



## RANNUNG SEH NATNA (SCRUB TYPHUS) CHUNGCHANG

Rannung seh natna kan tihmai, *Scrub typhus* hi *Orientia tsutsugamushi* natna hrik in mihringa natna a thlen hi ani. *Tsutsuga* awmzia chu hlauhawm tihna a ni a, *mushi* tih chu Tuhrik (mites/chiggers) tihna a ni. Tuhrik (Trombiculid mites) te hian Transovarial (a puiin a note ah) leh transtadial (a note in a pui anih thleng an inhlanhhawng) transmission in heng natna hrik hi an kengkual thin a ni. He natna veite hi enkawl na mumal pek an nihloh chuan za a sawmthum velin an thihpui thin a ni. He natna hi Tuhrik *Scrub typhus* natna hrik pai in mi a seh atanga ni 10-12 chhungin a langchhuak thin ani. Mizoramah hian he natna hi Tuhrik te leh sazu te inthlahpunlai September atanga December thla chhung hian a hluar bik hle a ni. Mizorama sazu te enfahna neih tawhah pawh he natna hrik hi hmuhchhuah an ni.

### A THEHDARH DAN

*Scrub typhus* natna hrikte hian inthlahpun nan leh thanlen nan (reservoir), sazu lam chiho (rodents) te hi an hman a, heng sazute atang hian tuhrik in natna hrik chu lachhawngin mihringah an thehdarh ta thin ani. Tuhrikte hi an tehle a, chi (species) tamtak phei chu mitlawngin an hmuhtheihloh a ni. India rama he natna thehdarhtu tuhrik (vector) chu *Leptotrombidium deliense* ani a, Japan leh khawchhak lam ramah te chuan *Leptotrombidium akamushi* in a thehdarh thung ani. Mizoramah pawh hian *Leptotrombidium deliense* hian he natna hi a thehdarh mek ani.

### A LANCHHUAH DAN

Tlun/khur leh khawsik, nasa taka luna, mit vel sen remrum, thalthoh leh hnungzang vela thak bawl angte in he natna hi a rawn langchhuak thin a ni. Achang chuan tihrawl leh pumnate pawh a thlen bawka, anasat phei chuan thisenzam chat teleh thisenzam block te a thlenthei a, Pneumonia leh thawkna lama harsatnate pawh a thlen thei bawka a ni. *Scrub Typhus* natna hi thisen ekzam atangin a hmuhchhuah theiha, Mizoramah hian, Rapid Diagnostic Kits (ICT) te hi he natna hriatchhuah nana an hmanber a ni a, WHO leh Health Ministry lam chuan ELISA hmanga test hi an recommend thung ani.

### A ENKAWL DAN

*Scrub typhus* natna hi Antibiotic damdawi hmanga enkawl ani a, damdawi an hmanlar tak chu Doxycycline ania, Chloramphenicol pawh an hman bawka ani a, Rifampicin nen an pekpawl thin bawka. Naupang leh Nu naupailai ah chuan Azithromycin emaw Chloramphenicol emaw pektur a ni. He natna hi a invenna (vaccine) ala awmhrihlo a ni. Heng damdawi kan han tarlan tak te hi mahni thu a lo ei ve mai hi a him lova, Doctorte rawn pawht hi a thaber leh himber a ni.

### A INVEN DAN

He natna awmthinna leh a thehdarhtu tuhrik awmduhna hmun ah te chuan thawmhnaw hak uluk a ngai em em a, thawmhnaw taksa khuh tam thei ang ber hak tur ani. Rannung duhloh (insect repellent) damdawi, Odomos, Permethrin, Dibutylphtalate, te leh adangte thawmhnaw ah leh taksa langlai ah te ramchhuah dawnin inchulhtur a ni a, Hnimah teleh phulahte engmah phahlo in thut mai mai lohtur a ni. Inleh a velfai taka vawn reng hian nasa takin min veng thei bawka a ni. Rannung thahna hlo (Insecticides) kah a tangkai hle bawka ani.

### A CONTROL DAN

Heng a hnuai a thilpathumte hi he natna control nan hian an pawimawh hle a ni.

#### 1. *Rapid case identification*

A rang thei angber leh a hma thei angber a he natna hi damdawi lam thiamten an hriatchhuah hi a pawimawh em em a ni.

#### 2. *Public education*

Mipuite hnena he natna chungchang leh a kaichhawndante a tam thei angber zirtir a hrillfhiah a pawimawh hle a ni.

#### 3. *Rodent control and habitat modification*

Kan chenna hmunte, sazute tana khawsak remchanglo tura siam hian *scrub typhus* natna lakah nasa takin min veng dawn a ni.

## INTEGRATED DISEASE SURVEILLANCE PROGRAMME (IDSP)



## DENGUE NATNA CHUNGCHANG

Dengue tih thumal hi Sawahili tawng, **ka-dinga pepo** tih atanga lakchhuah ani a, Cramp-like seizure, tihrawl na avanga chetthat theihlohna ani ber ang chu. Flavivirus/Arbovirus natna hrik ten he natna hi an thlen a, Aedes thosi nu ten an thehdarh thung a ni. Dengue natna hi chi 2 a then a ni a, a nalo zawk chi dengue fever (DF) leh a nasa chi Dengue haemorrhagic fever/dengue shock syndrome (DHF/DSS) (WHO, 2009) a na chi zawk phei hi chu thihpui mai theih ani.

### A thehdarh dan :

Dengue natna hi Aedes thosi chi 2 *Aedes aegypti* leh *Aedes albopictus* ten an thehdarh a, *Aedes albopictus* hian South india lamah a thehdarh a, a bak state dangah chuan *Aedes aegypti* in he natna hi a thehdarh ani.

### A lanchhuah dan :

Dengue natna lanchhuahdan tlangpuite chu, khawsik, ruhchuktuah leh tihrawl na, mitchhunglam na/luna, thak/bawl, pumna etc. te a ni. Taksa atanga thisen chhuak te pawh a awm thei bawk ani.

### A hluar bik lai :

Dengue natna hi ruahtui tlakdan hian a hril thui hle a, June thla atanga November thla chhung hian a hluar bik hle a ni.

### A enkawlna lam :

Dengue natna atan hian damdawi bik a awm lemloh avangin, doctor ten damlo mamawh ang zelin enkawlna an pe thin ani.

### A invenna lam :

- Thosi seh tlang theihloh thawmhnaw phuitha tak hak.
- Thosi duhloh repellants, Odomos ang chi te inchulh.
- Thosilen rannung thahna hlo ngei a chiah (impregnated) zar.
- Thosi hnawtbo thei leh tihlumthei chhit chi hrang hrang, Allout, Tortoise, Goodnight etc. hman.
- Chhunah naupang emaw puitling emaw thosilen hnuaiah chauh mut thin tur ani.

### Aedes thosite tihrem/control dante :

#### a). Larval control (thosi note tihrem dante)

1. Source reduction : Dengue thehdarhtu thosite hi in leh avela tuitlem tlingreia inthlahpung thin an ni a, heng an pian duhna tuizem chhinphuiloh, pangpar pot, tyre chhia a tuitling, bur ruak, dispo cup a tuitling etc. te hi kan tihbo emaw thosi tui theihloh nana siam a tul ani.
2. Chemical control : Abate, Temephos granules etc. thosi note tihlum thei chemical te hi hman dan tur bituk ang thlap a hman tur ani. Tui in tur leh ei leh in siamnana hman ah chuan hman loh a him zawk ani.
3. Oils : Khawnvartui, Diesel, engine oil etc. thosi no awmna tuia leih in a tihlum thei bawk ani.
4. Biological control : Thosi note ei thin sangha (lavivorous fish) chi hrang hrang Gambusia ang chi te tui tamtham tlingreiah chuan khawi a tangkai hle ani.

#### b). Adult Control (thosi puitling tihrem dan te) :

- (i). Space spray/Fogging : Hei hi thosi puitling tihlum nana hman a ni a, pawnlam (outdoor) a thosi awmte thah nana hman ani ber.
- (ii). Knockdown spray/Total spray : Hei hi inchhunglam (indoor) a thosi awm te mihring huatloh damdawi hmanga kahna ani a, Dengue vei mekte inleh a chhehvel in kah nana hman ani.
- (iii) IRS/impregnation : DDT kah pawh hian nasa takin Aedes thosi puitling a tihlum thei a, thosilen chiah pawh hian thosi nasa takin a control thei ani.

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