

# **2011 New London Chlamydia, Gonorrhea & Births to Teenage Mothers A Surveillance Report**

**Prepared by Ledge Light Health District  
Epidemiology Program**

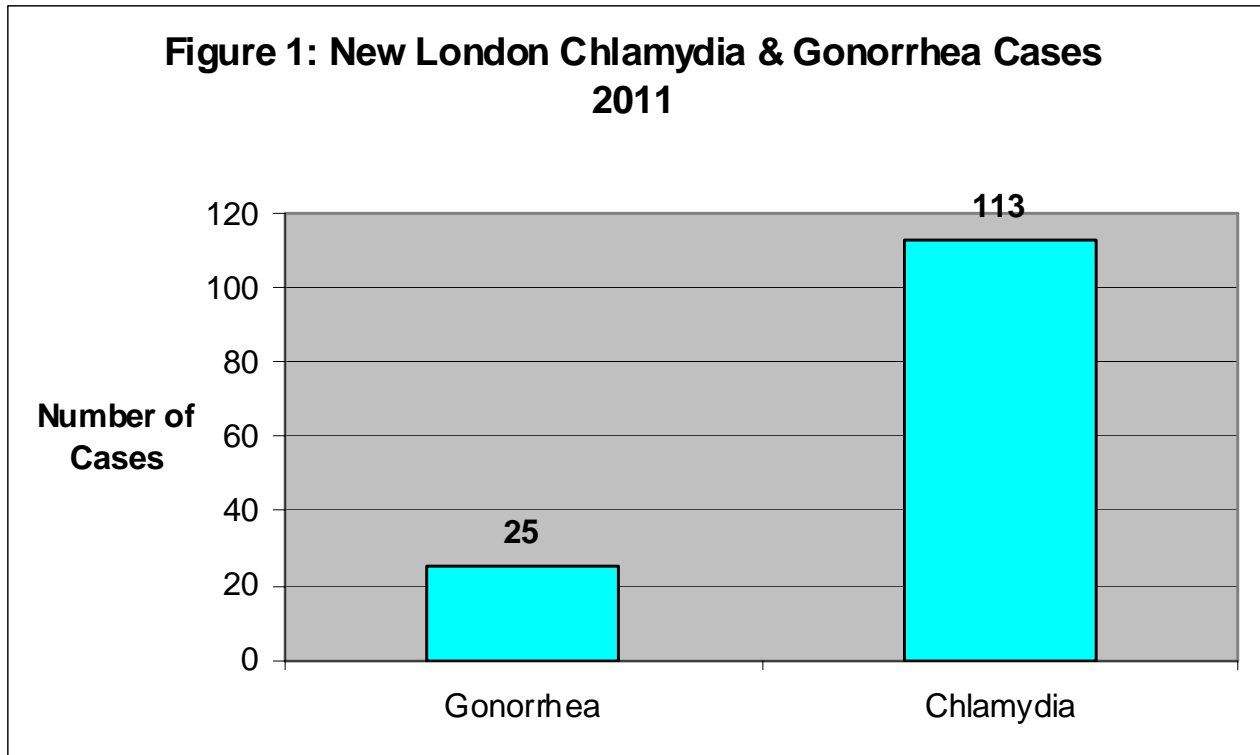
**Special thanks to Chris Seery for his contributions to this report**

**A note regarding the data:** The following analysis is intended as a brief update to LLHD's January 2010 STD surveillance report. The raw data used in the following analysis was provided by the State of Connecticut Department of Public Health. Reports of chlamydia and gonorrhea without race or ethnicity identified were not included in analyses by race/ethnicity, but were included in analyses by age, gender, and total infections. Population denominators used in rate calculations were acquired from the Decennial Census American FactFinder. For 2000 – 2005 rates, 2000 population numbers were used. For 2006 – 2011 rates, 2010 population numbers were used.



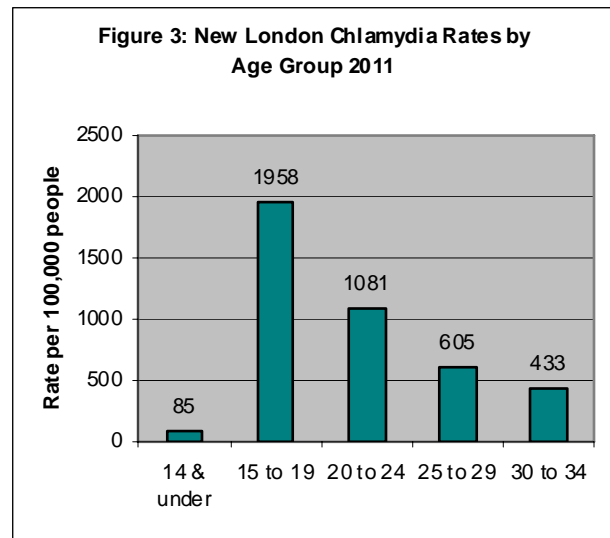
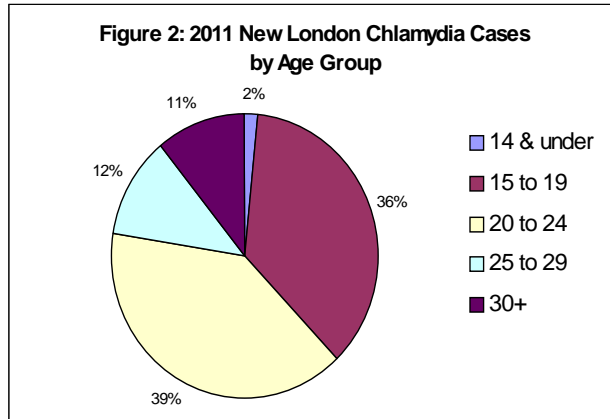
**Introduction:**

Sexually transmitted diseases pose serious health concerns and problems for communities across the United States, especially urban centers. In New London, surveillance for the two most commonly reported STDs, gonorrhea and chlamydia, is conducted to help inform interventions aimed at lowering disease burden and frequency. Chlamydia and gonorrhea pose significant short- and long-term health risks. A disproportionate burden and frequency of STDs are experienced by women, racial minorities, adolescents and young adults. The following data serve to highlight the most at-risk groups, among whom interventions should be targeted.

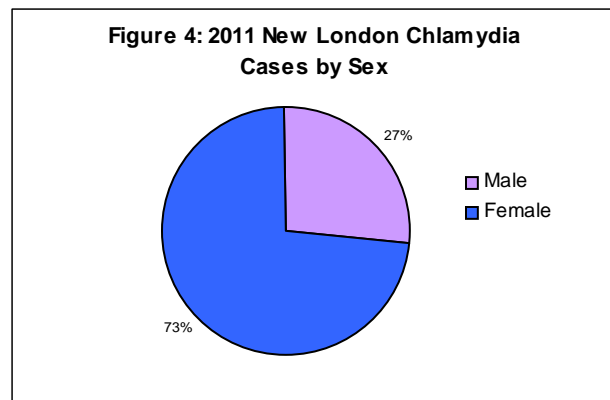


## Chlamydia: Age and Sex

The surveillance of chlamydia, both at the state and federal levels, indicate that there are noticeable disparities when it comes to age and sex. 87% of New London chlamydia cases in 2011 were among the 15-29 year age group, (figure 2). The distribution of chlamydia in New London in 2011 follow national trends. Data from 2010 showed that 87% of chlamydia cases were from the 15-29 year age group at the national level as well. The rates by age group for both sexes combined are presented in figure 3. The highest rates are among the 15-19 year age group, followed by the 20-24, and 25-29 year age groups.

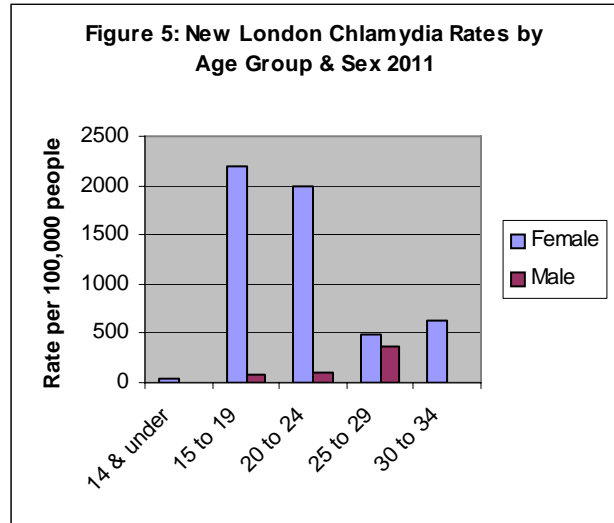


New London women overall report much higher numbers of cases of chlamydia than men, making up 73% of all reported cases (figure 4). Nationally and at the state level, women also make up the largest percentage of cases.



There is significant disparity in the frequency of chlamydia by age and sex. For example, the rate of chlamydia in the 15-19 year age group was 29 times higher

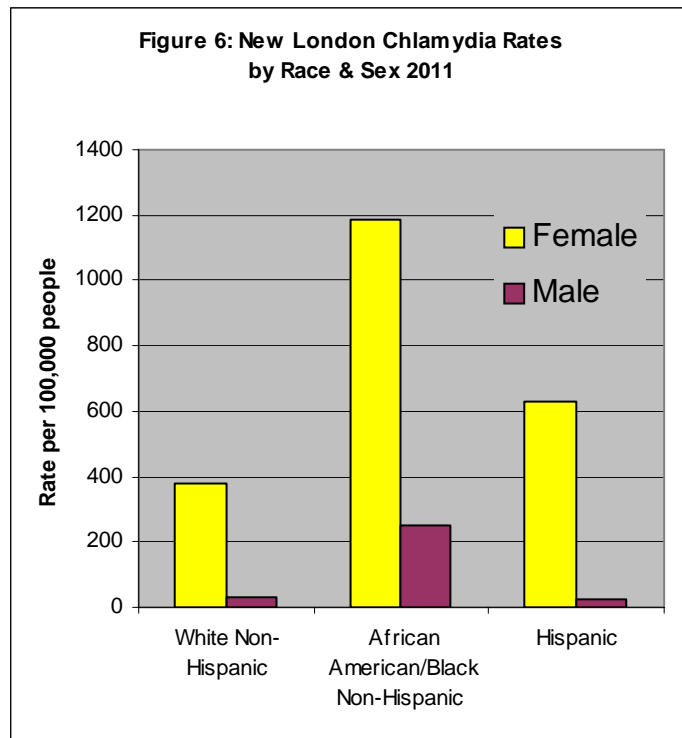
among females than males (figure 5). Rates among males increase steadily while rates among females decrease from the 15-19 year age group to the 25-29 year age group, with rates among males approaching the female rate in the 25-29 year age group. It is important to remember these rates reflect reported, diagnosed cases. Because males may be asymptomatic longer than females and because regular reproductive health screenings are more common for post-pubescent females



than males, the actual cases of male infection may be higher - and the gender disparity smaller - than reflected here.

### Chlamydia: Race and Sex

Similar to other STDs, chlamydia shows alarming disparities across different races in New London as well as at the state and national levels. In New London, Blacks tend to have the highest rates of chlamydia, followed by Hispanics and then Whites. In 2011, no cases were reported among people identifying their race as Asian, Native American, Pacific Islander, or multiracial. Figure 6 breaks down the rates for Whites, Blacks and Hispanics by sex. Once again,

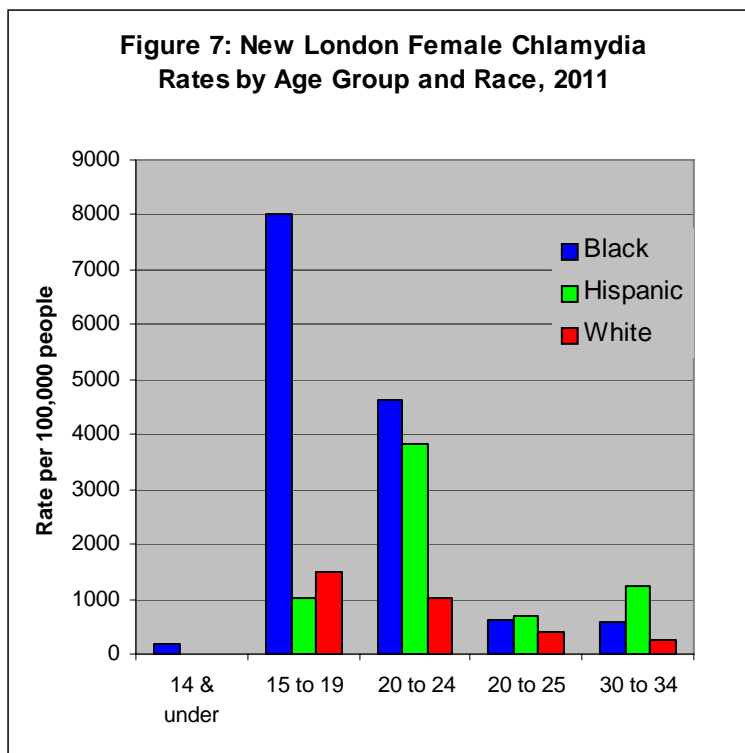


note the higher rates for women when compared to men as well as the much higher rates for Blacks compared to Whites and Hispanics.

## Chlamydia: Females

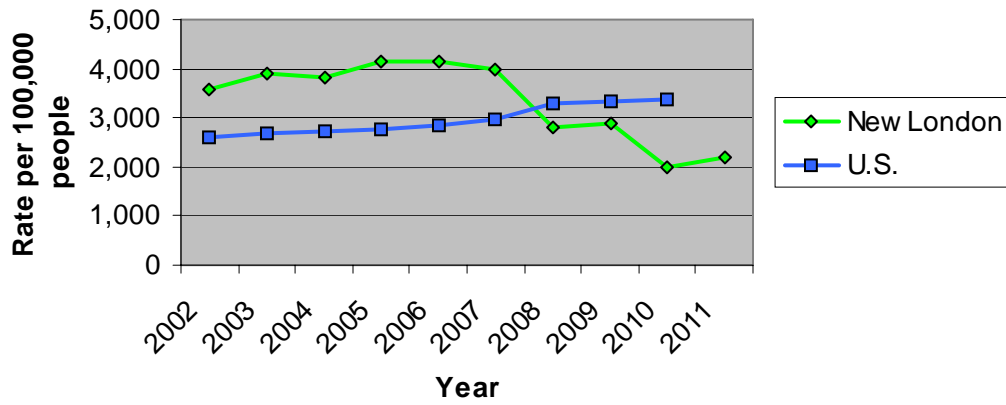
Because adolescent girls and young women represent the overwhelming majority of cases of chlamydia, a more specific break down of rates among this group is warranted.

Race-specific rates among females generally follow the same age-pattern seen when all races are combined, with rates peaking in the 15-19 year age group and declining with increasing age. The exception to this is among Hispanic females, who see rates peak in the 20-24 year age group, and then again among 30-34 year olds, though that peak is notably smaller than the rate among 20-24 year olds.

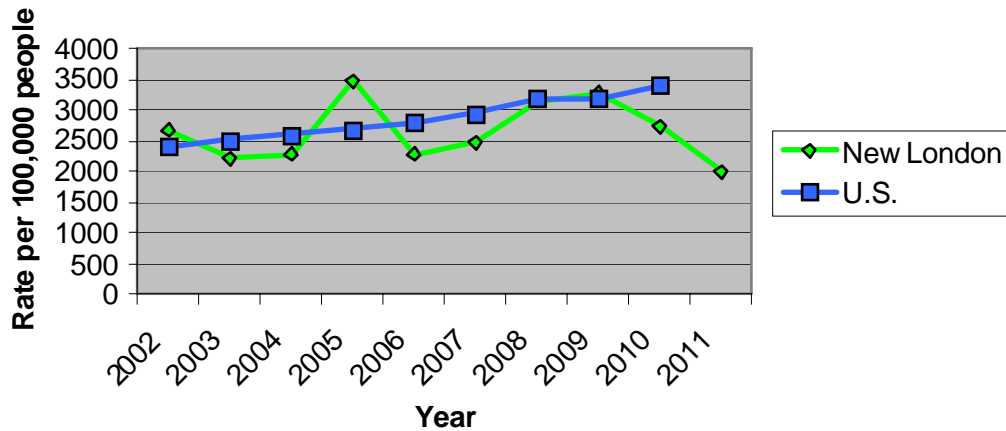


Over the last decade there has been a steady rise in chlamydia cases for women across the country; recent data suggest that the situation in New London may be diverging from this national trend with declining rates across all age groups studied. The graphs below show the trends for women in the 15-19, 20-24 and 25-29 year age groups, those identified as being most at risk for chlamydia infection. The graphs compare New London rates to national ones. Though rates for New London are available through 2011, the CDC has not yet reported rates for that year.

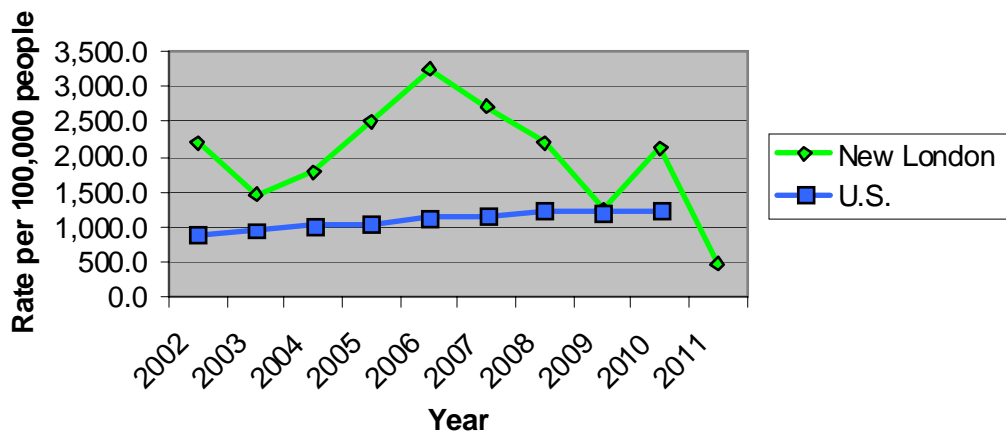
**Figure 8: New London 15-19 year old Female Chlamydia Rates, 2002-2011**



**Figure 9: New London 20-24 year old Female Chlamydia Rates, 2002-2011**



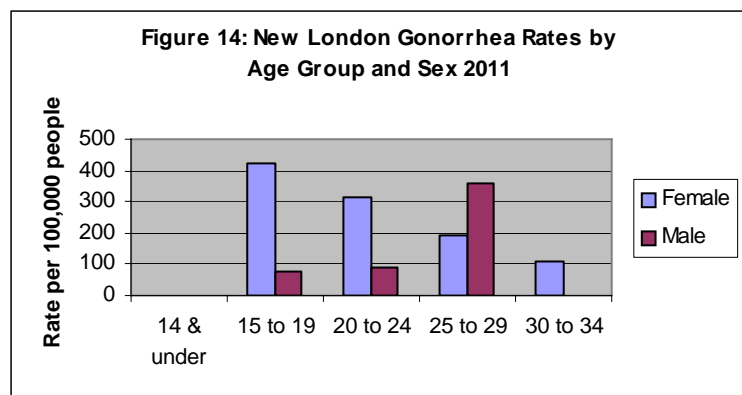
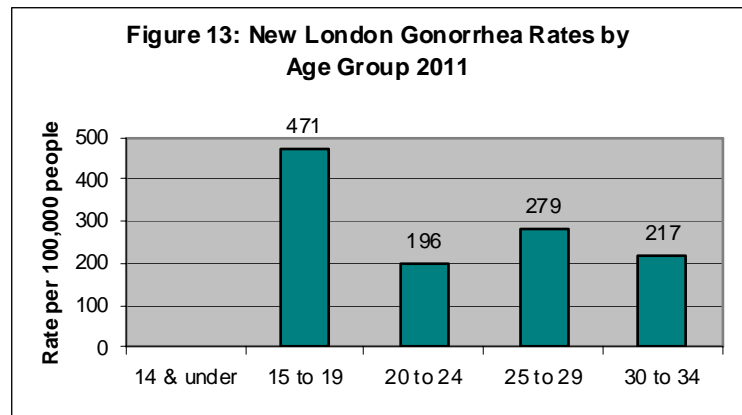
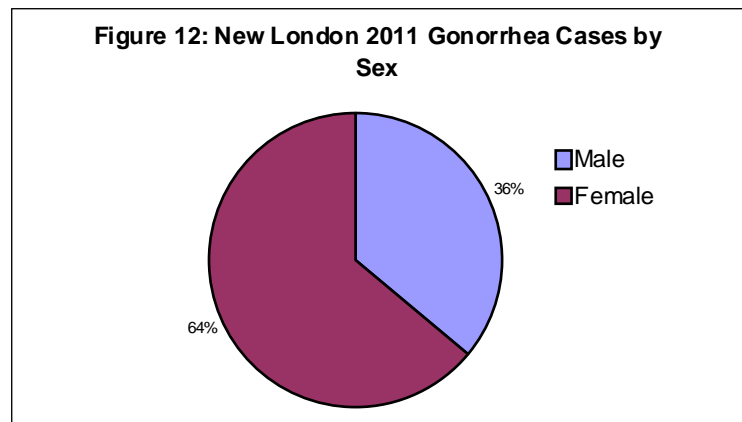
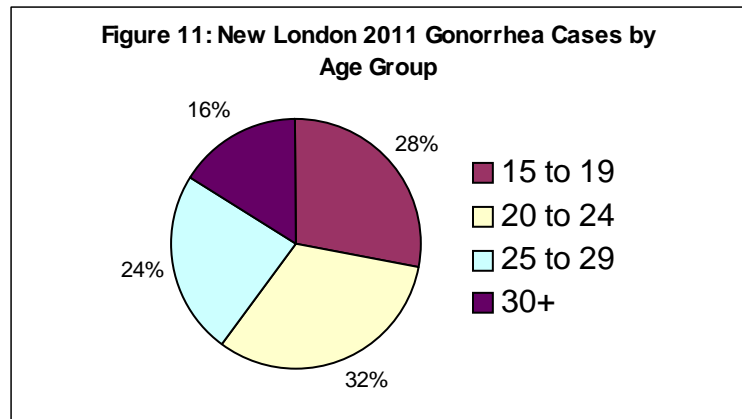
**Figure 10: New London 25-29 year old Female Chlamydia Rates, 2002-2011**



## Gonorrhoea: Age and Sex

Although there are fewer cases of gonorrhoea compared to chlamydia, the epidemiology of the disease is similar. Of additional concern is that gonorrhoea infections are becoming increasingly difficult to treat, with anti-microbial strains of the infection emerging across the world. As with chlamydia, the majority of cases are among women, Blacks, and 15-29 year olds. 84% of cases were in the 15-29 age groups (there were no cases in 2011 for individuals 14 & under) and 64% of cases in 2011 were among women.

In general, the highest rates of gonorrhoea are among 15-19 year old females, with steadily declining rates among females with increasing age. Among males, the trend appears reversed, with steadily increasing rates as age increases, a trend that may be influenced by increasing healthcare-seeking behavior as men age. Rates among 25-29 year old males are the second highest across

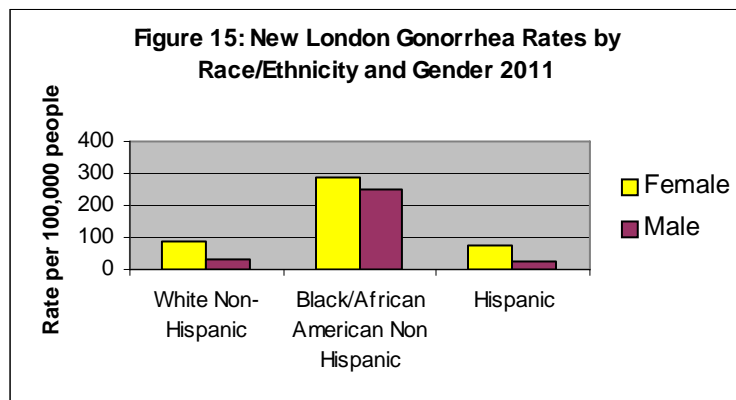


all age and gender groups. The absence of any cases among males 30-34 may be a statistical artifact reflecting the small number of cases of gonorrhea overall in any given year (25 total cases in New London in 2011). Similar to the profile of chlamydia, it is important to remember these rates reflect reported, diagnosed cases. As with chlamydia, because males may be asymptomatic longer than females and because regular reproductive health screenings are more common for post-pubescent females than males, the actual cases of male infection may be higher - and the gender disparity smaller - than reflected here.

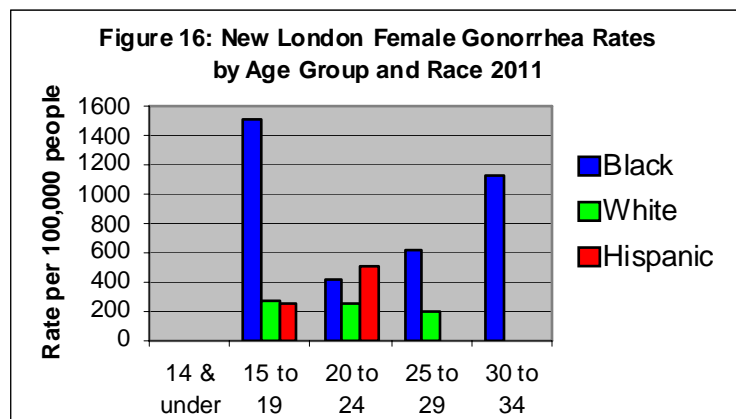
### **Gonorrhea: Race/Ethnicity, Age, and Sex**

Similar to chlamydia, the rates of gonorrhea are higher among Blacks than Whites or Hispanics. This difference is seen in both males and females.

Among both males and females, Blacks had much higher rates than their White and Hispanic peers (figure 15). Among Whites and Hispanics, females had much higher rates than males, though among Blacks, males and females had similar rates of gonorrhea.



Blacks consistently had the highest rates of gonorrhea among females in each age group, except among the 20-24 year age group, where Hispanic women had the highest rate (figure 16). Among Black females, there is a nearly three-



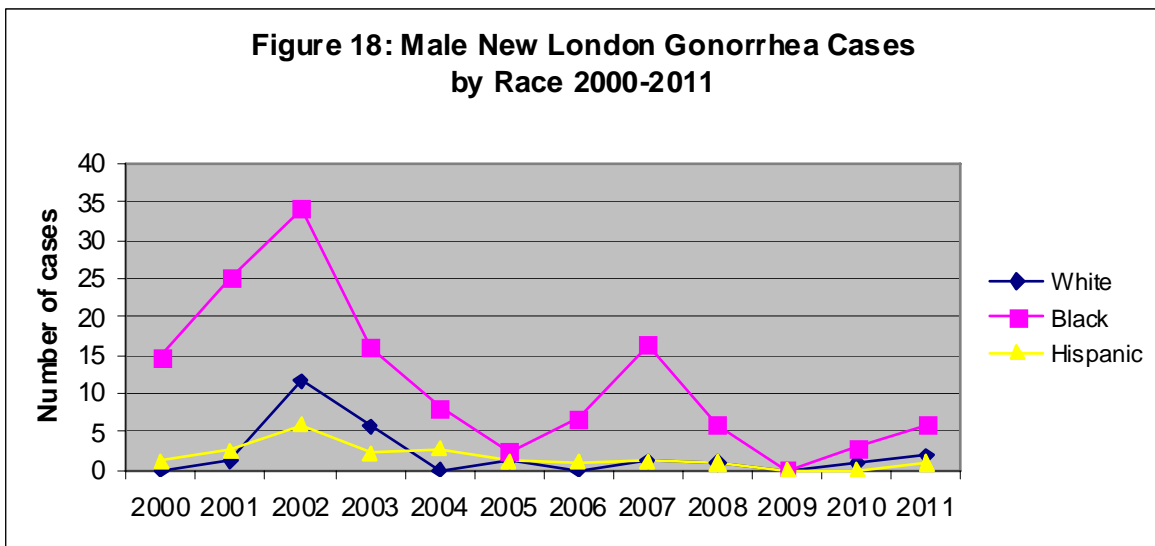
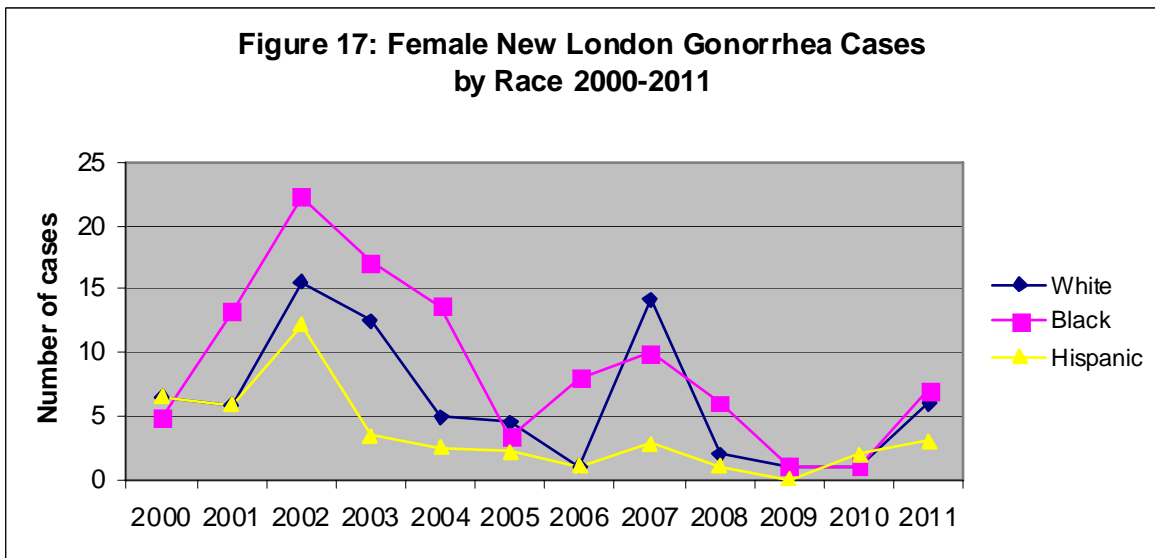
fold decrease in the rate of gonorrhea between the 15-19 and 20-24 year age group,



followed by a steady increase. This may reflect the sudden absence of health insurance that occurs for children of low-income families after they turn 18 and no longer qualify for state child health insurance, followed by a steady rise in coverage with age. There were no cases in the 35-39 year age group for any race/ethnicity, which suggests that people older than 34 are not at high risk for gonorrhea infection no matter the race or sex.

## Gonorrhea Trends 2000-2011

Gonorrhea trends during 2000-2011 followed similar patterns as chlamydia, and the trends were similar across all races and both sexes. Gonorrhea cases peaked in 2002, then declined through 2005, only to rise again in 2007. Since 2009 when cases appeared to bottom out, there has been a slight increase in gonorrhea cases.



## Teen Births

Teen pregnancy and subsequent births to teenage mothers have a tremendous social and economic impact on teens, their families, and the wider community. Pregnant teens are less likely than older females to receive timely prenatal care and more likely to experience complications of labor and delivery. Children born to teens are more likely to be born prematurely or at low birth weight, increasing the risk of infant death, blindness, chronic respiratory problems, mental retardation, cerebral palsy, dyslexia, and hyperactivity (Child Trends Databank). In New London, there has been only 1 birth to a teen under age 15 between 2007 and 2009, therefore the following analysis focuses exclusively on births to 15-19 year olds.

Table 1. Number of Births by Race/Ethnicity and Age Group: 15-19 Year-Old New London Females, 1998-2009

Year	15-17 Year-Olds						18-19 Year-Olds						Total Teen Births
	White, non-Hispanic	Black, non-Hispanic	Other, non-Hispanic	Hispanic	Unknown	Total 15-17	White, non-Hispanic	Black, non-Hispanic	Other, non-Hispanic	Hispanic	Unknown	Total 18-19	
1998	2	8	0	11	0	21	8	12	0	12	0	32	53
1999	6	6	2	6	0	20	22	9	1	9	1	42	62
2000	4	0	0	8	2	14	11	6	1	9	2	29	43
2001	8	2	0	9	0	19	11	8	2	8	1	30	49
2002	8	4	0	6	1	19	10	12	2	9	0	33	52
2003	2	7	3	12	0	24	10	9	3	16	0	38	62
2004	3	1	2	16	0	22	8	5	4	14	1	32	54
2005	1	3	1	10	0	15	7	5	1	23	0	36	51
2006	3	7	0	10	0	20	11	5	0	15	0	31	51
2007	1	1	0	7	0	9	5	8	1	21	0	35	44
2008	4	0	0	6	0	10	11	8	2	15	1	37	47
2009	0	3	1	7	0	11	8	3	4	8	0	23	35
Total	42	42	9	108	3	204	122	90	21	159	6	398	603

Over the 12 years from 1998-2009 there have been between 35 and 62 births annually to teenage mothers in New London. Of those, about two-thirds have been among 18-19 year olds (table 1), which is consistent with national trends.

Figure 19: Distribution of Births by Race/Ethnicity: 15-19 Year-Old New London Females, 2004-2006

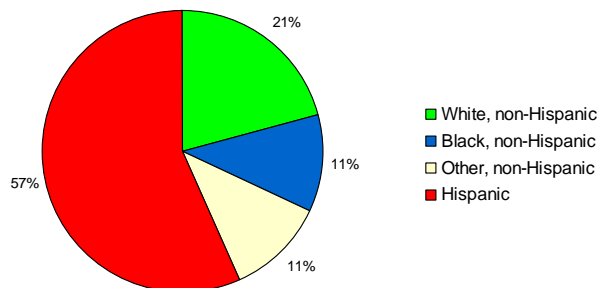
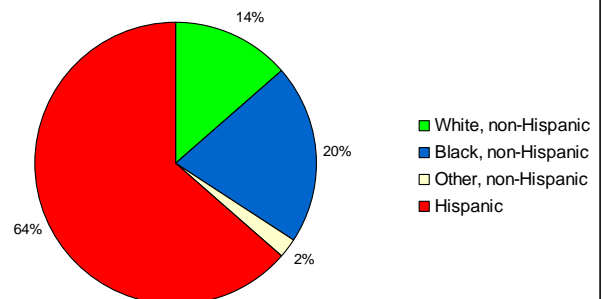
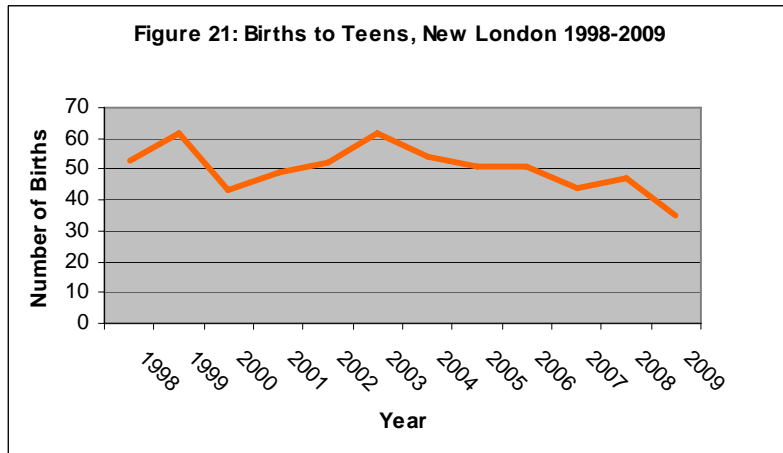


Figure 20: Distribution of Births by Race/Ethnicity: 15-19 Year-Old New London Females, 2007-2009



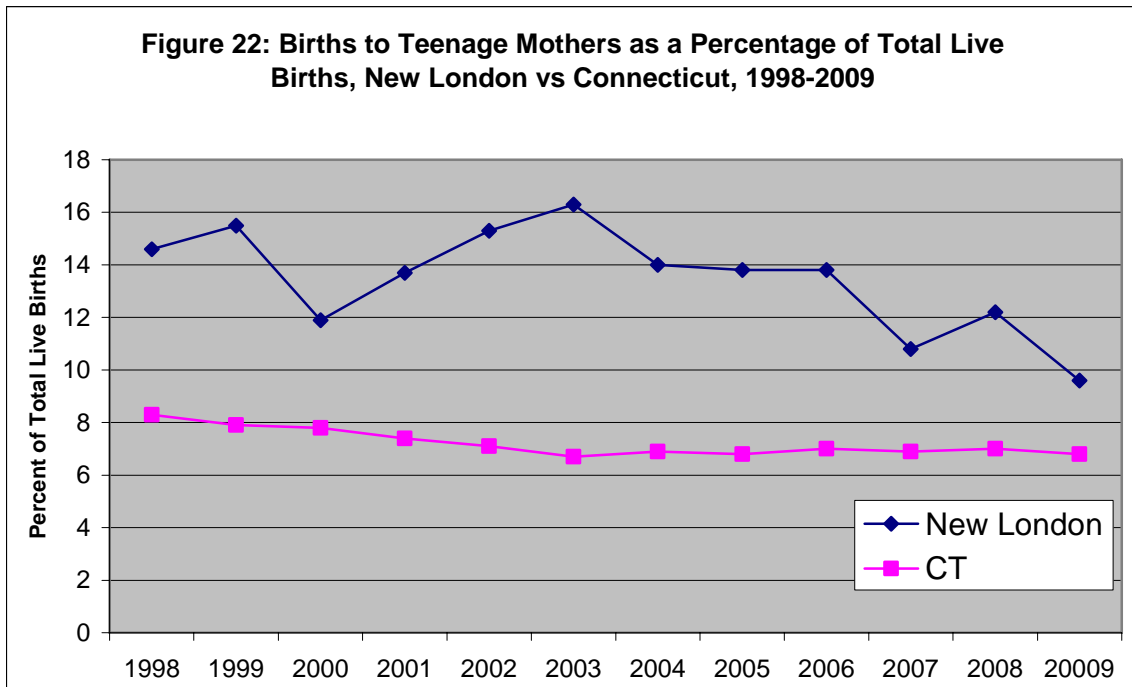
Between 2004-2006 and 2007-2009 the distribution of births to 15-19 year olds has changed. Births among

Whites and Others make up smaller proportions, while the proportion contributed by Hispanics and Blacks have grown considerably (figure 19 and 20). Despite this change, the overall



number of births to teens

has declined steadily from a peak in 2003, with 2009 recording the lowest totals among teens in New London since 2000 (figure 21).



Teenage births as a percentage of all births has also steadily declined, with the gap between New London and Connecticut having narrowed considerably from its widest in 2003. Still, the percentage of births to teenage mothers remains nearly 3 percentage points higher in New London than Connecticut (figure 22).

## **Conclusions**

The burden and frequency of STDs and births to teenage mothers in New London have declined since the early 2000s. Despite these improvements, important disparities by race/ethnicity and gender persist. The rates at which minority females in particular experience STDs and births to teenagers remain unacceptably high. The long term reproductive consequences of STDs and the social and economic burden of births to teenage mothers are considerable, therefore prevention of these outcomes should remain a priority. Efforts to further reduce STD transmission and births to teenage mothers should focus on encouraging young people to delay sexual activity and/or to use condoms to prevent pregnancy and transmission of disease during sex. Testing for STDs among young sexually active individuals should also be promoted to help detect asymptomatic cases.

## **Sources**

Sexually Transmitted Disease and Teen Births in New London, CT. Ledge Light Health District. January 2010.

Decennial US Census American FactFinder

<http://www.cdc.gov/std/stats10/tables/10.htm>.

New London CT 2011 Chlamydia. Report Source from both Public and Private. 2011.

New London CT 2011 Gonorrhea. Report Source from both Public and Private. 2011.

## **List of Figures and Tables**

Figure 1: New London Chlamydia and Gonorrhea Cases 2011.

Figure 2: 2011 New London Chlamydia Cases by Age Group.

Figure 3: 2011 New London Chlamydia Cases by Age Group 2011.

Figure 4: New London Chlamydia Rates by Sex.

Figure 5: New London Chlamydia Rates by Age Group and Sex 2011.

Figure 6: New London Chlamydia Rates by Race & Sex 2011.

Figure 7: New London Female Chlamydia Rates by Age Group and Race.

Figure 8: New London 15-19 year old Female Chlamydia Rates 2002-2011.

Figure 9: New London 20-24 year old Female Chlamydia Rates 2002-2011.

Figure 10: New London 25-29 year old Female Chlamydia Rates 2002-2011.

Figure 11: 2011 New London Gonorrhea Cases by Age Group.

Figure 12: 2011 New London Gonorrhea Cases by Sex.

Figure 13: New London Gonorrhea Rates by Age Group 2011.

Figure 14: New London Gonorrhea Rates by Age Group and Sex 2011.

Figure 15: New London Gonorrhea Rates by Race/Ethnicity and Sex 2011.

Figure 16: New London Female Gonorrhea Rates by Age Group and Race 2011.

Figure 17: Female New London Gonorrhea Cases by Race 2000-2011.

Figure 18: Male New London Gonorrhea Cases by Race 2000-2011.

Table 1: Number of Births by Race/Ethnicity and Age Group: 15-19 Year-Old New London Females, 1998-2009.

Figure 19: Distribution of Births by Race/Ethnicity: 15-19 Year-Old New London Females, 2004-2006.

Figure 20: Distribution of Births by Race/Ethnicity: 15-19 Year-Old New London Females, 2007-2009.

Figure 21: Births to Teens, New London, 1998-2009.

Figure 22: Births to Teenage Mothers as a Percentage of Total Live Births, New London vs. Connecticut, 1998-2009.