

Chlamydia trachomatis infections in patients attended at ambulatory health units in Germany

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Background

- Infection with Chlamydia trachomatis (CT) is one of the commonest bacterial STDs worldwide
- About 15% of untreated infections progress to pelvic inflammatory disease (PID) by spreading to the upper genital tract. This can cause chronic pelvic pain and worsen the reproductive outcome by higher rates of infertility and ectopic pregnancy due to fallopian tube scarring¹.
- An infection with CT represents an increased risk of infection with HIV^{2,3}
- Since diagnosis is made fast and an early detected infection can be treated easily, the screening of young men and women is an important part of health care

Objective

- The percentage of positive CT-PCR results and epidemiological variables in women and men attended at ambulatory health units of the Rhine-Ruhr metropolitan region in North Rhine-Westphalia (Germany) were determined

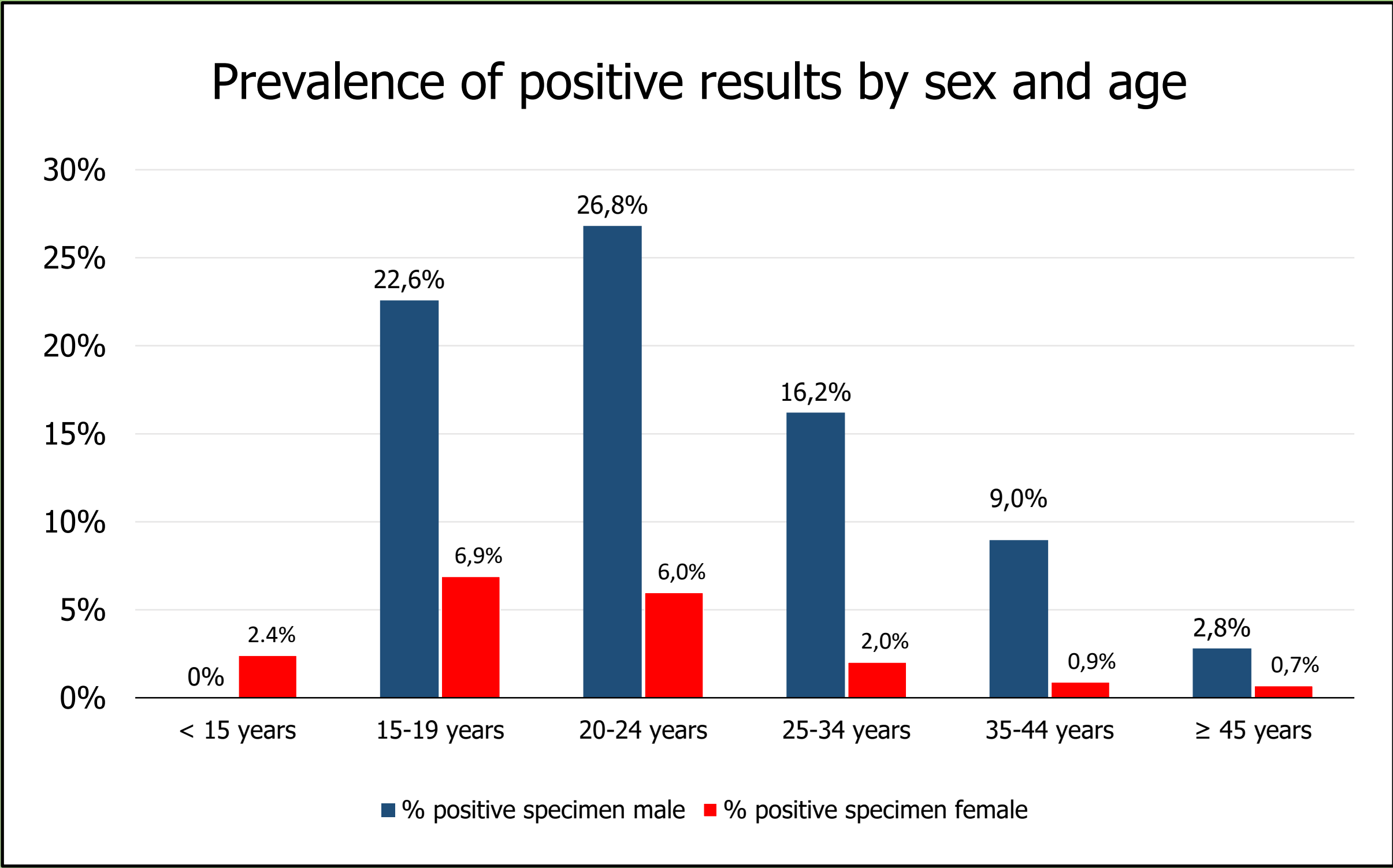
Material and Methods

- **72103 specimen** were collected during **January 2015 to December 2018** from outpatients and retrospective study was performed
- 45215 (62.71%) urine samples, 26861 (37.25%) swabs and 27 (0.04%) semen samples were tested
- **CT/NG assay** on the **Abbott® m2000 RealTime system** was used
- Demographic and clinical characteristics of the patients (sex, age and pregnancy) were obtained from the patient records
- One specimen per examination was included

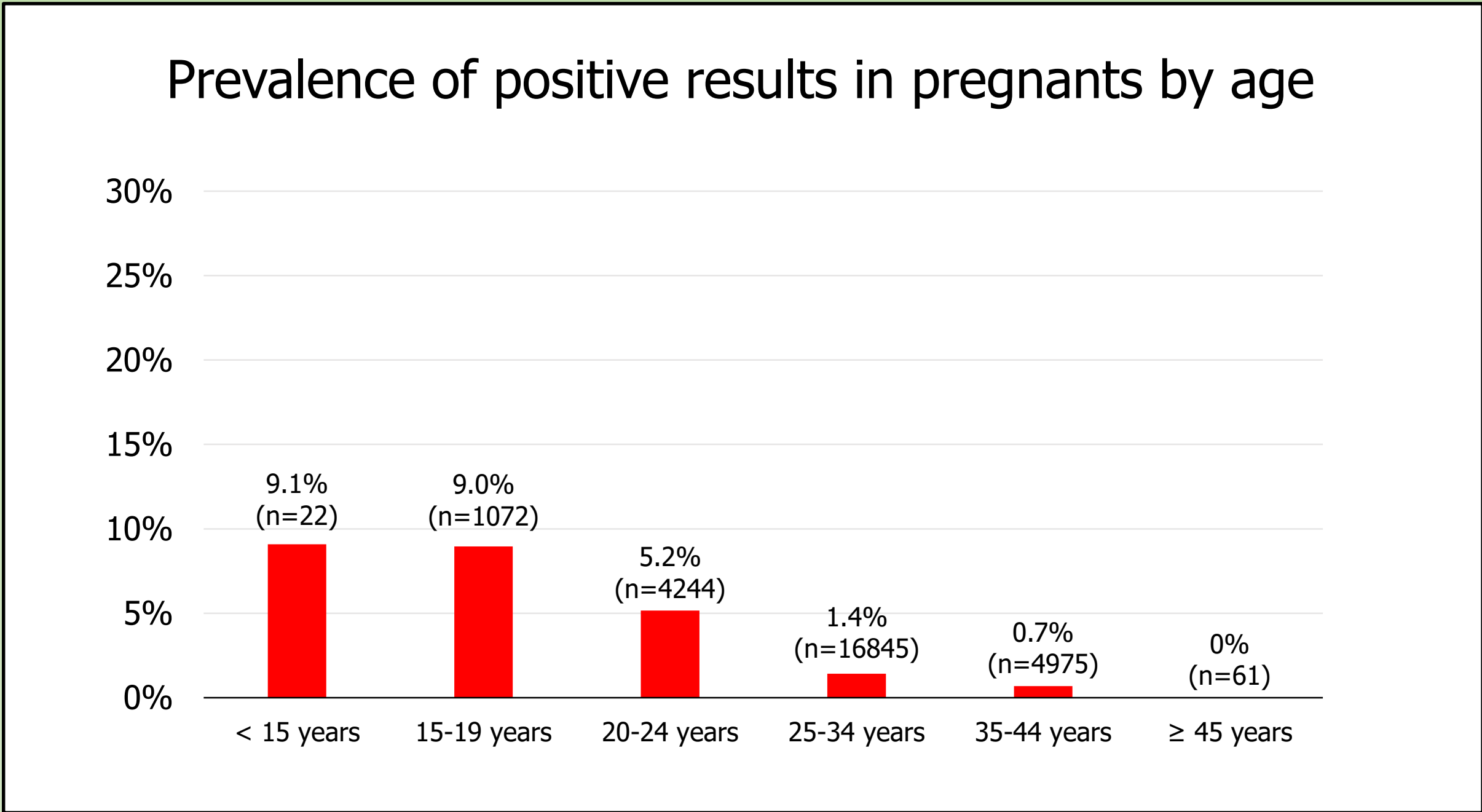
Results

- A total of 67911 (94.2%) clinical samples were collected from woman and 4192 (5.8%) from men
- **Positive CT-PCR results in 3.6%** (n=2603) **of all specimen**
- **Specimen collected from men where statistically significant more often tested positive** (n=524 (12.5%)) **than those collected from women** (n=2079 (3.1%)) (p<0.001)
- **CT positive females** were **statistically significant younger** than **CT positive male patients** (24.4 years (SD=7.98) vs. 28.2 years (SD=8.71) (p<0.001)

- **Highest rate of positive results in women** was found in the group aged **15-19 years (6.9%)**
- **Highest rate of positive results in men** was found in the group aged **20-24 years (26.8%)**

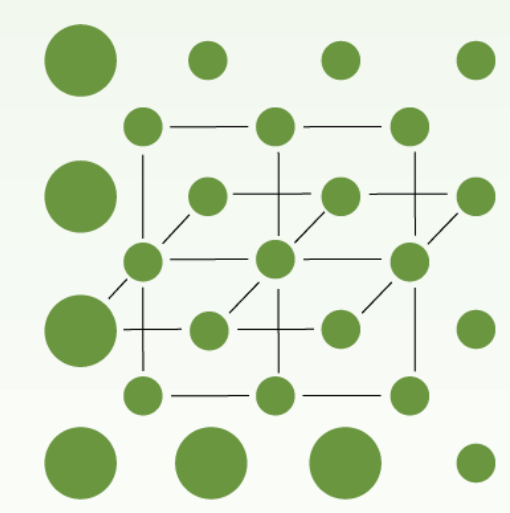


- 27219 (40.1%) of all female patients were pregnant and **589 (2.2%) of the pregnant showed a positive test result.** The mean age of CT-positive pregnant women was 24.6 (SD=5.36) years (n=589).



Conclusions

- The CT prevalence found in our study is similar to the prevalence reported by the RKI⁴ when they investigated a very large cohort with similar characteristics of german patients in 2013
- Percentually more men than women were diagnosed with infection by CT
- CT positive females were statistically significant younger than CT positive males
- The highest prevalence of positive results was observed in the group aged 15-19 years for women and 20-24 years of age for males



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