

Questionnaire survey and record

Id: □□□□□

Province _____
County _____
Name _____
Address _____
Phone number _____

Excluded form

- (a) How old are you? _____ (If age <20 or >60, then excluded)
- (b) Do you have some reproductive dysfunctions or diseases (genital diseases such as cryptorchidism, inguinal hernia, varicocele, epididymitis, gonorrhoea, chlamydia, and surgery for torsion of the testis) ?
1. Yes (**excluded**) 2. No
- (c) Do you have some chronic disease, such as diabetes, kidney disease, atherosclerosis, vascular disease, genital diseases, or hypertension?
1. Yes (**excluded**) 2. No
- (d) Do you work in factory related to Mn machining?
1. Yes (**excluded**) 2. No
- (e) Do you work in or live near factories related to metal machining, such as lead, cadmium, zinc, copper, etc.?
1. Yes (**excluded**) 2. No

A. Demography characteristics

for coding

- A1 Birth date: _____
- A2 Height : _____cm
- A3 Weight : _____kg
- A4 Education level:
1. Illiteracy 2. Primary school 3. Junior high school
4. Senior high school 5. junior college or higher
- A5 Registered residence: 1. Urban 2. Rural
- A6 Occupation:
1. Peasant 2. Factory worker 3. Commercial service worker
4. Doctor/teacher/researcher 5. Other _____
- A7 Do you have sexual intercourse? 1. Yes 2. No (**skip to A9**)
- A8 Age of first sexual intercourse? _____ year old
- A9 Marriage status:
1. Unmarried (**skip to A11**) 2. Married
- A10 Age of married: _____
- A11 Do you have child? 1. Yes 2. No
- A12 Income: _____ Yuan /person/year

B. Living status

- B1 Birth place: 1. Urban 2. Rural
- B2 How long do you live here? _____ year
- B3 Did you ever have enuresis? 1. Yes 2. No
- B4 Did you ever have mumps? 1. Yes 2. No
- B5 Do you smoke? 1. Yes 2. No (**skip to B7**)
- B6 Mean number of units smoked per day? _____
- B7 Do you drink alcohol? 1. Yes 2. No (**skip to B10**)
- B8 What kind of alcohol? 1. Beer 2. White wine 3. Red wine
4. Other _____
- B9 Mean number of alcohol per day? _____

- B10 Do you drink coffee? 1. Yes 2. No
- B11 Do you drink tea? 1. Yes 2. No
- B12 Do you work at sitting position long time? 1. Yes 2. No
- B13 Do you contact with pesticide often? 1. Yes 2. No
- B14 Do you contact with chemical materials, such as benzene, nitrogen sulfide, often?
1. Yes 2. No
- B15 Do you use mobile phone every day?
1. Yes 2. No (**skip to B17**)
- B16 Where the mobile phone is carried?
1. Trouser pocket 2. Bag 3. Other place
- B17 Do you use computer often? 1. Yes 2. No (**finished**)
- B18 How long do you use computer per every day? _____hours

Signature of interviewer:_____

Data of examination:_____

Records of semen quality examination

- C1. Data for first semen sample collection: _____
- C2. Abstinence interval (day): _____
- C3. Examination time after ejaculation (minute): _____
- C4. Appearance: 1.Normal 2. Abnormal
- C5. Time for liquefaction (minute):
1. ≤ 20 2. 21~30 3. 31~60 4. >60
- C6. Stickiness (length of drawbench): 1. $\leq 2\text{cm}$ 2. $>2\text{cm}$
- C7. Agglutination: 1.No 2. Have
- C8. Volume (ml): _____
- C9. pH: _____
- C10. Motility (100 sperm)
- (a) rapid and linear progressive motility _____
- (b) sluggish linear motility _____
- (c) no linear _____
- (d) no motile _____
- C11. Density ($\times 10^6/\text{ml}$) _____
- C12. Total sperm count ($\times 10^6$) _____
- C13. Sperm viability (%) _____
- C14. Normal sperm forms (%) _____

Signature of examination person: _____

Data of examination: _____