This quick check list is to support UNHCR operations to prevent and reduce malaria through the distribution of Long-lasting Insecticide Treated Nets (LLIN).

**WHY LONG-LASTING INSECTICIDE TREATED NETS?**

An important programme for the prevention and reduction of morbidity and mortality caused by malaria is the use of LLINs.

<table>
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<th>LLINs nets function as a physical and chemical barrier and are proven to be an effective means of preventing malaria infection (by reducing malaria transmission) <em>if used consistently and properly</em>. Long-lasting insecticide treated nets (LLINs) are now accepted as the most cost-effective nets for malaria prevention because the protection they offer is twice as much as that provided by untreated nets. LLINs do not require re-treatment.</th>
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<td><strong>WHO recommends full coverage of all people at risk of malaria with LLINs. Nets have been shown to provide a community protective effect when 80% of the population are using the LLINs. At lower rates of coverage, LLINs have only an individual level effect on those sleeping under it.</strong></td>
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**WHO SHOULD RECEIVE A LLIN?**

Where malaria is endemic, UNHCR should ensure all refugees living in refugee camps or out of camp in rural and urban areas have access to LLINs.

UNHCR supported programmes should provide *one LLIN net per two persons.* Where this is not possible (e.g. delay in receiving nets, lack of transport, other logistical problems, or funding limitations), certain at-risk populations who are likely to get seriously ill or die from malaria should be prioritized:

- pregnant women
- children under five years of age
- all malnourished children
- people with chronic illness, including people living with HIV
Additionally, all UNHCR supported programmes should have **LLINs for all inpatient beds** in:
- clinics
- hospitals
- stabilization centres

**WHICH LLINS TO USE?**

Only **WHOPES approved nets** should be used. The list of recommended nets can be found at the following link, that is regularly updated by WHO: [http://www.who.int/whopes/Long Lasting insecticidal nets Jul 2011.pdf](http://www.who.int/whopes/Long Lasting insecticidal nets Jul 2011.pdf)

**Important note:**

All UNHCR tents are impregnated with insecticide according to WHOPES requirements. Therefore there is no need to distribute LLINs where UNHCR tents are used.

However, in emergencies where UNHCR tents are not available, and malaria is endemic, or there is a risk of malaria transmission, LLINs should be distributed through mass distribution campaigns.

**TIP:** LLINs can be used **indoors or outdoors**. Indoors, they can be suspended from walls or ceilings using string or guy ropes. Outdoors, nets can be supported on rounded poles.

**WHICH TYPE OF DISTRIBUTION METHOD TO CHOICE?**

1. **Targeted individual distributions during contacts** through antenatal clinics, immunization programmes, primary health care facilities, HIV services or nutritional feeding centers.

2. **Mass distribution campaigns** in the immediate emergency, can achieve rapid initial coverage if planned and implemented well. However, campaigns must include appropriate pictorial materials to ensure correct usage and community mobilization to ensure awareness of the campaign, acceptance, usage, and avoidance of sale.

3. **Mass distribution and hanging up campaign** in stable settings should be well planned door-to-door campaigns involving trained community health workers who, in addition to raising awareness, encourage net acceptance, assess individual household needs, distribute nets, support hanging of nets, and monitor correct usage post distribution.

Shortly after mass distribution campaigns, the net coverage will begin to drop if no additional nets are made available. Therefore any mass distribution should be routinely supplemented by targeted distribution to ensure that all pregnant women, malnourished children, children under-five, and people living with HIV sleep under insecticide treated nets.
WHAT IS THE ROLE OF THE REFUGEE COMMUNITY?

Lack of consistent and appropriate LLIN use, and sale are a problem where there are competing survival priorities, and adequate community engagement and education are not implemented. Knowledge, behaviour and practices in relation to LLINs and other public health interventions should be appropriately addressed and include community involvement.

Community investment and participation are essential for a successful malaria prevention campaign.

Community health workers (CHWs) play a critical role pre, during and post distribution including:
- household assessment (who is eligible, how many nets, which distribution point)
- dissemination of clear information on upcoming campaigns and benefits of nets (BCC)
- mobilization/acceptance by community through holding, for example, block meetings
- distribution
- demonstration and assistance in net hanging
- monitoring

Check with the Ministry of Health, the national malaria programme or other actors in the field of malaria, whether content and context appropriate awareness materials already exist / can be adapted before developing own materials.

Key messages on LLINs:
- Sleeping under a mosquito net is the best way to protect yourself and your family against malaria.
- Ensure that you and your entire family sleep under the mosquito net, every night all year round.
- It is important to hang the mosquito net properly: it must reach the ground so that you can be tucked under the mat or mattress. Ask a community health worker for help.
- These types of LLINs are “long-lasting insecticide treated, which means the insecticide lasts for the lifetime of the mosquito net. The mosquito net should not be re-treated.
- Wash your mosquito net once a month in plain water and let it dry in the shade.
- Sew any holes in the mosquito net carefully.
- Your LLINs needs to be replaced every 2-3 years.
- The mosquito nets are safe for children and pregnant women and any skin irritations are not serious and will disappear after a few days.
**Quick Check List**

**Distribution of Long-Lasting Insecticide Treated Nets in Refugee Situations**

**MALARIA PREVENTION**

**How and When to Plan for Mass Distribution and Hanging Up Campaign Mosquito Net Distribution?**

Plan well-organized campaigns ahead of the rainy seasons to ensure impact and sustainability (when to order, how the nets get to field, who is responsible for which step).

- **Determine the number of refugees to determine the number of nets and budget needs for the year ahead.**
- **Remember that unregistered refugees are eligible as long as they meet the household definition criteria.**
- **For mass distribution campaigns use coupons to account for each distributed net:**
  - During the assessment, trained CHWs hands out unique colour-coded coupons indicating the exact number of nets the household is entitled to and the location of distribution site to the head of household.
  - On the day of the distribution, a person from the household can collect the net(s) in exchange (and only then) for the coupon at the assigned distribution site (and only there).
- **Assign clear distribution sites** (health posts, food distribution points, school, etc.) and keep track/monitor number of coupons versus distributed nets.
- **Hand the nets to beneficiaries with the packaging removed** to minimize re-sale. Ensure proper waste management (retention, transport, burying, or incineration) of packaging.
- **Assess how households are using the nets 3-4 days after the LLIN distribution campaign.** The assessment also provides an opportunity for additional awareness and support.
HOW TO MONITOR AND EVALUATE MOSQUITO NET UTILIZATION?

The preferred method is the **UNHCR Standardized Expanded Nutrition Survey (SENS)** that has a module on LLIN coverage (Module 6: Mosquito Net Coverage). This and other guidelines can be found at [http://info.refugee-nutrition.net/survey-guidelines](http://info.refugee-nutrition.net/survey-guidelines).

If funding is available, a complete stand-alone malaria LLIN mosquito net coverage survey should be conducted.

WHICH REFERENCE MATERIALS ARE OUT THERE?

- Roll Back Malaria (RBM) [http://www.rbm.org](http://www.rbm.org)
- A toolkit for developing integrated campaigns to encourage the distribution and use of long lasting insecticide-treated nets. Alliance for Malaria Prevention 2008

IN SUMMARY

- Participation of the community is essential for acceptance of LLITNs.
- Awareness materials to convey messages to people must be clear, simple and culturally appropriate (involve the community to support the development of materials).
- Check with MOH, the National Malaria programme and other actors whether content and context appropriate awareness materials already exist / can be adapted before developing own materials.
- Plan ahead of the rainy season: procurement, delivery, the selection and training of distribution teams, assessment of households, distribution and hanging up of nets MUST be done before the rainy season begins.
- Frequency of mass redistribution is 2-3 years.
- Individual distributions to at-risk populations must be continuous.
- Key facilities such as clinics, hospitals, and feeding centers must always have good quality mosquito nets that are regularly replaced.
- In returnee operations, plan and ensure that families are provided with mosquito nets.
- Ensure the SENS module on mosquito net coverage is implemented.
- Advocate for the inclusion of refugees into national malaria programmes, strategies and funding proposals.