

Supplementary Appendix

Title: Burden of Whooping Cough in China (PertussisChina): Study Protocol of a Prospective, Population-based Case-control Study

Running head: PertussisChina Study, 2020

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Supplementary Table 1. Survey questionnaire for healthcare utilization and attitudes survey of cough illness among children under 5 years old

Greetings! We are the staff of Center for Disease Control and Prevention. We sincerely invite you to participate in this questionnaire survey. The purpose of the survey is to study the utilization and attitudes of community residents towards health-care services of chronic/persistent cough, so that we can better serve you in the future.

This survey is anonymous. Your answers to these questions are kept confidential. You can choose whether to participate in the survey voluntarily or not. Refusal of the survey will not have any adverse consequences on you personally and your children. If you agree to participate, please read each question carefully and fill in the answer on your own. Thank you for your support and cooperation!

Part I. Basic Information

1.1 Site: _____ Site ID: _____

1.2 Your length of time (years & months) living in the site (e.g. Yiwu or Yongcheng):

less than 6 months six months and over

1.3 Current address: _____ county _____ street _____ community/village

1.4 Type of respondents in relation to the studied subject/children:

mother father grandma/grandpa others _____

1.5 Date of Birth: □□□□/□□/□□ (yyyy/MM/dd)

1.6 Gender: Male Female

1.7 Ethnicity: Han others _____

1.8 Did your child attend school? yes no

1.9 Your occupation (of the respondent who answered the question):

students housework or unemployed retired people commercial & service sector workers food handler or employees of food industry
 specialists, including teacher, medical personnel and workers agriculture, forestry, animal husbandry and fishery workers others _____

1.10 Your educational attainment (of the respondent who answered the question).

- primary school or illiteracy middle school high school
 technical secondary school college level and above

1.11 Including yourself, there are _____ members in your family (defined as those who shared the same dining table in the house)?

Of which, there are _____ children under five years old.

1.12 Is there any smokers or ex-smokers in your family? yes no

Part II. self-perceived illness and health-care seeking behavior

2.1 Did your children experienced cough during the past one month prior to our interview? no yes

2.1.1 If yes, how long did the cough last?

- <1 week 1-2 weeks 3-4 weeks 5-8 weeks >8 weeks

2.1.2 If yes, what is the clinical characteristics of the last episode of cough?

- paroxysmal cough vomiting after coughing whooping cough
 cough worsening during the night vomiting after coughing
 productive cough with large amount of sputum dry cough
 cough with blood in sputum others _____

2.1.3 If yes, what is the other concomitant symptoms?

- productive cough running nose fever (body temperature $\geq 37.2^{\circ}\text{C}$)
 belching acid reflux irritable and crying vomiting headache
 tachypnea earache sore throat dyspnea abdominal pain
 arthralgia chest pain myalgia fatigue lethargy
 burn after sternum without any other discomfort others _____

2.1.4 If yes, what do you think is the most probable cause of your cough?

- respiratory tract infection inhalation of foreign objects in the respiratory tract
 COPD exacerbation asthma exacerbation recurrent tuberculosis
 chronic cardiopulmonary disease lung cancer inhalation of cold air
 chronic bronchitis bronchiectasis I don't know others _____

2.2 Did your child visit a doctor or seek healthcare during the last episode of cough?

no yes

2.2.1 If yes, where did your child see a doctor?

(For Yiwu site, please select the following)

- The Fourth Affiliated Hospital Zhejiang University School of Medicine
- Yiwu Fuyuan Hospital Yiwu Maternal and Children's Hospital
- Yiwu Central Hospital Yiwu Traditional Chinese Medicine Hospital
- Yiwu Tianxiang Medical Group Dongfang Hospital
- Chouzhou Hospital of Yiwu The Second People's Hospital of Yiwu
- The Third People's Hospital of Yiwu Yiting township Health Center
- Suxi Township Health Center Beiyuan Community Health Center
- Shangxi Township Health Center Dachen Township Health Center
- Houzhai Community Health Center Chi'an Township Health Center
- Chengxi Community Health Center Niansanli Community Health Center
- Yiwu Huashan Rehabilitation Hospital Jiangdong Community Health Center
- Futian Community Health Center Yiwu Dermatology Hospital
- Zhejiang Children's Hospital Village clinics or private clinics
- others_____

(For Yongcheng site, please select the following)

- Yongcheng People's Hospital Yongcheng Central Hospital
- Yongmei Group General Hospital Henan Shenhua Group General Hospital
- Yongcheng Maternal & Child Health Hospital Yucheng Township Health Center
- Chenji Township Health Center Gaozhuang Township Health Center
- Yongcheng Mangdang Hospital Lizhai Township Health Center
- Yongcheng Second People's Hospital Liuhe Township Health Center
- Yanji Township Health Center Dawangji Township Health Center
- Longgang Township Health Center Shunhe Township Health Center
- Peiqiao Township Health Center Huaihai Community Health Center
- Huangkou Township Health Center Maqiao Township Health Center
- Jiangkou Township Health Center Houling Township Health Center

- Chenguanzhuang Township Health Center
- Taiqiu Township Health Center
- Wolong Township Health Center
- Huicun Township Health Center
- Yongcheng Traditional Chinese Medicine Hospital
- Shibali Township Health Center
- Xuehu Township Health Center
- Mamu Township Health Center
- Xinqiao Township Health Center
- Xunyang Township Health Center
- Shuangqiao Township Health Center
- Yongcheng Jiangkou Yongji Hospital
- Miaoqiao Township Health Center
- Yongcheng Tuberculosis Hospital
- Tiaohe Township Health Center
- Zhongyuan Road Community Health Center
- Yongcheng Wuguanke Hospital
- Mangshan Township Health Center
- Luanhu Township Health Center
- others_____

2.2.1 If no, why did not your child see a doctor?

- Symptoms are mild, no need to see a doctor
- The hospital is too far from home and the transportation is inconvenient
- Drugs purchased in pharmacies
- Distrust the doctor
- Unaffordable high medical expenses
- Hospital facilities and environment were poor
- others_____

2.3 Was your child hospitalized for the last episode of cough? no yes

2.3.1 If yes, where was your child hospitalized?

(For Yiwu site, please select the following)

- The Fourth Affiliated Hospital Zhejiang University School of Medicine
- Yiwu Fuyuan Hospital
- Yiwu Maternal and Children's Hospital
- Yiwu Central Hospital
- Yiwu Traditional Chinese Medicine Hospital
- Yiwu Tianxiang Medical Group Dongfang Hospital
- Chouzhou Hospital of Yiwu
- The Second People's Hospital of Yiwu
- The Third People's Hospital of Yiwu
- Yiting township Health Center
- Suxi Township Health Center
- Beiyuan Community Health Center
- Shangxi Township Health Center
- Dachen Township Health Center

- Houzhai Community Health Center Chi'an Township Health Center
 Chengxi Community Health Center Niansanli Community Health Center
 Yiwu Huashan Rehabilitation Hospital Jiangdong Community Health Center
 Futian Community Health Center Yiwu Dermatology Hospital
 Zhejiang Children's Hospital Village clinics or private clinics
 others _____

(For Yongcheng site, please select the following)

- Yongcheng People's Hospital Yongcheng Central Hospital
 Yongmei Group General Hospital Henan Shenhua Group General Hospital
 Yongcheng Maternal & Child Health Hospital Yucheng Township Health Center
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 Jiangkou Township Health Center Houling Township Health Center
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 Wolong Township Health Center Huicun Township Health Center
 Yongcheng Traditional Chinese Medicine Hospital
 Shibali Township Health Center Xuehu Township Health Center
 Mamu Township Health Center Xinqiao Township Health Center
 Xunyang Township Health Center Shuangqiao Township Health Center
 Yongcheng Jiangkou Yongji Hospital Miaoqiao Township Health Center
 Yongcheng Tuberculosis Hospital Tiaohe Township Health Center
 Zhongyuan Road Community Health Center Yongcheng Wuguanke Hospital
 Mangshan Township Health Center Luanhu Township Health Center
 others

Part III. Attitudes towards health-care utilization

(Next, we will ask some questions about the actions you might take under some hypothetical situations that do not need to happen.)

3.1 If your child keeps coughing for 2 weeks but does not get better, and you have decided to see a doctor, which one of the following medical institutions would you choose to go?

(For Yiwu site, please select the following)

- The Fourth Affiliated Hospital Zhejiang University School of Medicine
- Yiwu Fuyuan Hospital Yiwu Maternal and Children's Hospital
- Yiwu Central Hospital Yiwu Traditional Chinese Medicine Hospital
- Yiwu Tianxiang Medical Group Dongfang Hospital
- Chouzhou Hospital of Yiwu The Second People's Hospital of Yiwu
- The Third People's Hospital of Yiwu Yiting township Health Center
- Suxi Township Health Center Beiyuan Community Health Center
- Shangxi Township Health Center Dachen Township Health Center
- Houzhai Community Health Center Chi'an Township Health Center
- Chengxi Community Health Center Niansanli Community Health Center
- Yiwu Huashan Rehabilitation Hospital Jiangdong Community Health Center
- Futian Community Health Center Yiwu Dermatology Hospital
- Zhejiang Children's Hospital Village clinics or private clinics
- others_____

(For Yongcheng site, please select the following)

- Yongcheng People's Hospital Yongcheng Central Hospital
- Yongmei Group General Hospital Henan Shenhua Group General Hospital
- Yongcheng Maternal & Child Health Hospital Yucheng Township Health Center
- Chenji Township Health Center Gaozhuang Township Health Center
- Yongcheng Mangdang Hospital Lizhai Township Health Center
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- Mamu Township Health Center
- Xinqiao Township Health Center
- Xunyang Township Health Center
- Shuangqiao Township Health Center
- Yongcheng Jiangkou Yongji Hospital
- Miaoqiao Township Health Center
- Yongcheng Tuberculosis Hospital
- Tiaohu Township Health Center
- Zhongyuan Road Community Health Center
- Yongcheng Wuguanke Hospital
- Mangshan Township Health Center
- Luanhu Township Health Center
- others_____

3.2 If the doctor recommends that your child be hospitalized, which one of the following medical institutions would you choose?

(For Yiwu site, please select the following)

- The Fourth Affiliated Hospital Zhejiang University School of Medicine
- Yiwu Fuyuan Hospital
- Yiwu Maternal and Children's Hospital
- Yiwu Central Hospital
- Yiwu Traditional Chinese Medicine Hospital
- Yiwu Tianxiang Medical Group Dongfang Hospital
- Chouzhou Hospital of Yiwu
- The Second People's Hospital of Yiwu
- The Third People's Hospital of Yiwu
- Yiting township Health Center
- Suxi Township Health Center
- Beiyuan Community Health Center
- Shangxi Township Health Center
- Dachen Township Health Center
- Houzhai Community Health Center
- Chi'an Township Health Center
- Chengxi Community Health Center
- Niansanli Community Health Center
- Yiwu Huashan Rehabilitation Hospital
- Jiangdong Community Health Center
- Futian Community Health Center
- Yiwu Dermatology Hospital

Zhejiang Children's Hospital Village clinics or private clinics

others _____

(For Yongcheng site, please select the following)

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Yongmei Group General Hospital Henan Shenhua Group General Hospital

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Jiangkou Township Health Center Houling Township Health Center

Chenguanzhuang Township Health Center Taiqiu Township Health Center

Wolong Township Health Center Huicun Township Health Center

Yongcheng Traditional Chinese Medicine Hospital

Shibali Township Health Center Xuehu Township Health Center

Mamu Township Health Center Xinqiao Township Health Center

Xunyang Township Health Center Shuangqiao Township Health Center

Yongcheng Jiangkou Yongji Hospital Miaoqiao Township Health Center

Yongcheng Tuberculosis Hospital Tiaohe Township Health Center

Zhongyuan Road Community Health Center Yongcheng Wuguanke Hospital

Mangshan Township Health Center Luanhu Township Health Center

others _____

Part IV. Other questions

4.1 Has your child ever received the following vaccines?

influenza vaccine pneumococcal vaccine Haemophilus influenzae vaccine

Vaccines containing pertussis components (i.e. DTP)

4.1.1 If received vaccines containing pertussis (i.e. DTP), what kind of the vaccine?

cDTaP DTaP/Hib DTaP-IPV/Hib

4.2 Your family's average annual income (Chinese Yuan) is,

<50,000 50,000-90,000 100,000-190,000 200,000-490,000 ≥500,000

4.3 Your phone number is _____

Thank you very much for taking your time. The information you provided in this interview is very valuable to help us improve our work. Wish you a happy life!

Time of survey started: □□□□/□□/□□:□□:□□ (yyyy/MM/dd hh:mm)

Time of survey ended: □□□□/□□/□□:□□:□□ (yyyy/MM/dd hh:mm)

Investigator: _____ Supervisor: _____

Supplementary Table 2. Survey questionnaire for healthcare utilization and attitudes survey of cough illness among persons aged 5 years and older

Greetings! We are the staff of Center for Disease Control and Prevention. We sincerely invite you to participate in this questionnaire survey. The purpose of the survey is to study the utilization and attitudes of community residents towards health-care services of chronic/persistent cough, so that we can better serve you in the future.

This survey is anonymous. Your answers to these questions are kept confidential. You can choose whether to participate in the survey voluntarily or not. Refusal of the survey will not have any adverse consequences on you personally and your children. If you agree to the participate, please read each question carefully and fill in the answer on your own. Thank you for your support and cooperation!

Part I. Basic Information

1.1 Site: _____ Site ID: _____

1.2 Your length of time (years & months) living in the site (e.g. Yiwu or Yongcheng):

less than 6 months six months and over

1.3 Current address: _____ county _____ street _____ community/village

1.4 Type of respondents in relation to the studied subject:

respondent himself is the study subject others _____

1.5 Date of Birth: □□□□/□□/□□ (yyyy/MM/dd)

1.6 Gender: Male Female

1.7 Ethnicity: Han others _____

1.8 Your occupation:

students housework or unemployed retired people commercial & service sector workers food handler or employees of food industry specialists, including teacher, medical personnel and workers agriculture, forestry, animal husbandry and fishery workers others _____

1.9 Did you ever contact with dust/chemical materials in the working environment in the past one year, such as those encountered by workers using pneumatic drills at

construction sites, miners, painters, benzene solvents in leather production, etc.

no yes

1.10 Your educational attainment:

primary school or illiteracy middle school high school
 technical secondary school college level and above

1.11 Including yourself, there are _____ members in your family (defined as those who shared the same dining table in the house)?

Of which, there are _____ children under five years old.

1.12 Are you smoker or ex-smoker? yes no

Part II. self-perceived illness and health-care seeking behavior

2.1 Did you experienced cough during the past one month prior to our interview?

no yes

2.1.1 If yes, how long did the cough last?

<1 week 1-2 weeks 3-4 weeks 5-8 weeks >8 weeks

2.1.2 If yes, what is the clinical characteristics of the last episode of cough?

paroxysmal cough vomiting after coughing whooping cough
 cough worsening during the night vomiting after coughing
 productive cough with large amount of sputum dry cough
 cough with blood in sputum others _____

2.1.3 If yes, what is the other concomitant symptoms?

productive cough running nose fever (body temperature $\geq 37.2^{\circ}\text{C}$)
 belching acid reflux irritable and crying vomiting headache
 tachypnea earache sore throat dyspnea abdominal pain
 arthralgia chest pain myalgia fatigue lethargy
 burn after sternum without any other discomfort others _____

2.1.4 If yes, what do you think is the most probable cause of your cough?

respiratory tract infection inhalation of foreign objects in the respiratory tract
 COPD exacerbation asthma exacerbation recurrent tuberculosis

- chronic cardiopulmonary disease lung cancer inhalation of cold air
chronic bronchitis bronchiectasis I don't know others_____

2.2 Did you see a doctor or seek healthcare during the last episode of cough?

- no yes

2.2.1 If yes, where did you see a doctor?

(For Yiwu site, please select the following)

- The Fourth Affiliated Hospital Zhejiang University School of Medicine
Yiwu Fuyuan Hospital Yiwu Maternal and Children's Hospital
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Futian Community Health Center Yiwu Dermatology Hospital
Zhejiang Children's Hospital Village clinics or private clinics
others_____

(For Yongcheng site, please select the following)

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 Zhongyuan Road Community Health Center Yongcheng Wuguanke Hospital
 Mangshan Township Health Center Luanhu Township Health Center
 others_____

2.2.1 If no, why did not you see a doctor?

- Symptoms are mild, no need to see a doctor
 The hospital is too far from home and the transportation is inconvenient
 Drugs purchased in pharmacies Distrust the doctor
 Unaffordable high medical expenses
 Hospital facilities and environment were poor
 others_____

2.3 Were you hospitalized for the last episode of cough? no yes

2.3.1 If yes, where were you hospitalized?

(For Yiwu site, please select the following)

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Yongcheng Tuberculosis Hospital Tiaohe Township Health Center
Zhongyuan Road Community Health Center Yongcheng Wuguanke Hospital
Mangshan Township Health Center Luanhu Township Health Center
others_____

Part III. Attitudes towards health-care utilization

(Next, we will ask some questions about the actions you might take under some hypothetical situations that do not need to happen.)

3.1 If you keep coughing for 2 weeks but does not get better, and you have decided to see a doctor, which one of the following medical institutions would you choose to go?

(For Yiwu site, please select the following)

- The Fourth Affiliated Hospital Zhejiang University School of Medicine
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- Yongcheng Tuberculosis Hospital
- Tiaohe Township Health Center
- Zhongyuan Road Community Health Center
- Yongcheng Wuguanke Hospital
- Mangshan Township Health Center
- Luanhu Township Health Center
- others_____

3.2 If the doctor recommends that you should be hospitalized, which one of the following medical institutions would you choose?

(For Yiwu site, please select the following)

- The Fourth Affiliated Hospital Zhejiang University School of Medicine
- Yiwu Fuyuan Hospital
- Yiwu Maternal and Children's Hospital
- Yiwu Central Hospital
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- Yiwu Huashan Rehabilitation Hospital
- Jiangdong Community Health Center
- Futian Community Health Center
- Yiwu Dermatology Hospital
- Zhejiang Children's Hospital
- Village clinics or private clinics

others_____

(For Yongcheng site, please select the following)

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- Yongcheng Tuberculosis Hospital Tiaohe Township Health Center
- Zhongyuan Road Community Health Center Yongcheng Wuguanke Hospital
- Mangshan Township Health Center Luanhu Township Health Center
- others_____

Part IV. Other questions

4.1 Have you ever received the following vaccines?

- influenza vaccine pneumococcal vaccine Haemophilus influenzae vaccine
- Vaccines containing pertussis components (i.e. DTP)

4.1.1 If received vaccines containing pertussis (i.e. DTP), what kind of the vaccine?

cDTaP DTaP/Hib DTaP-IPV/Hib

4.2 Your family's average annual income (Chinese Yuan) is,

<50,000 50,000-90,000 100,000-190,000 200,000-490,000 ≥500,000

4.3 Your phone number is _____

Thank you very much for taking your time. The information you provided in this interview is very valuable to help us improve our work. Wish you a happy life!

Time of survey started: □□□□/□□/□□:□□:□□ (yyyy/MM/dd hh:mm)

Time of survey ended: □□□□/□□/□□:□□:□□ (yyyy/MM/dd hh:mm)

Investigator: _____ Supervisor: _____

Supplementary Table 3. Case screening and ascertainment form

Name of Hospital _____ Departments _____

Name of patient		Sex	<input type="checkbox"/> male <input type="checkbox"/> female
Birthdate		Ethnicity	
Current address		Phone number	
Date of illness onset		Date of admission	
Date of written informed consent signed			
Lists of inclusion & exclusion criteria	yes	no	
Inclusion criteria:			
Patient regardless of ages:			
1.cough of ≥ 2 weeks duration;	<input type="checkbox"/>	<input type="checkbox"/>	
2.had one or more of the following symptoms;	<input type="checkbox"/>	<input type="checkbox"/>	
– paroxysmal cough;	<input type="checkbox"/>		
– inspiratory whoop;	<input type="checkbox"/>		
– post-tussive vomiting.	<input type="checkbox"/>		
Infants less than one year old			
1.cough (regardless of cough duration);	<input type="checkbox"/>	<input type="checkbox"/>	
2.had one or more of the following symptoms;	<input type="checkbox"/>	<input type="checkbox"/>	
– paroxysmal cough;	<input type="checkbox"/>		
– inspiratory whoop;	<input type="checkbox"/>		
– post-tussive vomiting;	<input type="checkbox"/>		
– apnea.	<input type="checkbox"/>		
Written informed consent signed	<input type="checkbox"/>	<input type="checkbox"/>	
If you answer “No” to any of the above, the patient cannot enter the study.			
Exclusion criteria:			
1.not a permanent resident (lived less than 6 months at the site);	<input type="checkbox"/>	<input type="checkbox"/>	
2.gastroesophageal reflux;	<input type="checkbox"/>	<input type="checkbox"/>	
3.spastic bronchitis;	<input type="checkbox"/>	<input type="checkbox"/>	
4.diagnosed tuberculosis;	<input type="checkbox"/>	<input type="checkbox"/>	
5.lung mycoplasma/chlamydia infection;	<input type="checkbox"/>	<input type="checkbox"/>	
6.chronic sinusitis;	<input type="checkbox"/>	<input type="checkbox"/>	
7.adults/adolescents with a measured body temperature of ≥ 38.5 °C;	<input type="checkbox"/>	<input type="checkbox"/>	
8. researchers considered not suitable for participating in the study.	<input type="checkbox"/>	<input type="checkbox"/>	
If you answer Yes” to any of the above, the patient cannot enter the study.			
Whether the patient is included in the study	<input type="checkbox"/>	<input type="checkbox"/>	
If no, what is the reason for not included?			
– not meet the inclusion & exclusion criteria;	<input type="checkbox"/>	<input type="checkbox"/>	
– Refuse to participate ;	<input type="checkbox"/>	<input type="checkbox"/>	
If yes, what is the patient identifier no.? _____	<input type="checkbox"/>	<input type="checkbox"/>	

Supplementary Table 4. Baseline information of case & control (CRF—T0)

Patient identifier no.: _____ Type: Inpatient outpatient Control

Name : _____ (or **Parents' name :** _____) **Sex :** male female **Ethnicity :** Han other _____
Birthdate : ____/____/____ (YYYY/mm/dd) **Preterm baby :** yes , (gestational age ____ weeks) no
Address* : _____ **mobile phone :** _____
Family member No. : _____ persons **No. of children under five in the family :** _____ children
Smokers in the family : yes , (____ persons) no **Smoking :** yes no **Drinking :** yes no
Occupation :
 kindergarten children preschool children students teacher childcares food industry worker commercial service
 medical staff factory workers migrant worker farmer herdsman fishermen cadre retired housewife
 others unknown

Clinical characteristics (within 24h before and after admission)

Illness onset Date : ____ (YYYY/mm/dd) **Primary diagnosis :** _____ **Diagnose date :** ____ (YYYY/mm/dd)
Hospitalized : yes no **Admission diagnosis :** _____ **Admission date :** ____ (YYYY/mm/dd)
 cough (Starting date ____/____/____ [YYYY/mm/dd] , duration ____ days)
 post-tussive vomiting paroxysmal cough whooping cough apnea cyanosis fever (body temperature ____ °C)
 cough worsening in night productive cough; Sputum color : yellow/white/black/glass like
 seizure hemoptysis chills headache myalgia sore throat joint pain chest pain
 sweat shortness-of-breath running nose lachrymation fatigue other(_____)
Complications : pneumonia (radiographical evidence : yes no) atelectasis pulmonary hypertension
 encephalopathy seizure others (_____)
Blood tests : WBC ____ ×10⁹/L; L ____ ×10⁹/L; N ____ ×10⁹/L; Plt ____ ×10⁹/L; Hb ____ g/L; CRP ____ mg/L; GLU ____ mmol/L
Physical check : body temperature : ____ °C **Breath rate :** ____ breath/min **Heart rate :** ____ beats/min
Systolic/diastolic blood pressure : ____/____ mmHg **Pulse oximetry:** sPO₂ (if any): ____ %
Lung auscultation : dry rale wet rale **Consciousness :** clear/lethargy/irritable/delirium/convulsions/coma

Treatment (one week before admission)

- (1) Drug name : Please give the name of the drug, or the trade name if it is a fixed compound preparation
(2) Category: A=antibiotic (1. Amoxicillin; 2. Amoxicillin-clavulanic acid; 3. Ampicillin; 4. Azithromycin; 5. Ceftriaxone; 6. Cefuroxime; 7. Ciprofloxacin; 8. Clarithromycin; 9. Doxycycline; 10. Erythromycin; 11. Penicillin; 12. Tetracycline; 13. Compound sulfamethoxazole); B=antiviral drugs; C=steroid hormone drugs
(3) Route : 1=oral, 2=intravenous injection, 3=intravenous drip, 4=intramuscular injection, 5=inhalation, 6=other
(4) Frequency : 1= continuous , 2=intermittent

Drug name (1)	Category (2)	Route (3)	Daily dose		Frequency (4)	Starting date (YYYY/mm/dd)	Stop date (YYYY/mm/dd)
			dose	unit			

Vaccination history of DTP3 (for children aged under 14 years old)							
Source of data : <input type="checkbox"/> vaccination certificate <input type="checkbox"/> linkage with national database <input type="checkbox"/> self-reports Reasons of unvaccinated : 1. Contraindications; 2. Under the age of vaccination; 3. Missed vaccination time; 4. Parents refused to vaccination; 5. migrating population; 6. Don't know; 7. Others_____							
dose	lot number	producer	dosage		site	Date (YYYY/mm/dd)	Reasons of unvaccinated
			dose	unit			
1							
2							
3							
Patient specimen collection							
Specimen collected : <input type="checkbox"/> yes <input type="checkbox"/> no Date of sampling : ____/____/____(YYYY/mm/dd) Type of specimen : Nasopharyngeal swab <input type="checkbox"/> amounts : _____ Whole blood <input type="checkbox"/> quantity : _____ ml							
Hospital : _____ Investigator : _____ Date of reporting : ____/____/____(YYYY/mm/dd)							

Supplementary Table 5. Follow-up information of case (CRF—T_{2w}/T_{4w}/T_{8w})

Patient identifier no.: _____ Type: Inpatient Outpatient

Name : _____ (or **Parents' name :** _____) **Sex :** male female

Illness onset date : ____/____/____(YYYY/mm/dd) **Admission date :** ____/____/____(YYYY/mm/dd)

Follow-up date : ____/____/____(YYYY/mm/dd) **Weeks of follow-up:** 2 wks 4 wks 8 wks

Follow-up method: hospital visits home visits

Outcomes

Survival: yes no **Date of death:** ____/____/____(YYYY/mm/dd) **death diagnosis :** _____

Hospitalized : yes no **Re-admitted into hospital after discharge:** yes no

Reasons for re-admission : Pneumonia/heart failure/cardiogenic shock/encephalopathy/Seizure/other _____

Lost to follow-up: yes no (refers to 3 consecutive phone calls to patients on different working days but no answers at all)

Clinical characteristics (during follow-up visits)

cough (Starting date ____/____/____ [YYYY/mm/dd] , duration ____ days)

post-tussive vomiting paroxysmal cough whooping cough apnea cyanosis fever (body temperature ____°C)

cough worsening in night productive cough; Sputum color : yellow/white/black/glass like

seizure hemoptysis chills headache myalgia sore throat joint pain chest pain

sweat shortness-of-breath running nose lachrymation fatigue other(_____)

Blood tests : WBC ____ × 10⁹/L; L ____ × 10⁹/L; N ____ × 10⁹/L; Plt ____ × 10⁹/L; Hb ____ g/L; CRP ____ mg/L; GLU ____ mmol/L

Physical check : body temperature : ____°C **Breath rate :** ____ breath/min **Heart rate :** ____ beats/min

Systolic/diastolic blood pressure : ____/____ mmHg **Pulse oximetry:** sPO₂ (if any): ____%

Lung auscultation : dry rale wet rale **Consciousness :** clear/lethargy/irritable/delirium/convulsions/coma

Patient specimen collection

Specimen collected : yes no **Date of sampling :** ____/____/____(YYYY/mm/dd)

Type of specimen : Nasopharyngeal swab amounts : _____

Whole blood quantity : _____ ml

Reasons for not sampling : without coughing symptoms for 1 week refusal to sampling

Hospital : _____ **Investigator :** _____ **Date of follow-up :** ____/____/____(YYYY/mm/dd)

Supplementary Table 6. Outcome of case at the end of follow-up (CRF—T_{end})

Patient identifier no.: _____ Type: inpatient outpatient

Name : _____ (or Parents' name : _____) Sex male female Illness onset date : ____/____/____(YYYY/mm/dd)
 Admission date : ____/____/____(YYYY/mm/dd) Discharge date : ____/____/____(YYYY/mm/dd)
 Discharge diagnosis : primary diagnosis _____
 secondary diagnosis 1. _____ 2. _____ 3. _____

Treatment during hospitalization

Admitting into ICU : yes no ____/____/____(YYYY/mm/dd)
 1. Transfer in date ____/____/____(YYYY/mm/dd) Transfer out date ____/____/____(YYYY/mm/dd)
 2. Transfer in date ____/____/____(YYYY/mm/dd) Transfer out date ____/____/____(YYYY/mm/dd)
 3. Transfer in date ____/____/____(YYYY/mm/dd) Transfer out date ____/____/____(YYYY/mm/dd)
 Oxygen therapy : yes no duration : _____ days
 Invasive ventilation : yes no duration : _____ days (invasive ventilation refers to tracheal intubation or tracheotomy)
 Non-invasive ventilation: yes no duration : _____ days
 Oscillating respirator : yes no duration : _____ days
 ECMO or interventional lung adjuvant therapy (iLA) yes no date of treatment start : ____/____/____(YYYY/mm/dd)
 Renal replacement therapy/dialysis : yes no date of treatment start : ____/____/____(YYYY/mm/dd)
 Exchange transfusion : yes no date of treatment start : ____/____/____(YYYY/mm/dd)
 Leukophoresis or leukoreduction therapy : yes no date of treatment start : ____/____/____(YYYY/mm/dd)

Drugs

(1) Drug name : Please give the name of the drug, or the trade name if it is a fixed compound preparation
 (2) Category: A=antibiotic (1. Amoxicillin; 2. Amoxicillin-clavulanic acid; 3. Ampicillin; 4. Azithromycin; 5. Ceftriaxone; 6. Cefuroxime; 7. Ciprofloxacin; 8. Clarithromycin; 9. Doxycycline; 10. Erythromycin; 11. Penicillin; 12. Tetracycline; 13. Compound sulfamethoxazole); B=antiviral drugs; C=steroid hormone drugs
 (3) Route : 1=oral, 2=intravenous injection, 3=intravenous drip, 4=intramuscular injection, 5=inhalation, 6=other
 (4) Frequency : 1= continuous , 2=intermittent

drug name (1)	category (2)	route (3)	daily dose		frequency (4)	starting date (YYYY/mm/dd)	stop date (YYYY/mm/dd)
			dose	unit			

Clinical characteristics

Symptoms/signs :
 cough (Starting date ____/____/____[YYYY/mm/dd] , duration _____ days)
 post-tussive vomiting paroxysmal cough whooping cough apnea cyanosis fever (body temperature _____ °C)
 cough worsening in night productive cough; Sputum color : yellow/white/black/glass like
 seizure hemoptysis chills headache myalgia sore throat joint pain chest pain
 sweat shortness-of-breath running nose lachrymation fatigue other(_____)

Complications :
 viral pneumonia cardiac arrest bacterial pneumonia bacteremia acute lung injury/ARDS heart infection
 coagulation disorders pneumothorax anemia pleural Effusion acute kidney injury myolysis
 bronchiolitis gastrointestinal hemorrhage meningitis pancreatitis epilepsy arrhythmia

<input type="checkbox"/> liver insufficiency <input type="checkbox"/> stroke <input type="checkbox"/> hyperglycemia <input type="checkbox"/> hypoglycemia <input type="checkbox"/> congestive Heart Failure <input type="checkbox"/> other (_____)		
Patient Prognosis		
<input type="checkbox"/> cured <input type="checkbox"/> improved and be discharged <input type="checkbox"/> transferred to other hospital reasons for transfer : community rehabilitation/other (_____) <input type="checkbox"/> give up treatment reasons for give-up : economic reasons/illness exacerbation/other (_____) <input type="checkbox"/> death date of death : ____ / ____ / ____ (YYYY/mm/dd) death diagnosis : _____		
Hospital : _____	Investigator : _____	Date of record : ____ / ____ / ____ (YYYY/mm/dd)