

Appendix 1. Questions to determine eligibility to participate in the survey

1. Your age: _____

If the potential participant is younger than 16 years, the system will automatically display that "Sorry, you are not eligible to participate in the survey. Thank you very much for your interest in participation".

2. How long have you lived in this city?

A Less than 3 months

B 3 months to 1 year

C 1 to 3 years

D More than 3 years

If the potential participant live in the city where the survey is carried out for less than 3 months, the system will automatically display that "Sorry, you are not eligible to participate in the survey. Thank you very much for your interest in participation".

3. Have you had anal or oral sex with other man in the last six months?

A Yes

B No

If the potential participant did not have sex with other man in the last six months, the system will automatically display that "Sorry, you are not eligible to participate in the survey. Thank you very much for your interest in participation".

4. Have you taken any antibiotics in the past month?

A Yes

B No

If the potential participant did take any antibiotics in the past month, the system will automatically display that "Sorry, you are not eligible to participate in the survey. Thank you very much for your interest in participation".

Appendix 2. Informed consent

Chlamydial infection has shown an increase in recent years particularly among some subgroups of people and resulted in serious threat to reproductive health. The survey is aimed to know the infection among men who have sex with other men during the past six months. To participate in the survey, you will be invited to fill out a short questionnaire and provide urine and swabs collected from the anorectal and oropharyngeal sites. You can voluntarily choose to participate or refuse to participate in the survey after you carefully read and totally understand the following information. You can withdraw from participation at any time even though you have agreed to participate. Thank you for your cooperation!

1. The survey is a public health project organized by the National Center for STD Control and Chinese Center for Disease Control and Prevention and coordinated by administrator – Dr. Ning-Xiao Cao. If you have any questions you can consult Dr. Cao at mobile phone of 025-85478179.
 2. The direct benefit of the survey to you is provision of free service to determine if you are infected with chlamydia and gonorrhoea. If you provide contact information to allow us informing you of infection status in 2 weeks and if you are infected you will be provided with a free treatment according to the national guideline.
 3. During swab collection, you may experience a discomfort, but it is tolerable for most people.
 4. If you agree to finish participation of the survey, you will be compensated for your time, and inconvenience.
 5. Confidentiality of your privacy including personal information and infection status will be protected.
- I have read and understood the above statements and agree to participate in the survey.
- I have read and understood the above statements and decide not to participate in the survey.

Appendix 3. Questionnaire

1. Your education level:

- a) Junior high school and below
- b) High school or technical secondary school
- c) Junior college
- d) Undergraduate
- e) Master degree or above

2. Your occupation:

- a) Civil servants
- b) Employees of public institutions
- c) Corporate staff
- d) Young students
- e) Migrant workers in cities
- f) Freelance or unemployed
- g) Retired
- h) Other _____

3. Your current marital status:

- a) Unmarried
- b) Unmarried and living with a boyfriend
- c) Unmarried and living with a girlfriend
- d) Married
- e) Married but separated
- f) Divorced or widowed
- g) Other _____

4. Your sexual orientation:

- a) Homosexual
- b) Heterosexual
- c) Bisexual
- d) I don't know

5. Which of the following best fits your sexual behavior:

- a) Only heterosexual
- b) Mainly heterosexual, occasionally homosexual
- c) Mainly heterosexual, often homosexual

- d) Both homosexual and heterosexual, with similar opportunities
 - e) Mainly homosexual, often heterosexual
 - f) Mainly homosexual, occasional heterosexual
 - g) Only homosexual
6. Which way did you use for finding a male sex partner during the last six months? (multiple choices)
- a) Network platform
 - b) Bar
 - c) Parks, public toilets
 - d) Sauna and bathroom
 - e) Club
 - f) Sports venues
 - g) Other _____
7. The number of sex partners to have anal or oral sex with you during the past six months is _____ .
8. What role did you mainly play in sex with other men?
- a) Insertive anal sex
 - b) Receptive anal sex
 - c) Insertive oral sex
 - d) Receptive oral sex
9. Did you have any sex with other woman during the last six months?
- a) Yes
 - b) No
10. Did you experience the following symptoms (multiple choices)?
- a) Dry pharynx, pharyngeal discomfort, burning or pain
 - b) Anal itching and burning, ulceration and pain
 - c) Itching and discomfort during urination
 - d) Tingling or burning sensation in the urethra
 - e) Itching or pain around the genitals
 - f) Blisters or erythema are found on the genitals
 - g) Abnormal genital secretions
 - h) Hyperplasia on the genitals and around the anus
 - i) Rash all over the body or on palms and feet
 - j) Unknown or no-specific

k) Not any symptoms

11. Did you diagnosed with any of the following diseases? (multiple choices)

- a) Gonorrhoea
- b) Syphilis
- c) Chlamydia trachomatis infection
- d) Condyloma acuminatum
- e) Genital herpes
- f) AIDS /HIV infection
- g) Other _____
- h) Unknown
- i) Never.

12. Did you get any testing for chlamydia during the last six months?

- a) Yes
- b) No
- c) Unknown

Appendix 4. Standard operating procedure

1. Instructions for collecting anorectal swabs:
 - a) Wash hands thoroughly with soap and water for at least 20 seconds.
 - b) Open the swab (DO NOT TOUCH THE TIP OF THE SWAB). Twist first to break the seal. Then pull. The swab will stay attached to the cap. Do NOT throw the plastic tube away! You will need to put the swab into the tube after having collected the participant's sample.
 - c) Grip the opened swab 1.5 inches away from the tip of the swab.
 - d) Insert the swab 1.5 inches into the participant's butt. Gently rub the swab in a circle, touching the walls of the participant's butt to collect specimen. Then remove the swab from the participant's butt by slowly turning it in a circle while pulling it out.
 - e) Place the used swab back into the transport tube. Close the tube tightly to prevent leakage.

2. Instructions for collecting pharyngeal swabs:
 - a) Wash hands thoroughly with soap and water for at least 20 seconds.
 - b) Open the swab (DO NOT TOUCH THE TIP OF THE SWAB). Twist first to break the seal. Then pull. The swab will stay attached to the cap. Do NOT throw the plastic tube away! You will need to put the swab into the tube after having collected the participant's sample.
 - c) Grip the opened swab 1.5 inches away from the tip of the swab.
 - d) Ask the participant to open the mouth and say "AHHH". Then use the swab to gently touch the participant's throat. Use the tongue depressor if needed.
 - e) Use the white tip of the swab to wipe the back of participant's throat and tonsils.
 - f) Remove the swab from participant's mouth. Place the used swab back into the transport tube. Close the tube tightly to prevent leakage.