

# Guangdong Province: Chinese Medicine Protocol for Pneumonia Due to

## Novel Coronavirus

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Based on the particular epidemiological features of pneumonia caused by novel coronavirus in Guangdong Province, along with the clinical presentation and clinical features of its progression, it fits the characteristics of “pestilent disease” or “warm disease” in Chinese medicine. When there is externally-contracted pestilent qi, the disease moves from the exterior to the interior, and generally follows the patterns of moving from upper to middle to lower burners and through the wei-qi-ying-xue levels. The climate in this area is damp and humid, and pestilent qi easily mixes with this dampness, first attacking the lung wei-defense level, particularly in patients with a weak spleen and stomach. If the upright, healthy (*zheng*) Qi cannot defeat the deviated, unhealthy (*xie*) [qi], then the deviated toxin (evil/pathogenic toxin) will move to the interior and transform into heat, harming the fluids (*jin*) and using-up the humors (*ye*), sometimes to the point of scorching the *ying qi* and agitating the blood. When the latter happens, this can be directly transmitted to the pericardium and create a critical situation. The main disease factor is (cause) is damp-heat with pestilent toxin, and the pathological features are “dampness, heat, stasis, toxin, and vacuity.”

### Early Stages

***Damp-evil is stuck in the lung, making qi movement through this pivot difficult (interferes with the Qi dynamic of the lung)***

**Symptoms:** low-grade fever or no fever, slight aversion to cold, sensation of heaviness and stuffiness in the head and body, muscle pain and soreness, fatigue, cough with scant phlegm, dry mouth with little intake of fluids, in some cases oppression in the chest and blockage/congestion in the middle of the torso (epigastrium), no sweating or difficulty sweating (feels like sweat cannot come out), in some cases nausea and poor appetite, diarrhea and loose stool, pale red tongue with a white, greasy coating; floating, slightly rapid pulse

**Treatment:** transform dampness and release toxins; diffuse the lung to vent the toxin;

**Formula:** Modified *Huo Po Xia Ling Tang* and *Xiao Chai Hu Tang*

<i>huoxiang</i> 10g <i>Agastache rugosa</i> (藿香)	<i>houpo</i> 10g <i>Magnolia officinalis</i> (厚朴)	<i>fa banxia</i> 10g <i>Pinellia ternata</i> , processed w\ licorice & lime (法半夏)	<i>fuling</i> 15g <i>Poria cocos</i> (茯苓)
<i>chaihu</i> 15g <i>Bupleurum</i> sp. (柴胡)	<i>huangqin</i> 10g <i>Scutellaria baicalensis</i> (黃芩)	<i>dangshen</i> 10g <i>Codonopsis pilosula</i> (黨參)	<i>xingren</i> 12g <i>Armeniaca amara</i> (杏仁)

yiwiren 20g <i>Coix lacryma-jobi</i> (生薏苡仁)	zhuling 10g <i>Polyporus umbellatus</i> (豬苓)	zexie 15g <i>Alisma plantago-aquatica</i> (澤瀉)	baidoukou 10g <i>Amomum kravanh</i> (白豆蔻)
dandouchi 10g <i>Glycine max</i> , processed (淡豆豉)	tongcao 10g <i>Tetrapanax papyriferus</i> (通草)	shengjiang 5g <i>Zingiberis officinalis</i> , fresh (生姜)	dazao 12g <i>Ziziphus jujuba</i> (大棗)

### Modifications:

For headache with distension in the head, add *manjingzi*, *baizhi*, *bohe*

For pronounced cough: add *mi* (honey mix-fried) *pipaye*, *zisuzi*

For copious phlegm add *gualou* and *zhebeimu*

For sore throat with swelling add *xuanshen*, *jiangcan*, and *shegan*

### ***Heat-evil obstructing the lung; lung loses ability to diffuse and descend***

**Symptoms:** fever or high fever; cough; phlegm that is yellow or thick; fatigue; headache; pain and soreness in whole body; dryness and bitter taste in the mouth; heart vexation (irritability); constipation and reddish urine; red tongue with yellow or yellow and greasy coat that is not moist (has no luster); slippery and rapid pulse

**Treatment:** clear heat and resolve toxins, diffuse the lung to vent pathogen

**Formula:** Modified *Ma Xing Shi Gan Tang* and *Da Yuan Yin*

zhi mahuang 8g <i>Ephedra sp.</i> , honey mix-fried (炙麻黃)	xingren 10g <i>Armeniaca amarum</i> (杏仁)	sheng shigao 30g Gypsum, unprocessed (生石膏)	sheng gancao 10g <i>Glycyrrhiza sp.</i> , raw (生甘草)
binglang 10g <i>Areca catechu</i> (檳榔)	houpo 10g <i>Magnolia officinalis</i> (厚朴)	caoguo 10g <i>Amomum tsaoko</i> (草果)	zhimu 10g <i>Anemarrhena asphodeloides</i> (知母)
baishao 10g <i>Paeonia lactiflora</i> (白芍)	huangqin 15g <i>Scutellaria baicalensis</i> (黃芩)	sheng gancao 5g <i>Glycyrrhiza sp.</i> raw (生甘草)	

### Modifications:

For sticky, hard to expel stools, one can add *Sheng Jiang San*

For severe phlegm and heat, or copious, yellow phlegm, add *sangbaipi*, *danpi*, and *shanzhizi*

For shortness of breath and fatigue along with pronounced thirst, one can use *xiyangshen* simmered and administered separately

## Middle Stage

### ***Damp-heat closes-down the lung; Fu-organ Qi [large intestine] is blocked***

**Symptoms:** fever; cough; copious, thick, yellow phlegm; chest oppression; wheezing; thirst; foul breath; constipation and distention in the abdomen; dar, red tongue with thick, yellow, turbid coating; slippery, rapid pulse or deep and tight pulse

**Treatment:** clear heat and diffuse lung; open the fu [large intestine] and drain heat

**Formula:** Modified *Xuan Bai Chengqi Tang* and *Huanglian Jie Du Tang*

<i>sheng mahuang</i> 8g <i>Ephedra</i> sp., honey mix- fried (炙麻黃)	<i>xingren</i> 12g <i>Armeniaca amarum</i> (杏仁)	<i>sheng shigao</i> 30g Gypsum, unprocessed (生 石膏)	<i>sheng dahuang</i> 10g <i>Rhei</i> sp., raw (生大黃)
<i>gualouren</i> 30g <i>Trichosanthes kirilowii</i> (瓜蒌仁)	<i>taoren</i> 10g <i>Prunus persica</i> (桃仁)	<i>chishao</i> 15g <i>Paeonia ovata</i> (草果)	<i>tinglizi</i> 20g <i>Eruca sativa</i> (葶苈子)
<i>huanglian</i> 3g <i>Coptis</i> sp. (黃連)	<i>huangqin</i> 10g <i>Scutellaria baicalensis</i> (黃芩)	<i>sangbaipi</i> 10g <i>Morus alba</i> (桑白皮)	<i>chonglou</i> 10g <i>Paris</i> sp. (重樓)
<i>danpi</i> 15g <i>Paeonia suffruticosa</i> (丹皮)	<i>yujin</i> 15g <i>Curcuma phaeocaulis</i> (郁金)	<i>shichangpu</i> 15g <i>Acorus tatarinowii</i> (石菖蒲)	<i>shengdihuang</i> 15g <i>Rehmannia glutinosa</i> (生地黃)
<i>xuanshen</i> 15g <i>Scrophularia ningpoensis</i> (玄參)			

### **Modifications:**

For more pronounced or severe constipation add *shengmangxiao*, *huzhang*

For expectorating yellow, dense, thick phlegm add *gualoupi* and *yuxingcao*

For heat-evils harming the fluids add *nanshashen*, *shihu*, *zhimu*, or *xiyangshen* (*Panax quiquifolius* 西洋參) simmered and administered separately

### ***Damp-heat harboring toxin; blocked and congested lung qi***

**Symptoms:** fever or sensation of heat in the body that does not dissipate; sweating that is not smooth [is not regular and feels blocked]; wheezing with rough breathing; dry cough or a choking cough, perhaps with pain in the throat; oppression in the chest and blockage/congestion in the middle of the torso (epigastrium); dry mouth with reduced fluid intake; bitter taste or feeling of stickiness in the mouth, sticky and stuck stool; dark-red tongue with a yellow-greasy coating; rapid and slippery pulse

**Treatment:** Clear heat and transform dampness, diffuse the lung and release toxins

**Formula:** Modified *Ma Xing Shi Gan Tang* and *Gan Lou Xiao Du Dan* with *Sheng Jiang San*

<i>sheng mahuang</i> 8g <i>Ephedra</i> sp., honey mix-fried (炙麻黃)	<i>xingren</i> 12g <i>Armeniaca amarum</i> (杏仁)	<i>sheng shigao</i> 30g Gypsum, unprocessed (生石膏)	<i>sheng gancao</i> 10g <i>Glycyrrhiza</i> sp. raw (生甘草)
<i>huashi</i> 12g Talcum (滑石)	<i>yinchenhao</i> 20g <i>Artemisia capillaris</i> (茵陳蒿)	<i>huangqin</i> 15g <i>Scutellaria baicalensis</i> (黃芩)	<i>baikouren</i> 10g <i>Alpinia katsumadai</i> (白蔻仁)
<i>huoxiang</i> 15g <i>Agastache rugosa</i> (藿香)	<i>fa banxia</i> 15g <i>Pinellia ternata</i> , processed w\ licorice & lime (法半夏)	<i>cangzhu</i> 15g <i>Atractylodes lancea</i> (蒼朮)	<i>tinglizi</i> 20g <i>Eruca sativa</i> (葶苈子)
<i>lianqiao</i> 15g <i>Forsythia suspensa</i> (連 翹)	<i>jiangcan</i> 5g Silkworm (僵蠶)	<i>chantui</i> 5g Cicada (蟬翼)	<i>jianghuang</i> 10g <i>Curcuma longa</i> (薑黃)
<i>sheng dahuang</i> 5g <i>Rhei</i> sp., raw (生大黃)	<i>chonglou</i> 10g <i>Paris</i> sp. (重樓)	<i>danpi</i> 15g <i>Paeonia suffruticosa</i> (丹皮)	<i>chishao</i> 15g <i>Paeonia ovata</i> (草果)
<i>yujin</i> 15g <i>Curcuma phaeocaulis</i> (郁金)	<i>shichangpu</i> 15g <i>Acorus tatarinowii</i> (石菖蒲)	<i>shengdihuang</i> 15g <i>Rehmannia glutinosa</i> (生地黃)	<i>xuanshen</i> 15g <i>Scrophularia ningpoensis</i> (玄參)

**Modifications:**

If heat is the most pronounced [evil], one can add *huanglian* and *yuxingcao*

If dampness is the most severe, add *fuling* and *peilan*

If dampness and heat are equally severe, add *huanglian*, *buzhaye* (布渣叶), and *yiyairen*

For liver and gallbladder damp-heat one can choose a modified version of *Long Dan Xie Gan Tang*

## Severe Stage

**Symptoms:** There is internal blockage and external separation [detachment] with high fever and agitation and vexation; cough with rough breathing that causes the nostrils to flare; sound of phlegm rattling in the throat; felling of suffocation and desperation; voice breaks when speaking; skin rashes with papules and spots appear; patient may lose consciousness or be delirious; sweating with cold limbs; dark-purple lips; dark-red tongue with a yellow-greasy coat; deep, fine pulse that seems about to give out

**Treatment:** benefit qi and return yang to secure what is separating

**Formula:** Modified *Shen Fu Tang*

<i>hongshen</i> 10g <i>Panax ginseng</i> , steamed (紅參)	<i>pao fuzi</i> 10g <i>Aconitum carmichaeli</i> , blast-roasted (炮附子)	<i>shanzhuyu</i> 30g <i>Glycyrrhiza</i> sp., raw (生甘草)	<i>maidong</i> 20g <i>Ophiopogon japonicus</i> (麥冬)
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*sanqi* 10g  
*Panax notoginseng*  
(三七)

### Modifications:

high fever with fright and delirium with reluctance to speak add *An Gong Niu Huang Wan* or *Zi Xue San*

For phlegm obscuring the heart orifice, *Su He Xiang Wan* can be given as a draught [briefly infused with water]

## Recovery Stage

### *Dual vacuity of qi and yin; latent pathogen has not been fully resolved*

**Symptoms:** fever is already gone or only a low-grade fever remains; fatigue; flustered; dry mouth; spontaneous sweating; abdominal distention; irregular bowel movements; pale-red tongue with a white coat or scant coat; vacuous [empty/scallion] and rapid pulse

**Treatment:** benefit qi and nourish yin to dispel the pathogen

**Formula:** Modified *Er Chen Tang* and *Wang Shi Qing Shu Yi Qi Tang*

<i>xiyangshen</i> 20g <i>Panax quiquifolius</i> (西洋參)	<i>shihu</i> 15g <i>Dendrobium</i> sp. (石斛)	<i>maidong</i> 20g <i>Ophiopogon japonicus</i> (麥冬)	<i>zhimu</i> 10g <i>Anemarrhena asphodeloides</i> (知母)
<i>danzhuye</i> 15g <i>Lophatherum gracile</i> (淡竹葉)	<i>huanglian</i> 3g <i>Coptis</i> sp. (黃連)	<i>gancao</i> 6g <i>Glycyrrhiza</i> sp. (甘草)	<i>fuling</i> 15g <i>Poria cocos</i> (茯苓)

<i>fa banxia</i> 10g <i>Pinellia ternata</i> , processed w\ licorice & lime (法半夏)	<i>juhong</i> 10g <i>Citrus reticulata</i> (橘紅)	<i>chenpi</i> 12g <i>Citrus reticulata</i> (陳皮)	<i>chao maiya</i> 30g <i>Hordeurn vulgare</i> (炒麥芽)
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### Modifications:

For pronounced cough: *beixingren* and *qianhu*

For pronounced dampness-turbidity: *sharen*, *cangzhu*, *houpo*

Fever with yin vacuity: *qinghao*, *digupi*, *shidagonglaoye* (十大功劳叶)

For dry mouth with pronounced thirst, add *xuanshen* and *tiandong*

For phlegm with blood in it, add *danpi*, *shanzhizi*, and *oujietan*

### Dual vacuity of lung and spleen

**Symptoms:** pronounced sleepiness and fatigue; flustered with heart palpitations; dry mouth; spontaneous sweating; poor appetite; abdominal distention; loose stools; pale and enlarged tongue with a white coat; deep, slow pulse with no force;

**Treatment:** build the spleen and benefit qi to dispel phlegm

**Formula:** Modified *Shen Ling Bai Zhu San*

<i>shengshaishen</i> 10g <i>Panax ginseng</i> , raw (simmered separately) (人參)	<i>chao baizhu</i> 15g <i>Atractylodes macrocephala</i> (炒白朮)	<i>fuling</i> 15g <i>Poria cocos</i> (茯苓)	<i>baibiandou</i> 30g <i>Dolichos lablab</i> (白扁豆)
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<i>sharen</i> 6g <i>Amomum villosum</i> (砂仁)	<i>lianzi</i> 30g <i>Nelumbo nucifera</i> (蓮子)	<i>zhi gancao</i> 6g <i>Glycyrrhiza</i> sp., honey mix-fried (炙甘草)	<i>jiengeng</i> 10g <i>Platycodon grandiflora</i> (桔梗)
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<i>shanyao</i> 15g <i>Dioscorea opposita</i> (山藥)	<i>yiwiren</i> 20g <i>Coix lacryma-jobi</i> (薏苡仁)	<i>chao maiya</i> 30g <i>Hordeurn vulgare</i> (炒麥芽)	<i>shenqu</i> 30g <i>Massa fermentata</i> (神曲)
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### Modifications:

For pronounced lack of appetite add *chaogumaiya*, *jiaoshanzha*

For damp-turbidity that binds and fetters, one can choose *cangzhu*, *shichangpu*, *baidoukou*

For pronounced sweating, add *mahuanggen*, *baishao*

For dry mouth with severe thirst, add *xuanshen* and *tiandong*

For those who also have blood separation (*xue tuo*), add *shengshaishen* and *ejiao*

For those who are flustered and have heart palpitations to a severe degree, add *danshen* and *yuanzhi*

For this condition, prevention is more important than treatment. When coming into contact with patients, wear a mask. Make sure your home has good air circulation, do not smoke or drink, maintain a pleasant mood and a good diet, avoiding spicy or pungent foods and anything that agitates fire and dries the fluids in the body. Secure and guard your upright, healthy qi.