INTREM-GUIDELINE
FOR MULTI-SECTORIAL SCABIES OUTBREAK
EMERGENCY RESPONSE
ETHIOPIA

December 2015
# TABLE OF CONTENTS

**SUMMARY** .................................................................................................................................................. 3

1. **INTRODUCTION TO SCABIES** .................................................................................................................. 4

2. **PUBLIC HEALTH RESPONSE** .................................................................................................................... 6

   2.1. **HEALTH** ........................................................................................................................................... 6

   2.2 **WASH** .................................................................................................................................................. 10

   2.3. **COMMUNICATION** .............................................................................................................................. 10

   2.4. **NON FOOD ITEMS (NFI)** ................................................................................................................... 13

3. **COORDINATION** ........................................................................................................................................ 14

**ANNEX 1: Behavioral objectives, messages and approaches by segmented audiences**..15
**SUMMARY**

**Country:** Ethiopia

**Title:** Guideline to control and prevent scabies outbreak in Ethiopia 2015

**Rationale:** The impact of the severe drought in Ethiopia attributed to El Niño weather conditions ensuing high levels of malnutrition that increased the potential for diseases outbreak. Currently Ethiopia is experiencing scabies outbreak in drought affected areas where there is shortage of safe water for drinking and personal hygiene as a result of direct impact of the drought.

In this regard, the Federal Ministry of Health (FMOH) in collaboration with partners is planning to respond that aims to rapidly stop community level transmission of scabies outbreak using multi-sectoral intervention approach in affected and high risk woredas selected based on nutrition and scabies outbreak risk criteria. Planned interventions include Health, WASH and Communication for development.

**Goal:** To reduce morbidity and contained scabies outbreak.

**Objectives:** To provide multispectral response to the outbreak.

**Dates:** December 2015

**Implementer:** Federal Ministry of Health, Ethiopia

**Partners:** WHO, UNICEF, NFI cluster and other partners
1. INTRODUCTION TO SCABIES

Epidemiology

Scabies is a contagious ectoparasite of the skin caused by the mite Sarcoptes scabiei var. hominis. Approximately 130 million cases of scabies occur worldwide each year. The incidence of scabies can increase during natural and manmade disasters.

Life cycle scabies mites

Infestation begins when one or several pregnant female mites are transferred from the skin of an infested person to the skin of an un-infested person. After transfer from the skin of an infested person, or, rarely, from fomites, to the skin of an un-infested person, the adult female mite travels on the skin surface seeking a burrow site. At a suitable location, the pregnant female mite burrows into superficial layers of the skin, forming a slightly elevated narrow tunnel where it deposits eggs. The eggs progress through larval and nymphal stages to form adults in 10 to 17 days. The adults migrate to the skin surface and mate. The males die quickly and the females penetrate the skin and repeat the cycle. The mite requires human skin to complete its life cycle and is unable to survive off the host at room temperature for more than 2 to 3 days.

The severity of scabies infestation is directly related to the number of mites residing on the skin and the length of time between initial infestation and subsequent diagnosis and treatment. If diagnosis and treatment are delayed, the number of live mites multiplies resulting in heavier or atypical infestations.

Mode of Transmission

Scabies usually is spread by direct, prolonged, skin-to-skin contact with a person who has scabies. Contact generally must be prolonged; a quick handshake or hug usually will not spread scabies. Scabies is spread easily to sexual partners and household members. Scabies sometimes is spread indirectly by sharing articles such as clothing, towels, or bedding used by an infested person. An infested person can spread scabies even if he or she has no symptoms. Humans are the source of infestation and animals do not spread human scabies. On a person, scabies mites can live for as long as 1-2 months. Off a person, scabies mites usually do not survive more than 48-72 hours. Scabies mites will die if exposed to a temperature of 50°C (122°F) for 10 minutes.

Risk factors

Scabies affects people of all races and social classes. Scabies can spread easily under crowded conditions where close body and skin contact is common. Institutions such as schools, refugee camps, sanitarium and prisons are often sites of scabies outbreaks. Some immunocompromised, elderly, neurological disabled, or debilitated persons are at risk for a severe form of scabies called crusted, scabies. Persons with crusted scabies have thick crusts of skin that contain large numbers of scabies mites and eggs. The mites in crusted scabies are much more numerous (up to 2 million per patient).
Because they are infested with such large numbers of mites and therefore persons with crusted scabies are very contagious to other persons. The mite can survive for much longer than the conventional 2 to 3 days in the thick skin shade. So in addition to spreading scabies through brief direct skin-to-skin contact, persons with crusted scabies have also a high probability to transmit scabies indirectly by shedding mites that contaminate items such as their clothing, bedding, and furniture. Persons with crusted scabies should receive quick and aggressive medical treatment for their infestation to prevent outbreaks of scabies.

**Case Definitions and Outbreak Definition**

- **Suspected case**: A person with signs and symptoms consistent with scabies.
- **Confirmed case**: A person who has a skin scraping in which mites, mite eggs or mite feces have been identified by a trained health care professional.
- **Contact**: A person without signs and symptoms consistent with scabies who has had direct contact (particularly prolonged, direct, skin-to-skin contact) with a suspected or confirmed case in the two months preceding the onset of scabies signs and symptoms in the case.

**Clinical Features**

**Incubation Period and Period of Infectivity**

Symptoms of scabies typically begin three to six weeks after primary infestation. However, in patients who have previously been infested with scabies, symptoms usually begin within one to three days after re-infestation, presumably because of prior sensitization of the patient's immune system. Infested persons can transmit scabies, even if they do not have symptoms, until they are successfully treated and the mites and eggs are destroyed.

**Signs and Symptoms**

The characteristic symptoms of a scabies infection include superficial burrows, intense pruritus (itching) especially at night, a generalized rash and secondary infection. Acropustulosis, or blisters and pustules on the palms and soles of the feet, are characteristic symptoms of scabies in infants. Itching and rash may affect much of the body or be limited to common sites. Scabies can develop anywhere on the skin. The distribution of scabies usually involves the sides and webs of the fingers, the flexor aspects of the wrists, the extensor aspects of the elbows, anterior and posterior axillary folds, the skin immediately adjacent to the nipples (especially in women), the periumbilical areas, waist, male genitalia (scrotum, penile shaft, and glans), the extensor surface of the knees, the lower half of the buttocks and adjacent thighs, and the lateral and posterior aspects of the feet. The back is relatively free of involvement, and the head is spared except in very young children. Mites also like to burrow in skin covered by a bracelet, watchband, or ring.
**Scabies in children**

Some children develop widespread scabies lesion. The scabies rash can cover most of the body. Even a child’s palms, soles, and scalp can have skin manifestation. In infants, the rash often appears on the palms and soles. Infants who have scabies are very irritable and often do not want to eat or sleep. Children, too, are often very irritable. The itch can keep them awake at night.

**Crusted scabies**

Crusted scabies is a severe form of scabies. People Crusted scabies develops in people who have a weak immune system due to a medical condition, neurologic problem and the elderly. Crusted scabies develops when the person’s body cannot develop any resistance to the mites. Without resistance, the mites quickly multiply. A common sign of crusted scabies is widespread crusts on the skin. These crusts tend to be thick, crumble easily when touched, and look grayish in color. Sometimes the crusts appear on 1 or a few areas of the body such as the scalp, back, or feet.

**Possible Complications**

The direct effect of scabies is debilitating itching, leading to scratching, which is in turn followed by complications due to bacterial infection of the skin, ranging from impetigo, abscesses and cellulitis, through to sepsicaemia, renal failure and possibly rheumatic heart disease.

**Diagnosis of scabies**

Diagnosis of a scabies infestation usually is clinical, made based upon presence of the typical rash and symptoms of unrelenting and worsening itch, particularly at night. The definitive diagnosis is made when evidence of mites is found from a skin scraping test. By scraping the skin (covered with a drop of mineral oil) sideways with a scalpel blade over an area of a burrow and examining the scrapings microscopically, it is possible to identify mites, eggs, or pellets.

2. PUBLIC HEALTH RESPONSE

2.1. HEALTH

**Case management:**

The following assumptions should be used for case management

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Treatment strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>In villages or kebeles or woreda with prevalence &gt; 15%</td>
<td>Treat all the people in the village/kebele/woreda (mass treatment contacts and other community members except children&lt;2 yrs, Pregnant women and lactating mothers).</td>
</tr>
<tr>
<td>In villages or kebeles or woreda with prevalence &lt; 15%</td>
<td>Treat cases individual cases and contact (family member) and contacts.</td>
</tr>
</tbody>
</table>

*NB: Average number of contacts for each case is assumed to be 5 people, i.e. household members. All persons should be treated at the same time to prevent infestation and contained the outbreak. A family member with who doesn’t have itching doesn’t mean he did not have scabies.*

Treatment campaign should be organized at the sub village (Gote) level closer to the household. Communities are mobilized using community mobilizers to come to the site for treatment. During the treatment campaign, community need to be aware and practice the prevention methods,
including hygiene practice during and after treatment such as cleaning clothes, sleeping materials and houses, etc. Individuals affected by the disease has to be advised the cut (clip) their nail. Water availability for personal hygiene is crucial for effective control of the outbreak.

**Drugs used for management of scabies**

There are two routes of anti-scabies drugs application to treat scabies

1. **Systemic or oral scabicide in the form of tablets:** Ivermectin
2. Application of a topical scabicide in the form of ointments, lotions, or cream. 5% Permethrin, 12.5 to 25% Benzyl Benzoate Lotion and Sulfur (5%-10%) ointment

There is increasing interest in the use of oral ivermectin. Evidence from the country are showing best results are obtained by treating the whole household at the same time.

Scabicide drugs used for topical application should be applied to all areas of the body from the neck down to the feet and toes. In addition, when treating infants and young children, also should be applied to their entire head and neck because scabies can affect their face, scalp, and neck, as well as the rest of their body. The scabicide should be applied to a clean body and left on for the recommended time before washing it off. Clean clothing should be worn after treatment.

As the symptoms of scabies are due to a hypersensitivity reaction (allergy) to mites and their feces (scybala), itching may continue for two to four weeks after treatment even if all the mites and eggs are killed and anti-histamines can be used as described below.

If itching still is present more than 4 weeks after treatment, re-treatment is required.

Secondary Skin infection including impetigo or bullous should be treated with an appropriate oral antibiotics as described below.

**First-line treatment to contain the scabies outbreak.**

1. **Ivermectine**
   - For > 2 years of age or 15 kg, adults except pregnant women and lactating mothers:
   **Dosage**
   - 200 micrograms/kg once orally for all except children less than 2 years old or 15 kg body weight, pregnant mothers and breast feeding women. Repeat the treatment after 2 weeks.

<table>
<thead>
<tr>
<th>Weight</th>
<th>Age</th>
<th>3 mg tablet</th>
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<tbody>
<tr>
<td>12.5 to 25</td>
<td>2 to 6</td>
<td>1</td>
</tr>
<tr>
<td>25 to 35</td>
<td>7 to 12</td>
<td>2</td>
</tr>
<tr>
<td>35 to 50</td>
<td>13 to 18</td>
<td>3</td>
</tr>
<tr>
<td>Above 50</td>
<td>Above 18</td>
<td>4</td>
</tr>
</tbody>
</table>

   **NB:** Ivermectine tablets and Benzyl Benzoate Lotion (BBL) are contraindicated for pregnant and lactating women and children under 2 years of age or <15kg

Ivermectine is very safe and effective anti-parasitic agent. Two rounds of MDA within roughly a two week period have the highest cure rate than other regimens. Below is the list with the most
common side effect of Ivermectin. Participants must be asked if they have any of this before the first and second dose. If there are no side effects, just write NO in the MDA form.

1. Headache
2. Dizziness
3. Itch
4. Tummy pain
5. Nausea
6. Vomiting
7. Diarrhea
8. Fever
9. Other

2. Permethrin 5% lotion/cream /ointment
   - For all except for infant less than 2 months of age.

Dosage:

- Full tube of 30 ml for all adults. Half tube for children. Second dose will be applied after one week. How to apply:
- Thin film of cream is applied on the whole body once and repeat after one week. All the skin below the neck should be treated, including the genital, inter-gluteal space, palm and soles and under the nails. Treat the head and neck regions in infants (up 2 month to the age of 2 years). Wash after 8-14 hours and repeated after one week.
- Side effect of Permethrin; Allergic contact dermatitis and rarely irritation

NB: If Permethrin is not available, use sulfur ointment. Benzyl Benzoate Lotion (BBL)

Second-line treatment to contain the scabies outbreak.
1. Benzyl Benzoate Lotion (BBL):

Dosage:

- One bottle of 100 ml BBL will be enough for 3 days whole body application for adult and leave on for 24 hour before washing off.
- For adult :- 25% Benzyl Benzoate Lotion (BBL) once per day for 3 days or (not recommended for pregnant women and lactating mothers)
- For children above 2 years of age up to 6 -12.5% Benzyl Benzoate Lotion (BBL) once per day for three days.

How to apply:

- All the skin below the neck should be treated, including the genital, buttock, palm and soles and under the nails. After application, the patient’s hands can be washed before eating food (not just after application). In case if the mother breast feed her child she may be forced to wash her hands, provided that she has to be re-apply the treatment again accordingly.
- Side effect of Benzyl Benzoate Lotion (BBL); Irritation, allergic contact dermatitis and rarely neurotoxicity

2. Sulfur (5%-10%) ointment – For all specially for children under 2 years, pregnant mothers and breast feeding women
Dosage: -
- For children under 10 year: 1 tube (50gm) of 5% sulfur apply once per day for three days, leave on for 1 day before washing off.
- For children above 10 years old and adult: 2 tubes of 10% sulfur will be needed for three days whole body applications. Leave on for 1 day before washing off

How to apply:
All the skin below the neck should be treated, including the genital, buttock, palm and soles and under the nails. Treat the head and neck regions in infants (up to the age of 2 years).
Side effect of Sulfur; messy, malodorous, irritation and allergic contact dermatitis.

3. Permethrin 5% cream or lotion:
Dosage:
- For children under 2 years 1 tube (30 ml) of 5% permethrin need to apply the whole body once. All the skin below the neck should be treated, including the genital, inter-gluteal space, palm and soles and under the nails. Apply on the head and neck regions and Wash after 8 hours. Repeated after one week. After application, lactating mother has to wash her hands before breast feeding the child. She has to re-apply the treatment on her hands after feeding.
- For children above 10 years old and adult: 2 tubes of 5% permethrin of 30 ml will be needed. Apply once the whole body, leave on for 1 day before washing off. After application, hands can be washed, if there is a need to eat before 8 hours but has to be re-applied after eating. Repeat after one week.

Treatment of crusted scabies:
- Both oral and topical agents should be used together.
- Ivermectin should be administered together with a topical agent.

Dosage:
Oral ivermectin (200µg/kg/dose) should be taken with food. Depending on infection severity, ivermectin should be taken in three doses (day 1, 2, and 8)

NB: Use of insecticide sprays and fumigants is not recommended.

Treatment of secondary infections
Secondary management involves prompt treatment of the complications of scabies, such as impetigo using appropriate antibiotics or antiseptics.

**Recommended antibiotics**

**First line antibiotic**
- Cephalexin

Dosage
- For children25-50 mg/kg/day orally in 3-4 divided doses for 7days,
- For adults 500mg orally every 6 hourly for 7 days

If Cephalexin is not available use Amoxicillin
- For children25-50 mg/kg/day orally in 3-4 divided doses for 7days,
- For adults 500mg orally every 6 hourly for 7 days

**2nd line antibiotic**
- Cloxacilin 25-50 mg/kg/day for 7days (Preferred drug for bullous form of skin lesions)

Treatment of Hypersensitivity reaction

**First line**
- Phenergan po 25 mg once per day (for adult)
- Diphenhydramine 2 – 50 mg cap PO Every 6 hourly

**Alternative**

- Chlorpheniramine, 4 – 6 my PO every 6 hourly

**Reasons for failure of control measures**

1. The following from the body during the treatment period, failure to follow to scabicide directions and failure to apply treatment to the entire body.
2. Continued exposure to infested persons due to failure to identify cases.
3. Continued exposure to infested materials such as bedding, clothing, , and furniture Failure to identify reasons may attribute to the failure of control measures.
4. Inadequate treatment application which includes failure to reapply medication after it has been removed
5. and report symptomatic patients
6. Failure to properly identify and monitor close contacts of cases
7. Suppressed immune response to scabicide due to immunocompromised status

Any identified control measures that have not been followed should be corrected immediately. If any of the above reasons for control measure failure is identified, re-administration of scabicide may be necessary.

**Coordination of Mass Drug Administration (MDA) and Monitoring**

The MDA will be done using the guideline of Zithromax campaign for the coordination. Post treatment Surveillance of the effectiveness of the campaign in 6 weeks time after the first does is mandatory.

### 2.2 WASH

Considering scabies as a water washed disease, the key intervention is the provision of access to sufficient safe water for personal hygiene:

- Washing of clothing
- Washing of body using soaps especially the affected areas
- Appropriate hand washing at critical times
- Clothing or bedding that were used by an infested individual during and before effective treatment should be dried for 3 days in the sun to allow time for mites and eggs to die.

All patients and their contacts coming to mass treatment center or health facility will be provide with body and laundry soap irrespective of water availability at household levels. In addition to this, Patients will be also advised to buy and use soap for personal hygiene

- a. Body Soap: 1/per person /month
- b. laundry soap : 1/per person /month
- c. Appropriate messages on personal hygiene practices
- d. Sun drying of clothing and beddings for at least 3 days

### 2.3. COMMUNICATION

The C4D strategy emphasizes the need for multi-sectoral coordination and response to contain the spread of the epidemics. The Communication strategy for scabies prevention needs an
integrated and multi-level intervention comprising advocacy, social mobilization, social and behavioral change communication at different levels and capacities.

The C4D strategy proposes a mix of multi-level social and behavior change communication approaches targeting various groups as briefly described below:

The immediate response focus on a mix of social mobilization and BCC campaign as briefly outlined below:

- **Social Mobilization:** undertake sensitization meetings at Regional and Woreda level, convening key actors (including schools, CBOs, and religious institutions) that can mobilize their respective groups in promoting prevention education and communicating on mass treatment days.
- **BCC campaign: focus on 3 elements:**
  - Use Audio Vans to disseminate information on treatment days and key prevention messages.
  - Disseminate key messages through regional/community media (See attached 2 radio spot messages in 3 languages, and select your preferred language).
  - Disseminate the available Job aids for HEWs, illustrative foldable posters to HDA/WDA/DAs to support interpersonal communication (see attached job aid messages).

Follow-up response by main strategies:

1. **Advocacy - Sensitization of key actors/advocacy:**

   **In this strategy,** aim at ensuring government leadership in coordination and monitoring of prevention intervention by engaging respective sectors and organizations. Hence:
   - Organize a sensitization workshops/meetings at different levels, together with the other emergency response taskforce and technical working groups.
   - Engage sectors, including health, water, education and DPPA in the advocacy workshops
   - In the workshops focus on enhancing understanding of current prevalence, multi-dimensional impact of the outbreak.
   - Following the sensitization sessions and discussions, allow the respective actors to prepare and produce an integrated cross-sectoral prevention and response intervention operational plan, specified by responsible actors, and agree on the implementation, and agree on the implementation modality.

**Potential Advocacy Participants**

- Decision makers in the government, Command Post, non-government, FBOs and CSOs at different levels and capacities.

**Interventions:**

- Sensitization meetings/workshops at regional level
- Woreda and Kebele to enhance coordination and
- management of sensitization meetings at regional level

**Use the following required resources for Advocacy:**

- Fact Sheet on current scabies situation, prevention and control aspects
- Advocacy material for government/non-government officials, religious and other related community influential leaders.

2. **Social Mobilization**
The General aim is at enlisting the participation of key institutions like community networks/CBOs and religious groups to use their membership and other resources to strengthen participation in prevention activities at the community level.

- Use the Women Development Army and/or the Health Development Army structures that are instrumental to engage large number of populations through ongoing dialogue. Use religious institutions and influential Community Based Organizations, in order to critically concrete the effort towards behavior change communication and action.
- Conduct sensitization meetings, engaging all the concerned, such as: GOs/NGOs, CSOs, RBOs and share them key messages and draw joint commitment of actions, aligned with the advocacy actions, and more.

Immediate Potential Participants for Social Mobilization:
- School Community (PTA, Clubs, Mini-Media)
- Religious institution
- Health/Women Development Armies

Interventions:
- Orient Health Extension Workers on Case management and prevention. Moreover, introduce specific sessions to be included on social/community mobilization, awareness raising and behavioral change communication for scabies prevention. (Note: the orientation will not require an exclusive budgeting from C4D as it’s part of the case management)
- Use the attached ready job aid to help health extension workers understand the major curative and preventive steps and actions. This tool serves you a dual purpose, one for HEWs to take appropriate actions to contain the epidemic and two, to mentor and coach the HDA/WDAs under their supervision
- Disseminate Scabies prevention material that help HDAs/WDAs and religious leaders to conduct effective community mobilization on scabies prevention through community gathering, community conversation, religious sermons and house to house visits
- Disseminate Scabies prevention brochures to school community (PTAs, school clubs and mini-medias) for wider information sharing and to create multiplying effects in their respective families and their neighbors.

The following are the required resources for use and reference:
- Job Aid for Health Extension Workers
- High pictorial A3 size foldable material
- Brochure (with illustration and detail text) – A3 and foldable
- Short Audio Messages for school mini-media

3. Social and Behavior change Communication (SBCC)
The main purposes of the behavioral change communication is;
- To bring about improved knowledge and awareness on scabies epidemics, prevention and treatment mechanisms,
- To increase the level of acceptance on the nature of the disease and
- To motivate the community to dialogue and come up with informed practice appropriate prevention and curative actions.

Focus on influencing knowledge and attitude, adoption of appropriate hygiene and care practices and tackling of misconceptions at individual and family levels.
In this strategy, don’t stick to one channel and media in order to attain the SBCC purposes, deploy a mix of SBCC approaches, including interpersonal communication/dialogue, mini-media, such as school mini-media, mobile vans and loudspeakers, mass media campaigns to reach children in schools, families and the concerned communities at large, based on the agreed and prepared required resources, listed below, and attached. Immediate potential participants are (where by you expand as need to include others):

- The community at large in scabies affected Kebeles and neighboring Kebeles
- Scabies affected individuals and families

**Interventions:**

- Create awareness using mobile audio-visual vans, using same prepared audio messages, deploy the vans during mass treatment days/community gatherings to complement message retention and encourage action
- Disseminate Scabies prevention audience high pictorial materials. Hand the materials to the community during community conversations and other community mobilization interventions.
- Disseminate the prepared poster to amplify scabies prevention core messages and post in the public gathering areas like market places, football fields, schools, health post, churches, mosques and other public service sites
- Disseminate audio messages through community and local radio stations (see the attached radio messages)

**SBCC required references/resource:**

- High pictorial A3 size foldable material
- Poster
- Audio Message

**Capacity building** - Focus on enhancing the skills of key actors (like HEWs, HAD/WDA)

### 2.4. NON FOOD ITEMS (NFI)

The objective of NFI response is to improve access to hygiene and sanitation kits, water collection and storage materials, changing cloths to address specific needs of women, men, boys, girls, elderly and disabled which are the most vulnerable community members to cope from and better prevent scabies transmission. The flowing are

1. **Provision of personal hygiene and sanitation options**
   a. Provide dignity kit to woman and girls in reproductive age group (15-49 years of age) (sanitary pad and underwear)
      - Sanitary Pad-3packs and 3pcs underwear /person/month
   b. Provide Sanitary towel, diaper, sanitizer and wiper to pregnant, lactating, skin sores( patients with secondary infection)
      - 5 Sanitary towel, 5 diaper packs, 2 liquid sanitizer bottle and 5 wiper/person/month

2. **Provision of clothing and night wears**
   a. Clothing for children, elder, woman
   b. Bed sheets and blankets for vulnerable households
   c. Shoes and sandals
   d. Safe disposal of infected clothing and beddings
Partners working on scabies response should access Health, WASH, C4D and NFI supplies from RHBs or ZHOs or woreda health offices and provide reports to respective offices where they received the supplies.

### 3. COORDINATION

Multi-sector coordination is critical to ensure scabies treatments are effective rather than considerable efforts of sectors individually. As multi sector coordination is the responsibility of Regional zonal woreda health and sector office at all levels; tremendous efforts needed at the regional level with support from NGOs to strengthen the coordination at woreda level through the existing structure to avert the spread of scabies. In addition, it is important to have coordination meetings to share information, who does what, where and when specific to scabies response so that the gaps can be addressed timely based on the identified gaps.

International NGOs are encouraged to partner with local NGO’s and or authorities and strengthen their capacities. Support system strengthening should be provided to government facilities as well as NGO supported facilities in scabies affected regions, zones, woredas and health facilities. All partners are expected to attend relevant cluster meetings to ensure a coordinated response.
# ANNEX 1: BEHAVIORAL OBJECTIVES, MESSAGES AND APPROACHES BY SEGMENTED AUDIENCES

<table>
<thead>
<tr>
<th>Audience segmentation</th>
<th>Behavior Change Objectives/Desired Behaviors</th>
<th>Action Oriented Key Messages</th>
<th>Approaches/Strategies</th>
<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families and communities affected by scabies</td>
<td>- Increase knowledge and skills on appropriate and preventive and treatment actions</td>
<td><strong>Cause</strong>&lt;br&gt;Scabies is not a curse, it is a disease caused by a microscopic scabies mite that burrows into the upper layer of the skin where it lives and lays its eggs.</td>
<td>• Inter personal communication and counseling</td>
<td>• IPC through HDAs</td>
</tr>
<tr>
<td></td>
<td>- Tackle misconceptions related to scabies</td>
<td><strong>Symptoms</strong>&lt;br&gt;The most common symptoms of scabies are intense itching and a pimple-like skin rash. If not treated, it causes massive infection and other internal complications.</td>
<td>• Mass media</td>
<td>• Local media during mass treatment days/Audio vans</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Risk factors</strong>&lt;br&gt;Direct skin-to-skin contact with an affected person, poor hygiene and overcrowded conditions and poor nutrition</td>
<td>• Print media</td>
<td>• Posters/brochures for general public and illustrative materials for HDAs</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Transmission</strong>&lt;br&gt;Scabies is spread by direct, prolonged, skin-to-skin contact with a person who has scabies. Scabies is spread easily to sexual partners and household members. Scabies sometimes is spread indirectly by sharing articles such as clothing, towels, or bedding used by an infested person.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>Treatment</strong>&lt;br&gt;- Always follow carefully the instructions provided by the health worker and complete medication as ordered&lt;br&gt;- The day you start treatment, wash your clothes, bedding, towels, and washcloths. Take a bath or shower before you apply the medicine.&lt;br&gt;- When treating adults and older children, apply the medication cream or lotion to all areas of the body, from the neck down to the feet and toes;&lt;br&gt;- When treating infants and young children, apply the cream or lotion to the head and neck.&lt;br&gt;- Leave the medication on the body for the recommended time before it is washed off.&lt;br&gt;- Wear clean after treatment.&lt;br&gt;- Leave used clothes out in the sun for at least 4 days before using again</td>
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<td></td>
<td><strong>Prevention/Control the spread</strong>&lt;br&gt;<strong>Personal hygiene</strong>&lt;br&gt;- Wash hands with soap before and after contact with infected body&lt;br&gt;- Improve personal hygiene&lt;br&gt;– Treatment is recommended for household members and sexual contacts, in addition to the infected person particularly those who</td>
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<td><strong>IPC through HDAs</strong>&lt;br&gt;<strong>Local media during mass treatment days/Audio vans</strong>&lt;br&gt;<strong>Posters/brochures for general public and illustrative materials for HDAs</strong></td>
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</tr>
</tbody>
</table>
have had prolonged skin-to-skin contact with the infested person.
- All persons should be treated at the same time in order to prevent re-infestation.
- Retreatment may be necessary if itching continues more than 2-4 weeks after treatment or if new burrows or rash continue to appear.
- Never use a medications intended for veterinary or agricultural use to treat humans
- Houses need to be cleaned - carpets and similar items) should be put on the sun on the day you start treatment.
- All clothes including bed sheets and blankets that are in contact with scabies infected individuals should be washed in boiling water and detergent and put in the sun for four days
- Where water is scarce; Leave all clothes including bed sheets and blankets that are in contact with scabies infected individuals out in the sun for at least 4 days

### Secondary participant groups

<table>
<thead>
<tr>
<th>Key influential networks, CBOs, religious networks</th>
<th>Ensure the participation of key institutions like community networks/CBOs and religious groups to use their membership and other resources to strengthen participation in prevention activities at the community level</th>
<th>- Current status, - Risk factors, - Prevention and control mechanisms - What the key community level networks can do to stop the outbreak</th>
<th>Social mobilization through sensitization meetings, orientation, dissemination of BCC materials</th>
<th>Sensitization meetings Fact sheets, Brochures</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEWs//HDAs</td>
<td>Equipped with necessary knowledge and skills to undertake interpersonal communication and to train HDAs</td>
<td>- Risk factors - Prevention and control mechanisms - Prevention and control mechanisms - facilitation tips</td>
<td>Capacity building</td>
<td>Job aids for HEWs Illustrative materials for use by DAs/HDAs/ WDAs</td>
</tr>
</tbody>
</table>

### Tertiary participant groups

| Regional and Woreda sector bureaus (health, education, water, DPP) | Support coordinated prevention interventions | | | |