

Yiji Parasitic Diseases Training Project

training successfully completed in mid-May 2021

fundraising successfully completed on 7 September 2021



340 primary school students receiving training on the diseases with a diagram showing the relationship between taeniasis and NCC and explaining how eating infected pork can lead to epileptic seizures and other NCC symptoms

The Diseases

- **Taeniasis** (*Taenia solium* tapeworm) and **neurocysticercosis** (NCC) are dangerous and highly prevalent diseases in Yiji Township, Muli County, Sichuan Province, China (Kham).
- *T. solium* taeniasis is caused by consumption of raw or undercooked, infected pork.
- *T. solium* taeniasis carriers can cause NCC, a brain disease that can cause debilitating symptoms which can be fatal. See WHO's diagram below, which shows relationship between taeniasis and NCC.

The Accomplishments

- **Dr. Li Tiaoying**, Sichuan CDC, Chengdu, is our long-time partner and an expert working on taeniasis/NCC for over 15 years.
- Yiji Township is a remote, mountainous, sparsely populated, agricultural area with few roads, 3700 Tibetan residents, 529 (extended) families, 3 villages, 18 clusters of homes, one primary school, and 9 kindergartens.
- Phase 1-May 2021: Dr. Li and Dr. Duan trained 340 Yiji Primary School students (1st-6th grade), 13 homeroom teachers, and 30 Yiji Township medical staff members and village cadres (government workers) on taeniasis (T) and NCC. The trainees demonstrated strong interest in the diseases.
- Phase 2-May 2021: Dr. Li and 5 other CDC staff members treated 200 Tibetans in rural Yiji for taeniasis with safe, effective Chinese herbal medicines. These patients were identified by trainees from Phase 1.

Disease Control Cost

\$15,048

Already Raised

\$15,048

Balance Needed

\$0

As of 7 September 2021



13 homeroom teachers receiving disease training



30 Yiji medical staff members and village cadres (government workers) receiving disease training



Dr. Duan Mian Chuan, Muli County CDC, (blue sweater) administering "smoothies" of Chinese herbal medicines to rural Tibetans for treating taeniasis



Ms. Pema Lhamo, Director, Yiji Township Clinic

Future Tasks

- Phase 3-June-October 2021: During their monthly home visits and summer holiday, the 340 students will continue to educate their (remote) families on T-NCC to improve their knowledge of the diseases, to change their risky behaviors, and most importantly to identify and document those who are passing tapeworms (for later treatment).
- Phase 4-June-October 2021: Dr. Li and Mr. Chen will perform lab work in Chengdu with blood serum, stool, and parasite samples collected in May.
- Phase 5-November 2021: Dr. Li, other CDC staff members, and the now-trained Yiji Township medical staff will continue taeniasis treatment (with Chinese herbal medicines) for Yiji residents and refer those, whose blood serum tested positive for NCC, for MRI brain scans and treatment.

The Cost

- Dr. Li can fund only Phases 2-5 from her own research funds.
- \$15,048 is the actual total cost of Phase 1, as detailed in the spreadsheet below.
- BLSCP transferred 50% of this amount to Dr. Li in early May. We have borrowed the other 50% from her research funds and will soon reimburse her so that she will be able to perform all of the tasks in Phases 4 and 5.

The Impacts

- This project will enable the 383 trainees to identify many new cases of taeniasis in 2021 and later years and refer them for treatment. In addition, many family members will be educated through the trainees delivering the related knowledge.
- Training all of the 340 primary school students was the key element of the project. This provided a way for the disease knowledge to reach the 3700 Tibetans living in the sparsely populated rural areas.
- Ms. Pema Lhamo, Yiji Township Clinic Director, witnessed the taeniasis treatment for 200 Tibetans. Seeing such a serious infection rate, she wants to perform future treatments herself. Dr. Li happily gave her the "smoothie" blender and unused medicines and will further support her efforts.
- Dr. Li and BLSCP have already discussed a concept for scaling up this project in April-May 2022 to five other townships of Muli County by using the same innovative, cost-effective methodology.

Disease Control Cost	\$15,048
Already Raised	\$15,048
Balance Needed	\$0

As of 7 September 2021

Boulder-Lhasa Sister City Project

HELPING TIBETANS IN TIBET

Your donation of any amount is important. Kindly give as generously as possible.

You may donate by credit card to Parasite Medical Program at boulder-tibet.org/paypal.html.

Checks may be mailed to BLSCP, 776 Cottage Ln, Boulder CO 80304-0758.

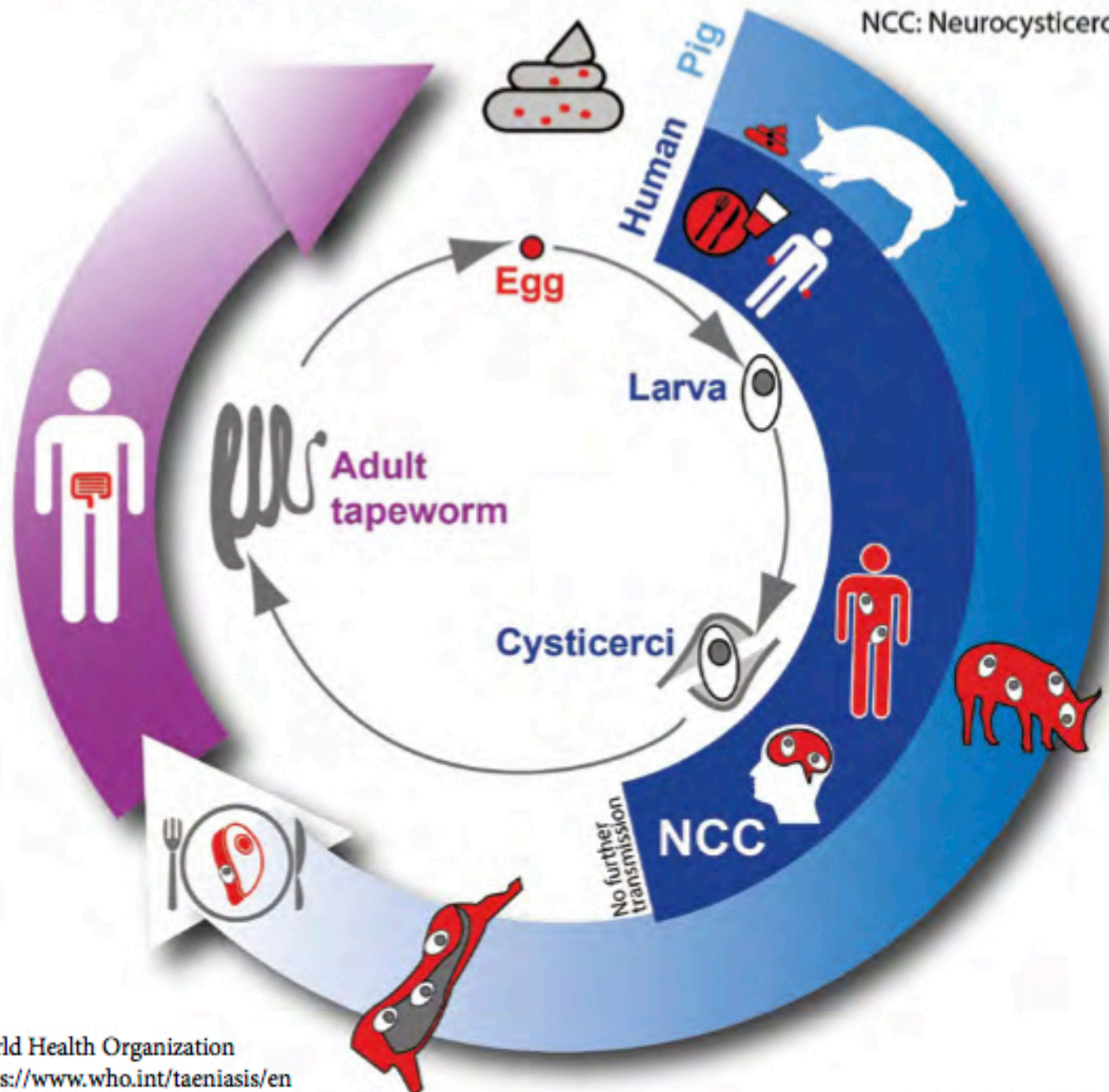


Taenia solium - Transmission and life-cycle

TAENIASIS

CYSTICERCOSIS

NCC: Neurocysticercosis



Actual Costs for Taeniasis/cysticercosis Training Project in Yiji Township		
Item	Cost	Total
Rental of two 4WD vehicles	160 USD/car/day	160*2*9=2,880 USD
Accommodations & meals for 6 CDC staff members	64 USD/person/day	64*6*9=3,456 USD
Allowances for 6 CDC staff members	48 USD/person/day	48*6*9=2,592 USD
Meals for 30 Yiji medical staff members and village cadres	32 USD/person/day	32*30*1=960 USD
Allowances for 30 Yiji medical staff members and village cadres	48 USD/person/day	48*30*1=1,440 USD
Allowances for 13 homeroom teachers in Yiji Primary School	48 USD/person/day	48*13*2=1,248 USD
Teaching materials for 30 adult trainees and 340 primary school students		2,280 USD
Accident insurance	32 USD/person	32*6=192 USD
	Total	15,048 USD