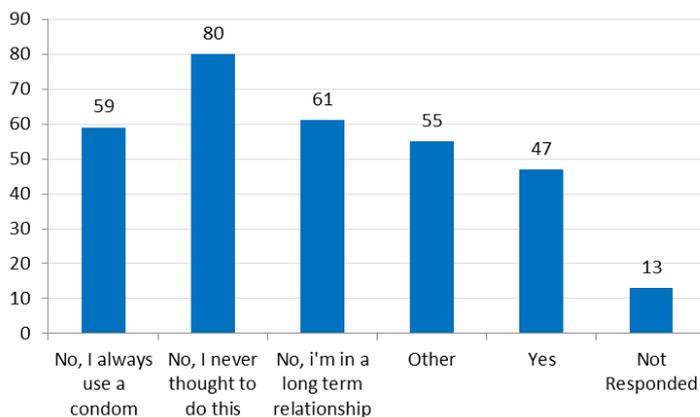
89% of young people said Yes and 9.5% said No, it would not make them more likely to use a condom.

Respondents were asked if they knew where to get Emergency Hormonal Contraception (EHC) and free condoms from. 58% (n=182) of young people said Yes, and 41% (n=128) said No.

#### Sexually Transmitted Infections

Young people were asked if they would have an STI test after every new partner.

**Fig 4 STI test after every new partner**

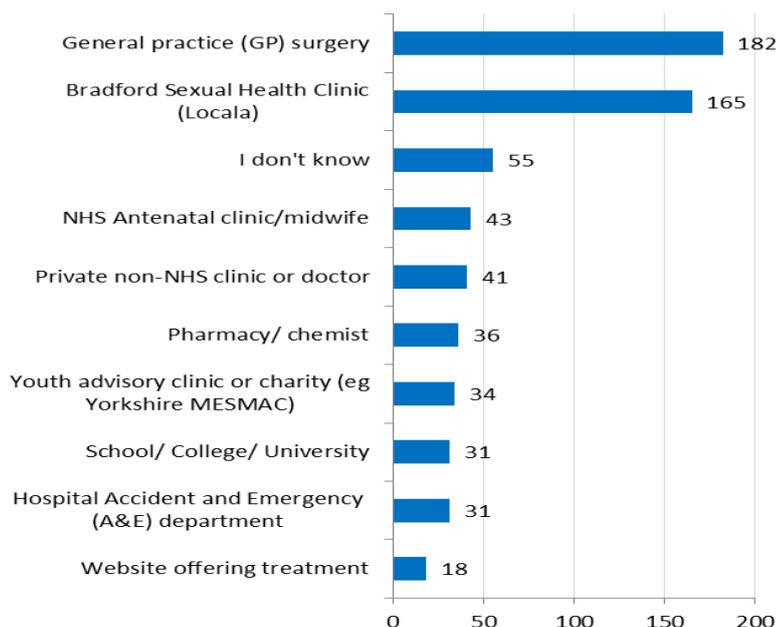


25% (n=80) of young people said No, I never thought to do this, 19% (n= 61) of young people said No, I'm in a long term relationship, 19% (n=59) said No, I always use a condom and 15%( n=47) said Yes

#### Sexual Health Services

315 young people were asked 'if you needed an STI where would they go?'

**Fig 5: STI test and services**



The majority of young people said they would go to their General Practice (GP) surgery and Bradford Sexual Health Clinic (Locala).

Young people were asked if they were aware of the Bradford sexual health and contraception clinics run by Locala. 36% (n=112) of young people said Yes, and 62% (n=194) said No. A small percentage of young people did not respond. 12% (n=39) of young people said they had accessed the service, 24% (n=76) said No, and 63% (n=200) young people did not respond. 43% (n=136) of young people said they know what the service provides and 54% (n= 172) said No. When asked if they felt confident in being able to access a sexual health clinic, 57% (n= 180) said Yes and 39% (n=122) said No. The young people were asked 'Would you prefer a young person's specific drop in?' 52% (n=163) said Yes and 45% (n=142) said No.

### **Sexual health information**

Young people were asked if they had used any of the following websites or social media accounts to access sexual health advice or information. 34% (n=108) of young people said 'Other' which were Connections, GP, NHS Choices, NHS website, school and youth service. 22% (n=69) of young people said they had accessed the Bradford and Airedale Sexual Health (BASH website).

### **Females**

Females were asked if they knew what to do if they wanted a termination. 60% (n=89) of females said Yes and 36% (n=54) said No. They were also asked if they had received enough information around Emergency Hormonal Contraception. 56% (n=83) of females said Yes and 43% (n= 64) said No. 79%

(n=118) of females had an HPV jab to protect against cervical cancer and 18% (n= 27) of females said No to not having one. Some of the reasons the females gave were; they felt they did not need it, or did not want it, or they were not given the opportunity to get one.

## Summary

The majority of young people have received RSE and information around STIs. However the results do not show how comprehensive the RSE was that they received. The majority of the young people believe it is the responsibility of both people to use contraception before having sex, and if they were diagnosed with an STI it would make them more likely to use a condom. Only 58% of young people knew where to get free EHC and condoms from.

The young people said they would go to their GP or the Bradford Sexual Health and Contraception Clinic (Locala) for an STI test. Only 36% of young people said they had heard of the Bradford Sexual Health Clinic or Locala. However, 58% of young people said they would be confident in accessing the service.

34% of young people said they would use Connections, GP or NHS websites for sexual health information and 22% said they would access BASH website.

60% of females said they would know what to do if they wanted a termination and 56% of females said they had received enough information around EHC. 79% of females said they had the HPV jab and the reason for females not having the HPV jab were they did not want it/ or need it or they were not given the opportunity.

### 4.16.2 Focus group: Over 50s sexual health

A focus group was held with the Older People's Partnership, who are part of the Bradford District Partnership, CBMDC, who provide service user feedback. . The participants were asked five questions about sexual health and their knowledge around sexual health services. The participants were asked to write down on a flipchart 'what does sexual health mean to you?' Thy key themes that came out were that there is no upper age limit, there needs to be different information for different ages/ outlooks on sexual health/ prevention, relationship abuse, recognition of LGBT relationships. Also, not understanding the outcome of sex without protection and what does sexual health mean to people with dementia and for carer's

The information they would like from a sexual health service for older people is; more awareness about what might be fine could carry a problem e.g. STIs, abusive relationships, and information for people who are visually impaired, disabilities (physical learning) and up to date information made available.

More information is needed as to what older people need in terms of their sexual health. As the Older Partnership said there is no upper age limit to relationships and sex.

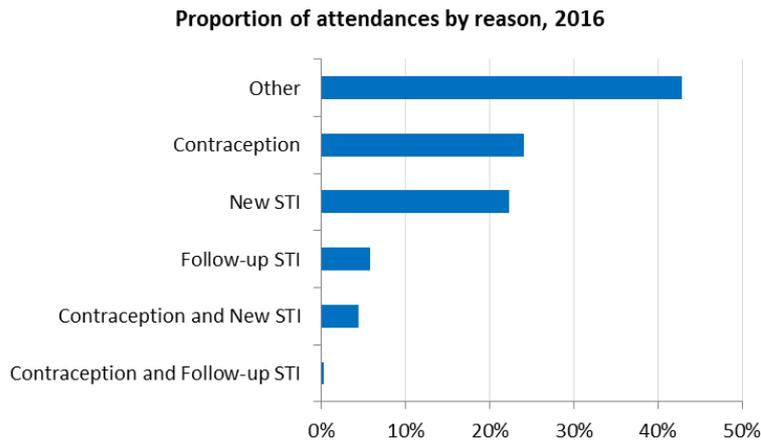
## 5 Demand: Who is (and who is not) using our services?

### 5.1 Bradford's Integrated SH service: Service usage

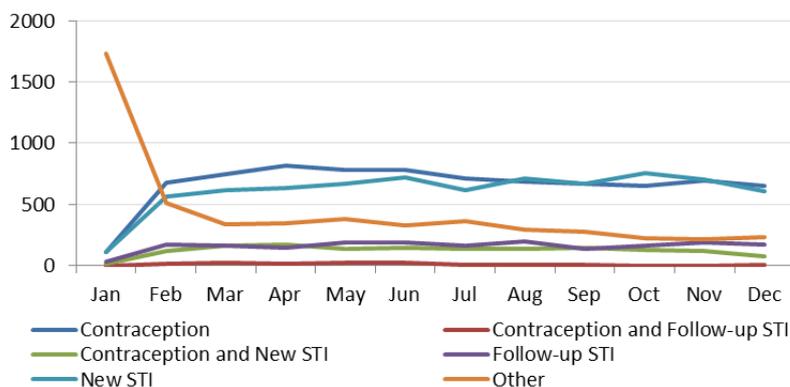
The below results gives an indication as to who attends the clinics at Locala Community Partnerships CIC.

The following chart shows the proportion of attendances by the reason they attended, the greatest proportion was down as 'Other' with the second 'contraception.'

**Fig 1: Reason of attendances to the Locala service**



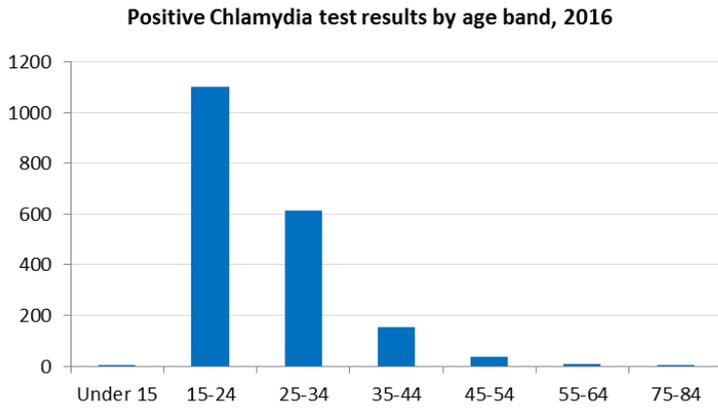
**Fig 2: Reason of attendances to the Locala service**



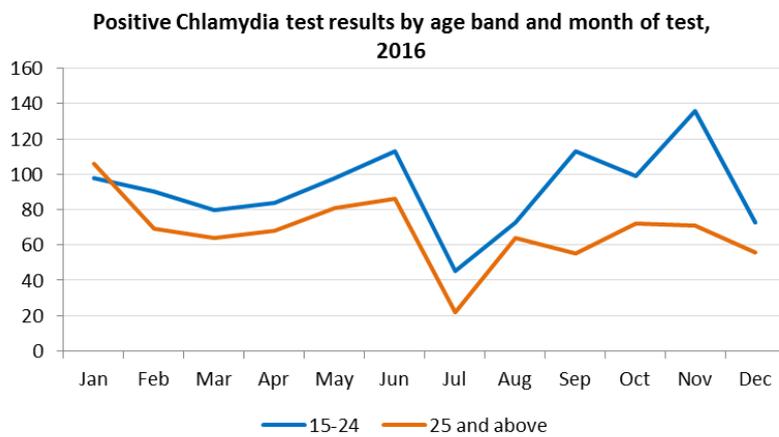
The number of attendances recorded as other reduced considerably in February, this may be due to better recording of the attendance. From February onwards the greatest number of attendances was due to contraception and contraception and a new STI, and this is highlighted in the chart above..

The following charts show the breakdown of positive STI tests by age and ethnicity, it is important to note that this is just the number who tested positive; it does not show the proportion of those who tested positive, as we would need to know the total number who were tested. It also does not give the total number of those with an STI, as there may be some who have not been tested.

**Fig 3: A bar chart to show positive Chlamydia test results by age band**

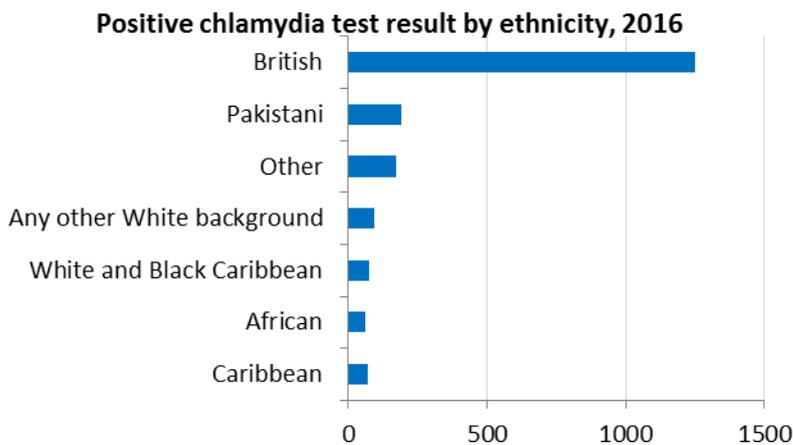


**Fig 4: Positive Chlamydia test results by age band and month of test.**



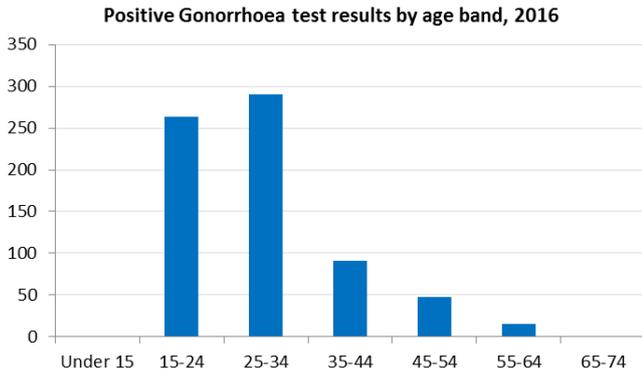
The graph suggests that in June there was an increase in positive test results for both groups aged 15-24 year olds and 25 years and above. In September, it increased again for the 15-24 year olds and November saw the biggest rise in positive Chlamydia test results.

**Fig 5: Chlamydia test results by ethnicity**



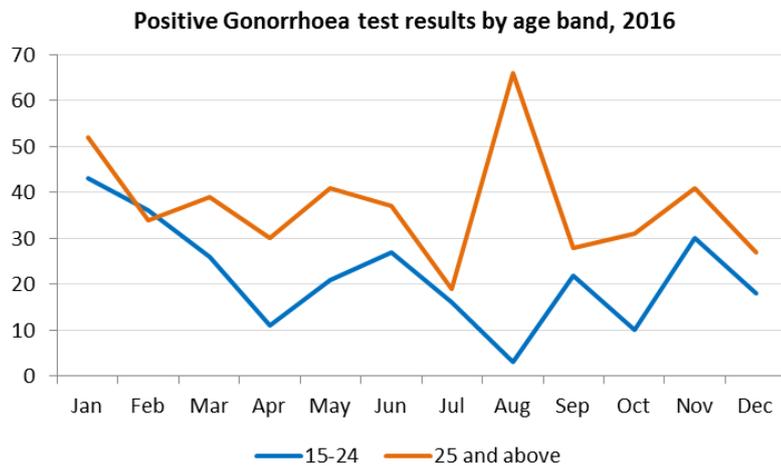
The bar chart shows that White British were the largest ethnicity who tested positive for Chlamydia, the second were British Pakistani and a close third was Other.

**Fig 6: Positive Gonorrhoea test results by age band**



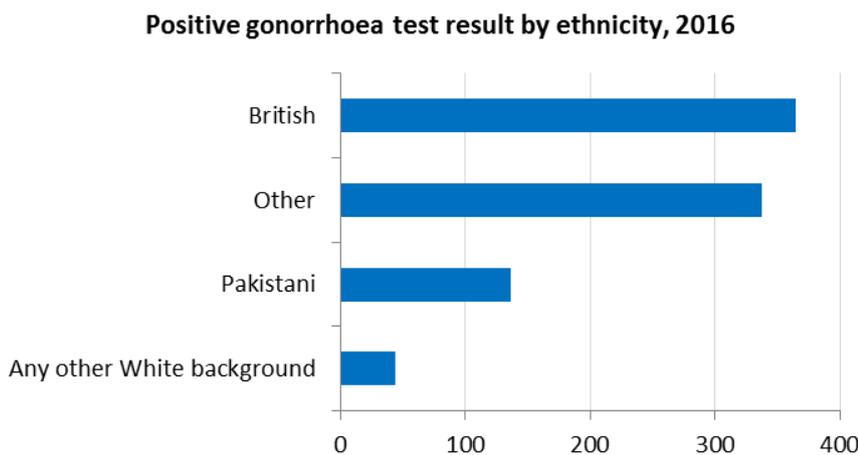
The bar chart suggests that patients aged 25-34 years old have a higher rate of Gonorrhoea and 15-24 year olds are just slightly behind this age group.

**Fig 7: Positive Gonorrhoea test results by age band**



The graph shows that service users aged 25 and above had higher rates of Gonorrhoea compared to young people aged 15-24 years old. There were more positive test results in January for both age groups. In August 2016 results for positive Gonorrhoea test results were particularly high the service users aged 25 and over.

**Fig 8: A Positive Gonorrhoea results by ethnicity 2016**



The majority of White British had tested positive for Gonorrhoea followed closely by Other.

### Summary

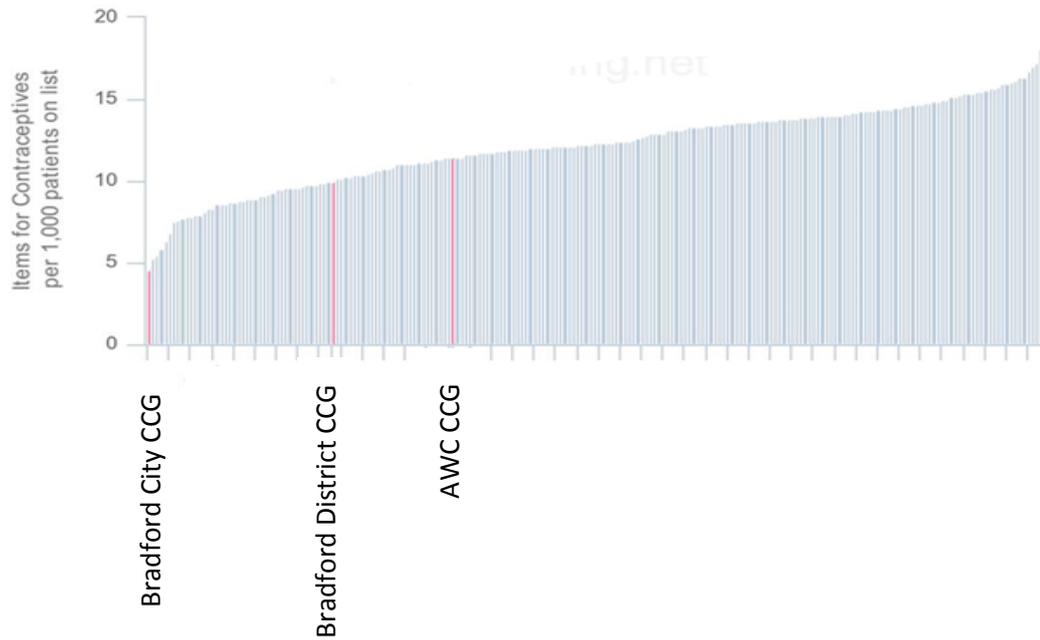
The majority of attendees to Locala were 'other' and contraception. The number of attendances at Locala were due to contraception and contraception and a new STI. The months of June, September and November were the most popular times for young people testing positive for Chlamydia. One of the reasons could be the summer and Christmas holidays for secondary schools, further education colleges and universities. The majority of patients who had positive Chlamydia test results were White British followed by Pakistani and for those who had a positive Gonorrhoea test result were White British and White Other for Gonorrhoea.

### 5.3 Contraception

Reducing the burden of unplanned pregnancy (whether this leads to maternity, miscarriage or abortion) requires a sustained public health response. This should be based around the following: marketing; easy access to high quality information for informed decision making; easy access to the full range of contraception (particularly the most effective long-acting reversible contraception (LARC), the implant, intrauterine systems (IUS) and intrauterine device (IUD) for pregnancy prevention; and accessible pregnancy testing with rapid referral into abortion services for unwanted pregnancy. These services should be delivered alongside promotion of safer sexual and health-care seeking behaviour. Every effort should be made to eliminate local barriers to pregnancy diagnosis and where requested, abortion referral, STI testing and contraception provision (which should be made available free and confidentially at easily accessible services). Alongside the effective clinical response, promoting safer sexual behaviour among individuals –including use of the most effective contraceptives, condom use and regular testing remains crucial.

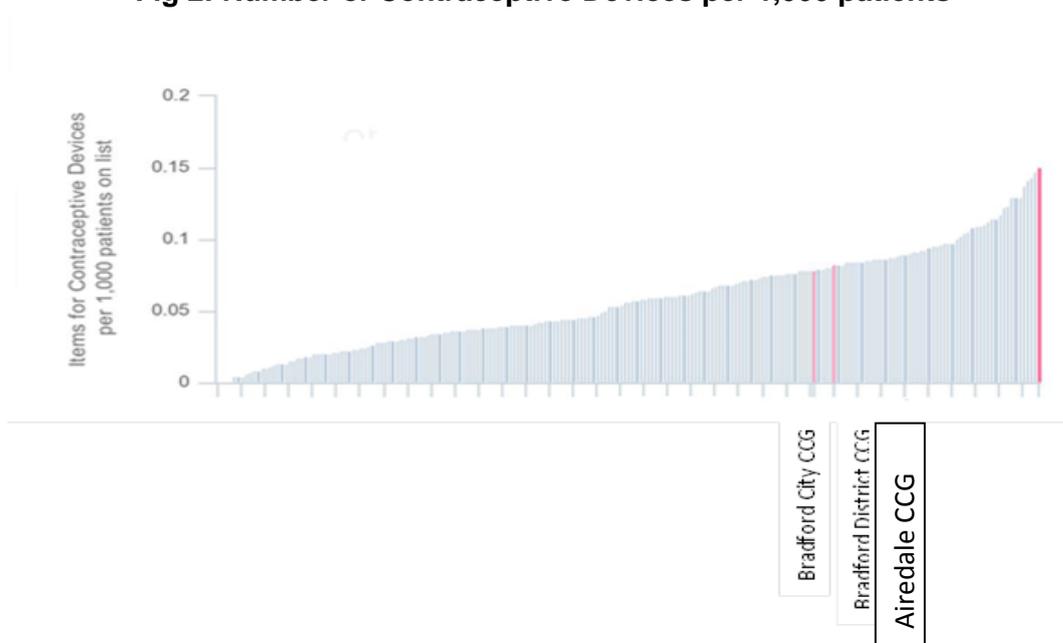
(Bradford Local Authority HIV, sexual and reproductive health epidemiology report LASER( 2015)

**Fig 1: Number of Contraceptives per 1,000 patients**



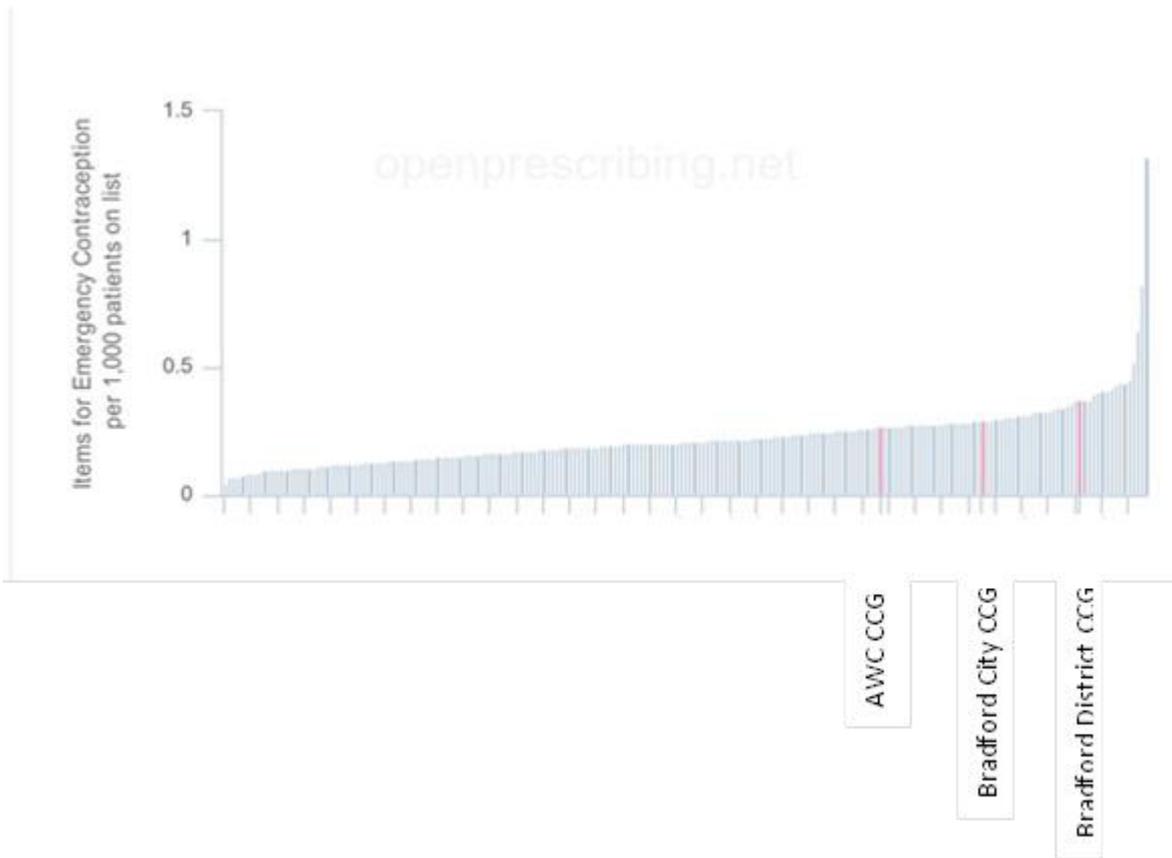
The graph suggests that NHS Bradford City CCG is the lowest in England compared to other CCG's or items for contraceptives per 1,000 patients.

**Fig 2: Number of Contraceptive Devices per 1,000 patients**



NHS Airedale, Wharfedale and Craven CCG prescribe the most items for contraceptive devices per 1,000 with NHS Bradford District CCG and NHS Bradford City CCG following closely behind.

**Fig 3: Number of Emergency Contraceptives per 1,000 patients**



NHS Bradford District City CCG are one of the highest CCG's prescribing items for emergency contraception per 1,000 patients with NHS Bradford City CCG and NHS Airedale, Wharfedale and Craven CCG following behind.

#### 4.13 Bradford's Integrated Sexual Health Service: Contraception

The following graphs show the percentage of contraception fitted by the service.

**Fig 1: The percentage of contraception by IUD, IUS and implants fitted by the service, if medically appropriate, in women who are aged under 18 years old.**

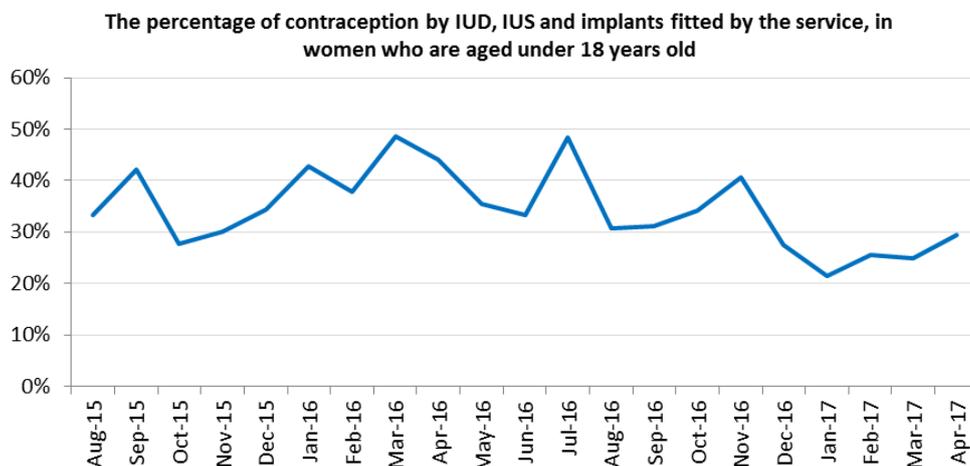


Fig 1 shows that there was a peak in March 2016 and July 2016 of contraception by IUD, IUS and implants fitted by the service in women who were aged under 18 years old. In January 2017, over 20% of contraception by IUD, IUS and implants were fitted which then increased in February 2017.

**Fig 2: The percentage of contraception by IUD, IUS and implants fitted in women who are aged 18 years old and over**

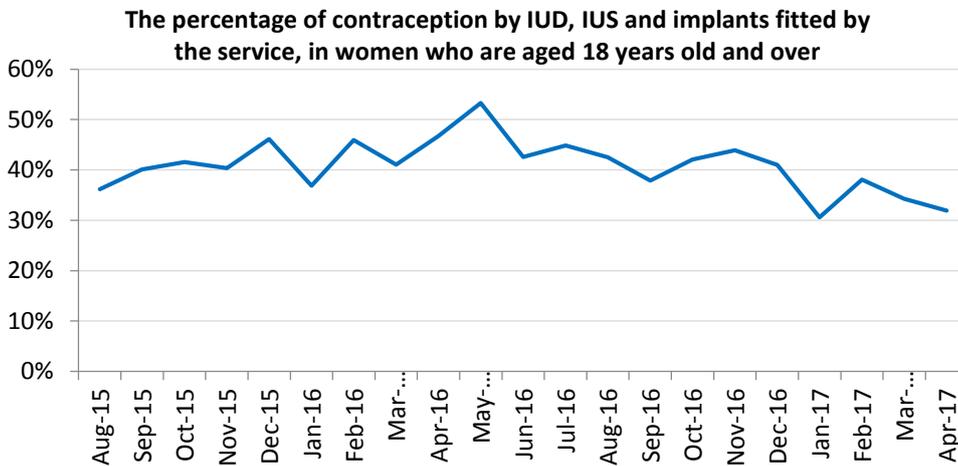
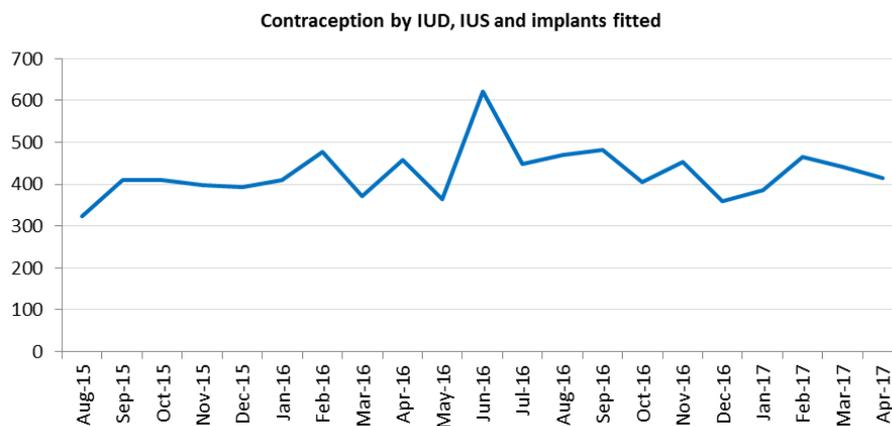


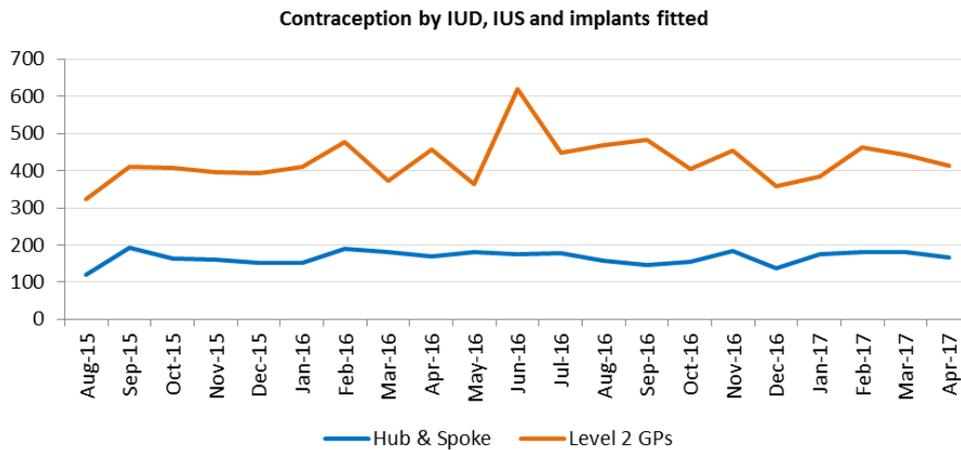
Fig 2 show there was a peak (53%) in contraception by IUD, IUS and implants fitted by the service, in women who were aged 18 years old and over. There was a decrease in contraception fitted in January 2017 (30%).

**Fig 3: Contraception by IUD, IUS and implants fitted by Locala**



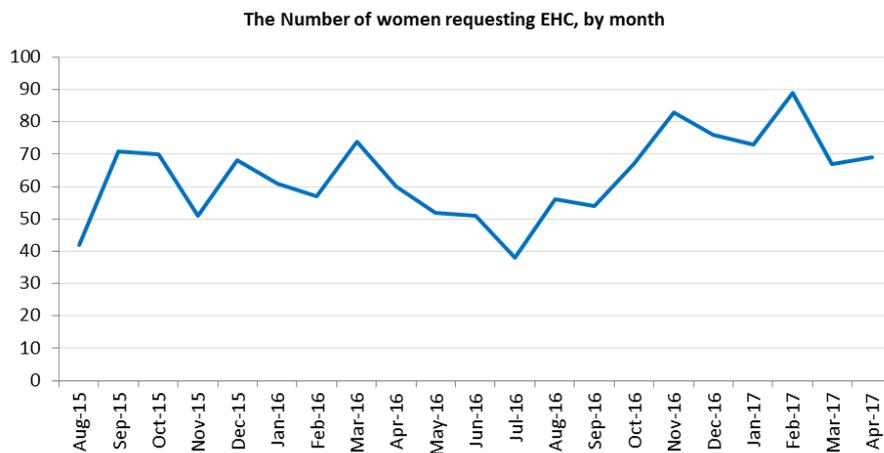
The graph above shows the contraception by IUD, IUS and implants fitted by Locala were consistent throughout the year with a rise in June 2016.

**Fig 4: Contraception by IUD, IUS and implants fitted by Locala and Level 2 GPs.**



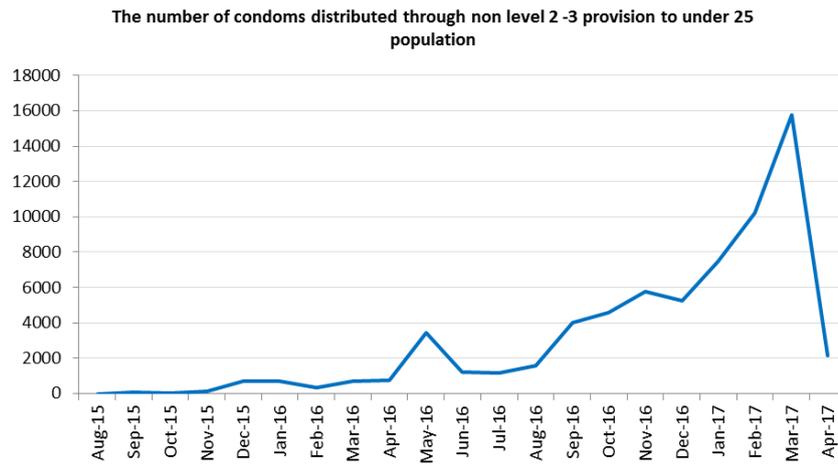
The two graphs show the contraception by IUD, IUS and implants fitted by Locala hub and spoke and Level 2 GPs. The level 2 GPs are sub contracted by the Locala contract and in June 2016 fitted over 600 IUD, IUS and implants. Locala hub and spoke fitted on average around 200 per month.

**Fig: 5 Women requesting EHC per month.**



There was an increase in women requesting EHC from November 2016- February 2017. This could be due to more women knowing about the service.

**Fig 5: Condoms distributed through non level 2 -3 provision to under 25 population**



From September 2016 there was an increase in the number of condoms distributed through non level 2-3 provision to the under 25 population with a peak in March 2017.

## References

- A review of research among black African communities affected by HIV in the UK and Europe  
Addiction. 2012 Jan; 107(1):51-9. doi: 10.1111/j.1360-0443.2011.03621.x.
- Aghaizu 2014 <http://sti.bmj.com/content/90/7/524.info>
- Alcohol consumption and the intention to engage in unprotected sex: systematic review and meta-analysis of experimental studies.
- Audrey Prost PSSRU/MRC n2006
- BASH guidance Gonorrhoea <https://www.bashh.org/documents/3920.pdf>
- Catherine Griffiths, Audrey Prost, Graham Hart; Sexual and reproductive health of South Asians in the UK: an overview. J Fam Plann Reprod Health Care 2008; 34(4): 251–260
- CHIMAT 2015 – teenage conception rates  
<http://atlas.chimat.org.uk/IAS/profiles/profile?profileId=40&geoTypeId=#iasProfileSection8>  
doi: 10.3201/eid2201.151331
- Emerg Infect Dis. 2016 Jan; 22(1): 88–91.
- Forbes KM1, Rahman N, McCrae S, Reeves I.
- Furegato 2016 <https://www.ncbi.nlm.nih.gov/pubmed/27511704>
- Hamish Mohammed, corresponding author Holly Mitchell, Bersabeh Sile, Stephen Duffell, Anthony Nardone, and Gwenda Hughes
- Howell-Jones R1, de Silva N, Akpan M, Oakeshott P, Carder C, Coupland L, Sillis M, Mallinson H, Ellis V, Frodsham D, Robinson TI, Gill ON, Beddows S, Soldan K.  
<http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/rel/regional-trends/area-based-analysis/conceptions-deprivation-analysis-toolkit/conceptions-deprivation-measures--2009-11.html>
- <https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-fact-sheet>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3944136/>
- Hughes et al 2015) <http://discovery.ucl.ac.uk/1450002/3/fmb%252E14%252E110-1.pdf>  
in England and Wales <http://dx.doi.org/10.1016/j.jadohealth.2015.06.008>
- Increase in Sexually Transmitted Infections among Men Who Have Sex with Men, England, 2014  
Int J STD AIDS. 2008 Oct;19(10):713-4. doi: 10.1258/ijsa.2008.008055.
- Integrated community-based sexual health services for young people in urban areas: are we meeting the needs of the local community?
- International Journal of STD & AIDS
- ONS 2014 Teenage conception rates highest in the most deprived areas
- PHE Health promotion for sexual and reproductive health and HIV: strategic action plan, 2016 to 2019)
- PMCID: PMC4696713

Prevalence of human papillomavirus (HPV) infections in sexually active adolescents and young women in England, prior to widespread HPV immunisation.

Previous Pregnancies Among Young Women Having an Abortion

Price MJ, Ades AE, De Angelis D et al. Risk of pelvic inflammatory disease following Chlamydia trachomatis infection: analysis of prospective studies with a multistate model. *Am. J. Epidemiol.* 178(3), 484–492 (2013).

Rehm J1, Shield KD, Joharchi N, Shuper PA.

S Tariq, S G Edwards, A Nalabanda, H Ward, E Allen, K Fenton, D Mercey, G Sethi. Vol 18, Issue 8, 2007

Sexual Health Needs Assessments (SHNA) A 'How To Guide'

Sexual health services for South Asians in London, UK: a case–control study

Stuff on HPV vaccine in 2016:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/579583/VU\\_256\\_Dec2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579583/VU_256_Dec2016.pdf)

The Educational Consequences of Teen Childbearing

Vaccine. 2012 Jun 6;30(26):3867-75. doi: 10.1016/j.vaccine.2012.04.006. Epub 2012 Apr 16.