## DISEASE: MALARIA

| Role profile | Competencies | Gaps in competencies | Gaps in information they need |
|---|---|---|---|
| **NS community health (non-clinical work) programme staff (non-emergency)** | Training in community health approaches for long-term health programming, not specific to emergencies | Specific adaptations needed for health emergencies, exposure to response approaches, tools, needs outside of sudden-onset natural disasters. Technical responses per disease type, understanding of epidemic profiles for each type of disaster (support for planning programming/health response) | Understanding of health impacts and timeline of natural disasters, tools and approaches available. How to plan for health needs immediately after sudden-impact disaster |

### Disease Tool 9.7 Malaria

| Fact Sheet | Importance | In 2016, 91 countries and areas had ongoing malaria transmission. The WHO estimates there were 216 million cases of malaria in 2016 and 445 000 deaths. Countries in Africa reported 90% of cases and 92% of deaths of malaria globally. Malaria epidemics do not generally occur in high-transmission areas (other than when there is migration of non-immune persons into these areas). This is because the population has developed partial immunity to the disease. Continuous exposure to malaria infection provides immunity in people after a certain age but this immunity is transient. People who remain uninfected over a short period (less than one year) become newly susceptible to the disease. Therefore, those living in areas of seasonal or low transmission do not develop adequate immunity and can be vulnerable to the disease every season. |
|---|---|---|
| | | Since epidemics occur in areas where populations have inadequate immunity, malaria cases can be high, with very high rates of morbidity and mortality. |
| | Risk assessment | Event description: type of disaster, characteristics of displacement |
| | | Host: community practices, cultural practices, chemoprophylaxis coverage |
| | | Agent: endemicity, recent epidemics, ongoing prevention and control interventions, disease incidence, mortality, seasonality |
| | | Environment: presence of vectors, shelter, availability and access to health and social care |
| | Vulnerable people | • Infants, children under five years of age<br>• Pregnant women<br>• People living with HIV<br>• Non-immune migrants, mobile populations and travellers |
| | How disease is spread (modes of transmission) | Vector-borne<br>• *Anopheles* mosquito bite<br>• The mosquitoes usually bite between sunset and sunrise during the night. |
| | Community case definition | A fever that goes up and down, with spells of extreme heat and shivering<br><br>Any person with fever in a malaria-endemic area<br><br>Any under-five child who has an illness with high fever and a danger sign<br><br>Danger signs include lethargy, unconsciousness, vomiting everything, convulsions, and in children less than five years, inability to drink or breastfeed) |
| | Community-level disease tools | • CBHFA module<br>• ECV disease tools (all relating to malaria) |

## Which interventions are most effective for prevention and control of malaria?

| Activity | Evidence of effectiveness | | | |
|---|---|---|---|---|
| | **High** | **Moderate** | **Low** | **No evidence** |
| (Referral for) Early and effective treatment (aligned with national anti-malarial drug policy) | ✔ | | | |
| Use of insecticide-treated bed nets (coverage must be at least 80% to be effective) | ✔ | | | |
| Use of insecticide-treated curtains | ✔ | | | |
| Indoor residual spraying | ✔ | | | |
| (Referral to) Intermittent prevention therapy (IPT) – infants and pregnant women | ✔ | | | |
| Social mobilisation and health promotion | ✔ | | | |
| Larvicide | | | ✔ | |
| Ultra-low volume aerosol spraying and fogging | | | | ✔ |
| Scrub removal around houses/communities | | | | ✔ |
| For malaria vector *Anopheles arabiensis*: Community application of "DEET" mosquito repellent to ankles and feet | | ✔ | | |

## Indicators and targets

The indicators and targets below can be adapted to specific contexts and should be used for monitoring and evaluation of: i) progress of the epidemic and characteristics, and ii) measuring Red Cross/Crescent activities.

| Indicator | Target |
|---|---|
| **Epidemic characteristics and progression** | |
| Malaria cases per week (population and children < 5 years) | # |
| Malaria deaths per week (population and children < 5 years) | # |
| Case-fatality rate in all malaria cases | % |
| Case-fatality rate in severe malaria cases | < 5% |
| Malaria parasite prevalence: children six months to five years with malaria infection | % |
| Districts above epidemic threshold | # |
| **Red Cross/Crescent activities** | |
| Number of volunteers trained | # |
| Suspected cases detected by volunteers and referred to health facility | # |
| Children < 5 years of age presenting with malaria receiving effective anti-malarial treatment within 24 hours of symptom onset | 100% |
| Insecticide-treated bed nets distributed to at-risk population | # or % |
| Population/children < 5 years/pregnant women who reported sleeping under a net the night before | % |
| Households that have installed window and/or door screens | # |

| Indicator | Target |
|---|---|
| Households that receive indoor residual spraying (specific time period) | # or % |
| Households that receive indoor residual spraying (specific time period) | # or % |
| Community campaigns conducted to eliminate mosquito breeding sites | # |
| Social and behaviour change communication (SBCC) plan developed | Plan available |
| Functional feedback mechanism in place | # and type |
| Households visited by volunteers (door-to-door visits) | # or % |
| People who attended group session held by volunteers | # |
| Radio spots/SMS messages/television spots broadcast | # |
| Respondents who correctly recall messages on symptoms/transmission/prevention/case definition for referral | % |

**Impact on other sectors and programme areas**

| Sector | High Impact | Medium impact | Low impact |
|---|---|---|---|
| WASH | ✔ | | |
| Food security | | | ✔ |
| Nutrition | | | ✔ |
| Shelter and settlements (including household items) | ✔ | | |
| Psychosocial support and mental health | | | ✔ |
| Restoring family links | | | ✔ |
| Education | | | ✔ |
| Livelihoods | | | ✔ |