**Information Bulletin N° 1**

**Central America: Dengue Outbreak**

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**Information Bulletin N° 1**

<table>
<thead>
<tr>
<th>Date of issue:</th>
<th>23 August 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of disaster:</td>
<td>Ongoing since June 2018</td>
</tr>
<tr>
<td>Point of contact:</td>
<td>Gonzalo Atxaerandio: Disaster Management Coordinator - Central America and Recovery focal point: <a href="mailto:gonzalo.atxaerandio@ifrc.org">gonzalo.atxaerandio@ifrc.org</a></td>
</tr>
</tbody>
</table>

**Category allocated to the disaster:** Orange

**National Societies currently involved:** Guatemala Red Cross (GRC) Honduras Red Cross (HRC) Nicaragua Red Cross NRC, El Salvador Red Cross (SRC) Costa Rica Red Cross CRRC and Panama Red Cross (PRC).

**N° of other partner organizations involved:** Canadian Red Cross, European Community Humanitarian Aid Office (ECHO), Spanish Agency for International Development Cooperation (AECID), Pan American Health Organization (PAHO).

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*This bulletin is being issued for information only; it reflects the current situation and details available at the time.*

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**The situation**

According to the Pan American Health Organization (PAHO), in the first 30 epidemiological weeks of 2019 in the Americas Region, there were 2,052,914 dengue cases (12,268 classified as severe), including 740 deaths. The number of cases reported is higher than the annual totals reported in the last two years (2017 and 2018). In 2018, there were 560,586 reported cases of dengue and 336 deaths.¹

PAHO has warned that this latest cycle of dengue outbreak in the region is of particularly concern because children under the age of 15 are among the most affected. Additionally, the deadliest of the four serotypes of the virus, DEN-2 is the one currently affected children and adolescents. The ten countries most affected by dengue (highest incidence) are currently: Nicaragua, Brazil, Honduras, Belize, Colombia, El Salvador, Paraguay, Guatemala, Mexico and Venezuela.

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*Photo 1: Fumigation sessions by Honduran Red Cross volunteers in Llano del Conejo in Santa Bárbara, Honduras supported by DREF funds. Source: Honduras Red Cross, August 2019.*
The number of cases reported is higher than the previous years but lower than annual totals during the 2015-2016 epidemic cycle. See below number severe cases and deaths reported from 2000 to 2019:

![Graph showing cumulative reported cases of Dengue Fever in Americas]

**2019 Cumulative reported cases of Dengue Fever in Americas**

<table>
<thead>
<tr>
<th>ID</th>
<th>Country or Subregion</th>
<th>Year</th>
<th>Serotype</th>
<th>Epi. Week (a)</th>
<th>Total of Dengue Cases (b)</th>
<th>Incidence Rate (c)</th>
<th>Laboratory Confirmed</th>
<th>Severe Dengue (d)</th>
<th>(SD/D) x100 (e)</th>
<th>Deaths</th>
<th>CFR (f)</th>
<th>Population X 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Costa Rica</td>
<td>2019</td>
<td>DEN 1,2</td>
<td>30</td>
<td>2,849</td>
<td>57.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,953</td>
</tr>
<tr>
<td></td>
<td>El Salvador</td>
<td>2019</td>
<td>DEN 2</td>
<td>31</td>
<td>10,900</td>
<td>168.43</td>
<td>5</td>
<td>0.046</td>
<td>6,412</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guatemala</td>
<td>2019</td>
<td>DEN 1,2,3,4</td>
<td>30</td>
<td>12,081</td>
<td>70.06</td>
<td>45</td>
<td>0.37</td>
<td>34</td>
<td>0.281</td>
<td>17,245</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honduras</td>
<td>2019</td>
<td>DEN 1,2</td>
<td>31</td>
<td>49,326</td>
<td>538.61</td>
<td>10,853</td>
<td>22.00</td>
<td>89</td>
<td>0.180</td>
<td>9,158</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nicaragua</td>
<td>2019</td>
<td></td>
<td>31</td>
<td>61,058</td>
<td>971.49</td>
<td>2,929</td>
<td>10</td>
<td>0.016</td>
<td>6,285</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Panama</td>
<td>2019</td>
<td>DEN 1,2,3</td>
<td>31</td>
<td>2,057</td>
<td>49.41</td>
<td>782</td>
<td>7</td>
<td>0.34</td>
<td>3</td>
<td>0.146</td>
<td>4,163</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
<td>2019</td>
<td>DEN 1,2,3</td>
<td>31</td>
<td>74,722</td>
<td>151.06</td>
<td>19,278</td>
<td>798</td>
<td>1.07</td>
<td>41</td>
<td>0.055</td>
<td>40,465</td>
</tr>
<tr>
<td></td>
<td>Brazil</td>
<td>2019</td>
<td>DEN 1,2,3,4</td>
<td>28</td>
<td>1,748,473</td>
<td>838.62</td>
<td>830,384</td>
<td>945</td>
<td>0.05</td>
<td>485</td>
<td>0.028</td>
<td>208,495</td>
</tr>
<tr>
<td></td>
<td>Dominican Republic</td>
<td>2019</td>
<td>DEN 1,3</td>
<td>29</td>
<td>5,548</td>
<td>50.08</td>
<td>1,486</td>
<td>144</td>
<td>2.60</td>
<td>8</td>
<td>0.144</td>
<td>10,883</td>
</tr>
<tr>
<td>6</td>
<td>Jamaica</td>
<td>2019</td>
<td>DEN 2,3</td>
<td>30</td>
<td>3,930</td>
<td>135.56</td>
<td>29</td>
<td>5</td>
<td>0.127</td>
<td>2,899</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** [PAHO Dengue Cases 2019 - Indicators](https://www.paho.org/PAHO/en/)

Guatemala and Honduras have the highest Case Fatality Rate (CFR)\(^2\) in Central America so far. Official figures of severe and laboratory confirmed cases for Nicaragua are still to be confirmed.

In the last three epidemiological weeks the incidence of dengue cases in Nicaragua and Honduras has gradually increased while there is a slight increase in El Salvador and Guatemala. See table below.

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\(^2\) Proportion of dengue deaths within all dengue cases.
Regional Impact

The current situation of the epidemic has worsened by factors such as climate change, inadequate environmental management for control of dengue, limited access to water, the great ability of adaptation of the mosquito, the simultaneous circulation of the four dengue serotypes, among others.

The factors that are influencing are:

- The risk of a more severe epidemic due to climate change. Dengue is endemic in the Americas, with epidemics that recur every three or five years. It is a seasonal disease, that is, in the southern hemisphere the highest incidence is observed during the first half of the year and in the northern hemisphere is observed in the second half of the year. Central America and the Caribbean are entering their period of greatest incidence in the rainy season (August to November, with a possibility of extension until January).

- The four dengue serotypes are currently circulating simultaneously in the Region of the Americas (DENV 1, DENV 2, DENV 3 and DENV 4), which increases the risk of serious cases and with the consequent burden of care for the health services. Serotype 2 is one of the deadliest and is the one that is now affecting children and adolescents.

- Children and adolescents under 15 years appear among the most affected. In Guatemala, they represent 52% of the total cases of severe dengue, while in Honduras they constitute 66% of all

Photo 2: Honduran Red Cross Volunteer training students on elimination of breeding sites in schools, supported by DREF funds. Source: Honduras Red Cross, August 2019.
confirmed deaths. According to PAHO, the cause can be linked to the fact that it is a population that due to its age has been less exposed to the virus and therefore lacks immunity.3

- If the epidemic prevention and control activities are not carried out, there is a risk that the disease will spread to new areas and increase the number of people given the flows of human mobility present in the region. Chile has detected the reappearance of mosquito after 50 years of being epidemic free.

Incidence of Dengue breakdown at department level – IFRC Regional Dengue Dashboard:

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3 PAHO. Epidemiological Update Dengue. 9 August 2019.
Red Cross and Red Crescent action

National Societies actions

The National Societies in Central America have developed and increased their capacities in terms of preparedness to response to any disaster and crisis. All of them have developed operational manuals for emergency response, drills for disasters have been carried out and all of them have operational crisis room coordination center. Most of them have contingency plan in place and have developed National Response Plan. Among the volunteers and staff of the Central America National Societies there are a total of 862 National Intervention Team (NITs), 103 Regional Intervention Team (RITs) and 22,841 active volunteers.

Most of the National Societies from Central America responded to the Dengue Outbreak in 2013 thought the implementation of DREF funds. For further reference see: [link].

Honduras

<table>
<thead>
<tr>
<th>Context</th>
<th>Honduran Red Cross</th>
</tr>
</thead>
</table>
| On June 14, 2019, the Ministry of Health declared a sanitary emergency for dengue in 12 departments (Atlántida, Colón, Comayagua, Copán, Cortés, Francisco Morazán, Intibucá, La Paz, Lempira, Olancho, Santa Bárbara and Yoyo) for the number of cases and deaths.  

The Government is allocating more than 10 million US dollars for public institutions to respond to the dengue | GO Field Report issued on 18 June 2019.  

DREF Operation ([MDRHN013](#)) launched on 1 July 2019 with a budget of 222,826 Swiss francs (CHF), with a target of reaching 42,510 people in 12 communities, five schools. Geographical areas: San Pedro Sula and Santa Barbara, with a timeframe from July to September 2019. |

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4 [Federation-Wide Databank and Reporting System](#) and IFRC Regional Dashboard of National Society internal capacity.  

5 Idem.
outbreak. Additionally, the government plans to allocate more than two million US dollars to affected municipalities for dengue response.\(^6\)

- As of Epidemiological Week 32 the Ministry of Health, reported 49,326, compared to week 32 of 2018 with 195 cases.\(^7\)

- Deaths caused by severe or hemorrhagic dengue this year in Honduras increased by 101% (89 deaths), according to records in epidemiological week 32. This emergency is the worst epidemic of this disease in Honduras.\(^8\)

- The Ministry of Health, has recommended to the population that, in the face of the suspicion of Dengue, not to self-medicate and go to the doctor immediately, and to support the activities of the Ministry of Health, COPECO and Red Cross.\(^9\)

- Implementation of a nationwide communication campaign with key messages to prevent the dengue epidemic, including launching the DREF operation, developing and publishing radio and television spots, as well as media coverage television on the activities under the Plan of Action.

- 285 volunteers from 11 Councils of the National Society and Volunteers of the 12 communities involved in the activities in San Pedro Sula and Santa Barbara, have been trained in Community-Based Surveillance and Epidemic Control.

- Development of awareness-raising processes in San Pedro Sula and Santa Barbara through 13 campaigns that include lifting larval indexes, raising awareness of the elimination of breeding sites of the dengue transmitter vector and education campaigns with delivery of communication material and cards on the identification of the signs and symptoms of the disease.

- 7 Aedes Aegypti vector elimination campaigns and educational campaigns in four schools involving 460 children and young people.

- 1,750 homes covered by fumigation for the elimination of the vector in the most critical areas of the epidemic, a process coordinated with the Ministry of Health.

- Development of training in Security and critical management of incident in emergencies, aimed at volunteers of the Councils that execute DREF actions.

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7 [PAHO Dengue Cases 2019 - Indicators](#).
8 Idem.
9 [Honduras registra más de 28 mil casos por dengue](#), 23 July 2019, La Prensa HN.
Guatemala

<table>
<thead>
<tr>
<th>Context</th>
<th>Guatemala Red Cross (GRC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- As of Epidemiological Week, 31, 12,081 cases have been reported of the serotype 3 of Dengue, Chikungunya and Zika which out of 97% corresponds to dengue, 45 cases of severe dengue and 34 deaths.</td>
<td>- GO Field Report issued on 30 June 2019.</td>
</tr>
<tr>
<td>- The Government of Guatemala issued the Red Alert due the impact of the Dengue Outbreak. An important campaign has been launched and fumigation and elimination of mosquito breeding have been carried out.</td>
<td>- On 29 July, Ministry of Public Health and Social Assistance (MSPAS) declared a red epidemiological alert due to the number of reported dengue and severe dengue cases, and departments affected by this disease, affecting over 75 per cent of the country.</td>
</tr>
<tr>
<td>- The highest number of cases have been reported in the municipality of Coatepeque in Quetzaltenango department and in Jacaltenango in Huehuetenango; however, active outbreaks are reported in 14 of 30 Health Regions in the country, especially in the municipalities of Jacaltenango, San Luis Jilotepeque, Joyabaj, Ixcan, Cuilapa, Nueva Santa Rosa, Mazatenango, Melchor de Mencos, San Benito, Poptún, San Luis Peten, Puerto Barrios, Morales, Chiquimula, Coatepeque and Malacatán.</td>
<td>- DREF Operation (MDRGT015) launched on 8 August 2019 with a budget of 296,711 CHF, with a target of reaching 37,500 people. Geographical Coverage: 6 municipalities: Coatepeque (Quetzaltenango) Mazatenango (Suchitepéquez) Retalhuleu, Chiquimula (Chiquimula) Puerto Barrios (Izabal) El Estor (Izabal). Implementation period: 6 August to 6 December 2019.</td>
</tr>
<tr>
<td>- Children under 0 to 14 years are the most vulnerable to the disease because the defenses of their immune system are less strengthened.</td>
<td>- Coordination with central authorities of the Ministry of Health to schedule actions to respond to the outbreak.</td>
</tr>
</tbody>
</table>

10 PAHO Dengue Cases 2019 - Indicators.
11 Cuarenta y dos niños con dengue clásico están en observación para evitar que se agraven. 19 July 2019. Prensa Libre GT
12 Declaran alerta epidemiológica por los más de 8 mil casos de dengue en el país. 29 July 2019. PubliNews GT.
## El Salvador

<table>
<thead>
<tr>
<th><strong>Context</strong></th>
<th><strong>Salvador Red Cross Society (SRCS)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• As of Epidemiological Week 32 of 2019, there have been 10,800 cases of dengue and 7 deaths, while in 2018 the figures reached 3,954 cases.</td>
<td>• The Salvadoran Red Cross is monitoring the situation. At the moment no action has been taken in relation to the request of a DREF, but this could change in the event of an increase of suspicious and confirmed cases.</td>
</tr>
<tr>
<td>• In El Salvador, although the impact of the Dengue outbreak is not as dramatic as the neighbor countries, the Government has launched a massive awareness campaign.</td>
<td>• The Salvadoran Red Cross has installed capacities thanks to ZIKA vector control activities in the Community Action against Zika (CAZ) project.</td>
</tr>
<tr>
<td>• 3,277 hospitalizations have been reported in 2019. 15</td>
<td>• Close coordination is being held with the Ministry of Health to carry out actions for the elimination of breeding sites, train its health personnel and carry out home visits.</td>
</tr>
<tr>
<td>• 162 confirmed cases of dengue are reported with an incidence rates of 168.43 per 100,000 inhabitants. 16</td>
<td></td>
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</tbody>
</table>

## Nicaragua

<table>
<thead>
<tr>
<th><strong>Context</strong></th>
<th><strong>Nicaragua Red Cross</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• As of Epidemiological Week, 32 of 2019, there have been 61,058 cases of dengue and 10 deaths. 17</td>
<td>• The Nicaraguan Government declared the epidemiological alert after the increase in dengue cases on July 31, 2019. 30</td>
</tr>
<tr>
<td>• The Nicaraguan Vicepresident confirmed that 21,479 suspected cases of dengue have been detected this year, with 12 deaths and 1,833 cases confirmed only from July 30 to August 22, 2019. 18</td>
<td>• GO Field Report issued on 8 August 2019.</td>
</tr>
<tr>
<td>• The Government of Nicaragua issued the epidemiological alert due the high impact of the Dengue outbreak. National Plan has been designed and coordination meetings have been held with the main humanitarian actors in order to coordinate actions. 19</td>
<td>• DREF Operation (MDRNI009) launched on 14 August 2019 with a budget of 286,712 CHF, with a target of reaching 41,750 people in the departments of Managua Chinandega and Masaya. Implementation period: 14 August to 14 November 2019.</td>
</tr>
<tr>
<td>• The Nicaraguan Red Cross has begun its first actions in relation to the implementation of DREF operation. The socialization of the intervention has been initiated with the Ministry of Health and the recruitment and procurement process have begun.</td>
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</tr>
<tr>
<td>• The Red Cross Nicaragua is coordinating actions with the Ministry of Health and has a joint plan to eradicate Dengue worth close to 600,000 American Dollars.</td>
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</tr>
<tr>
<td>• The Nicaraguan Red Cross has installed capacities thanks to ZIKA vector control activities in the Community Action against Zika (CAZ) project.</td>
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</tr>
</tbody>
</table>

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13 [PAHO Dengue Cases 2019 - Indicators](https://www.paho.org/Dengue/tracking/)
17 [PAHO Dengue Cases 2019 - Indicators](https://www.paho.org/Dengue/tracking/)
### Costa Rica

**Context**
- Costa Rica recorded a 160% increase in the spread of dengue so far from the current rainy season, compared to the same period last year, the Ministry of Health reported.\(^\text{21}\) So far, there have been 2,849 cases of dengue.\(^\text{22}\)
- Costa Rica is entering the rainy season in which cases are usually increased. Preventive measures are been taken to curb the proliferation of Aedes aegypti, eliminating breeding sites in homes and workplaces, as well as fumigation in at-risk areas.

<table>
<thead>
<tr>
<th>Costa Rica Red Cross</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the moment there are no actions by the Costa Rican Red Cross beyond monitoring the situation and coordinating with the Ministry of Health.</td>
</tr>
</tbody>
</table>

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### Panama

**Context**
- The latest figures show that 2,057 cases of dengue have been reported.\(^\text{23}\)
- The Ministry of Health (MINSA) to date has confirmed that 1,109 cases have been without warning signs, 105 with alarm signs, seven serious and three deaths due to this disease. The health regions with the highest number of dengue cases are: Colón, Panamá Norte, Herrera, Coclé and Panamá Oeste.\(^\text{24}\)

<table>
<thead>
<tr>
<th>Panama Red Cross</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently, there are no actions by the Panama Red Cross beyond monitoring the situation and coordinating with the Ministry of Health.</td>
</tr>
</tbody>
</table>

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16 Ídem.
17 PAHO Dengue Cases 2019 - Indicators
18 Nicaragua prosigue acciones para combatir brote de dengue que ya causó 12 muertes. 24 Agosto 2019.
20 Nicaragua emite alerta epidemiológica por dengue. 31 July 2019. DW.
21 Costa Rica con fuerte aumento de casos de dengue, alerta gobierno. 2 August 2019. RFI
22 PAHO Dengue Cases 2019 - Indicators.
23 PAHO Dengue Cases 2019 - Indicators.
24 MINSA confirma mil 220 casos de dengue. 24 August 2019. La Estrella de Panamá.
Actions

- Emergency categorization as orange has been issued by the IFRC Americas Regional Office.

- IFRC jointly with the National Societies launched three DREF Operations (MDRH013, MDRGT015, MDRNI009), reaching total amount of 800,245 CHF.

- It is coordinating with the Dominican Red Cross and Colombian Red Cross for the possible request of DREF funds to address the emergency.

- Close and fluent coordination and communication with Health focal points from the National Societies and with PAHO colleagues has been set up.

- **Dengue Regional Dashboard** has been issued that is updated in regular basis.

- Alerts for the deployment of RITs have been launched; (2 Health RITs for 2 months in Honduras and Nicaragua and 1 PMER RIT for Guatemala).

- Secondary data analysis has been processed using DEEP tool.

- Advocacy messages have been produced.

- Lessons learned identified in the humanitarian intervention of DREF operations with IFRC support to reduce the cases of Dengue in Colombia, Costa Rica, Guatemala, Honduras and Nicaragua of the 2013 epidemic have been included in the latest operations and under the Community Action Project against Zika. Like the following:

  Monitoring and evaluation:
  
  - Conduct a formative assessment of the needs and include the training and knowledge needs of the national executing societies, as part of a baseline.
  
  - Develop an impact assessment strategy from the beginning and plan the appropriate data collection.

  Vector Control:
  
  - Use of trainings, talks, knowledge sharing, fairs, cleaning days and maps in schools are instruments that not only serve to develop and raise awareness about the subject, but also for the integration of activities to remain as part of school life.

  Community participation and accountability:
  
  - Involvement of members of the school community as agents for the dissemination of key messages in the eradication and control of vectors.
  
  - The participation of parents, teachers and students implies a greater incidence and capacity to replicate the messages transmitted as agents of change at the community level that can contribute to greater sustainability and continuity of the actions carried out.
  
  - Emphasize the accountability processes and the resulting products, using them not only to advocate at the national level but also to demonstrate to the community with which we work the results and challenges and receive feedback from them. Community, engagement and accountability (CEA) tools can be used and adapted to strengthen feedback mechanisms throughout the project cycle.

  - Strengthen the link between community organizations and relevant institutions, to ensure an early and timely response to community action and alerts about the timely identification of arbovirus crises or outbreak risks.
Community-based surveillance:

- Communication campaigns carried out in the media and broad coverage achieved, has proven to be a key and successful factor in the incidence.

- The development of follow-up home visits to verify the implementation of the transmitted messages. This has not only served to know the scope and success of the teachings, but also as a continuity reinforcement and supervision for the appropriation of good health practices by families.

- Give continuity to the training processes of the Red Cross Volunteering and strengthening of subsidiaries, which allow them to update their knowledge and apply community monitoring models.

Contact information

For further information, specifically related to this operation please contact:

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- Stephen McAndrew, Deputy Director and (Acting) Head of the Disaster and Crisis Preparedness, Response and Recovery (DCP RR) department; email: stephen.mcandrew@ifrc.org
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How we work

All IFRC assistance seeks to adhere to the **Code of Conduct** for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO’s) in Disaster Relief and the **Humanitarian Charter and Minimum Standards in Humanitarian Response (Sphere)** in delivering assistance to the most vulnerable. The IFRC’s vision is to inspire, **encourage, facilitate and promote at all times all forms of humanitarian activities** by National Societies, with a view to **preventing and alleviating human suffering**, and thereby contributing to the maintenance and promotion of human dignity and peace in the world.

The IFRC’s work is guided by Strategy 2020 which puts forward three strategic aims:

- **Save lives, protect livelihoods, and strengthen recovery from disaster and crises.**
- **Enable healthy and safe living.**
- **Promote social inclusion and a culture of non-violence and peace.**