Healthy Lungs for Life 2025:

Promoting Respiratory Health in Santiago Atitlán, Guatemala

Event Report

April 14-16, 2025

Hospitalito Atitlan and European Lung Foundation



Introduction of your organization

Hospitalito Atitlán is a nonprofit hospital and community health center located in Santiago Atitlán, Sololá, Guatemala. Founded in 2005, the hospital plays a vital role in delivering accessible, high-quality medical care to the predominantly Tz'utujil Maya population in Santiago and the surrounding rural communities. As the only hospital in the region, the Hospitalito Atitlán provides essential services to a geographically isolated and historically underserved area.

The hospital is committed to offering equitable care, regardless of patients' financial circumstances. Each year, it provides approximately 1.5 million quetzals in free and discounted medical care to ensure that cost is not a barrier to treatment. Our services include emergency care, outpatient consults, Obstetrics and Gynecology, and surgery.

In addition to clinical services, Hospitalito Atitlán implements a range of public health programs that address key health challenges in the region. These include education and outreach efforts related to diabetes, nutrition, liver health, and respiratory conditions. Programs are designed in collaboration with local leaders and are delivered in culturally appropriate ways that reflect the needs and realities of the communities served.

Background of the event

In Santiago Atitlán, a predominantly Tz'utujil Maya community where over 90% of the population identifies as Indigenous, respiratory health is an urgent yet often overlooked public health concern. Many women over the age of 40 do not speak Spanish, which limits access to essential health information, particularly regarding the long-term dangers of air pollution. The majority of residents live in poverty and rely on traditional cooking methods—such as open three-stone fires or wood-burning stoves—that release harmful smoke into living spaces. In many households, cooking takes place indoors or in rooms where families also sleep, leading to prolonged exposure to smoke and other pollutants.

Beyond household air pollution, community-wide environmental practices further contribute to deteriorating air quality. These include the open burning of trash, use of tires and plastics as fuel, and unmanaged dumps. To the point where, in 2021, lower respiratory infections ranked as the third leading cause of death in Guatemala, following diabetes and ischemic heart disease. These conditions are preventable in many cases, underscoring the critical need for targeted public health interventions in high-risk communities like Santiago Atitlán. By focusing on education, early prevention, and community empowerment, our Healthy Lungs for Life event worked to address a pressing health disparity while reinforcing the campaign's global message.

The goals and objectives

The Healthy Lungs event aimed to address the critical burden of respiratory illness in Santiago Atitlán by promoting lung health through culturally relevant education, early detection, and community engagement. The event aligned with the Healthy Lungs for Life campaign, amplifying its global mission to increase awareness of lung disease and the importance of clean air.

Our primary goals were:

- 1. To raise awareness about lung disease and the impact of air pollution among residents of Santiago Atitlán.
- 2. To promote the importance of early detection, prevention, and treatment of lung conditions in a region where indoor air pollution and environmental hazards significantly affect respiratory health.
- To engage the community through accessible and culturally appropriate
 educational materials and methods, ensuring that key messages would be clearly
 understood and retained.

To achieve these goals, in our initial plans we set specific targets:

- Screening and outreach: Conduct lung health screenings for 200 participants
 using a simple balloon test to assess respiratory function. During the event, radio
 broadcasts were used to reach an additional 10,000 people with educational
 messages about the link between air pollution and lung disease.
- 2. Encouraging follow-up care: Refer at least 15 participants identified as having potential respiratory issues for further evaluation at Hospitalito Atitlán. Participants with difficulty completing the balloon test were also provided with peak flow meters and guidance on monitoring their lung health at home.
- 3. Culturally tailored education: Provide lung health education in both Tz'utujil and Spanish, reaching at least 200 in-person participants. Educational talks and materials focused on common sources of air pollution, symptoms of lung disease, and practical steps for prevention and treatment.

Program overview and structure

Our Healthy Lungs for Life event was a component of the Hospitalito Atitlán's larger health fair. The HLFL event's activities were designed to provide educational resources and preliminary evaluations of participant's pulmonary health. The event included several interactive activities aimed at engaging the community and fostering awareness of respiratory health.

Physicians and nurses staffed the station where attendees participated in a balloon test to assess lung function and engaged in discussions about lung health, disease prevention, and general concerns. Staff members used pulse oximeters to measure

oxygen saturation and auscultated lungs to identify potential problems. We also provided patients with educational materials to take home, including a tailored trifold pamphlet that addressed local risk factors, and a handout on breathing exercises to help strengthen the lungs.

For those exhibiting respiratory symptoms, in addition to the balloon test, peak flow meters were utilized to assess airflow and lung function. Those who struggled with the tests received a peak flow meter to empower them to continue to monitor and improve their lung strength. Patients who showed signs of concern were also encouraged to seek a more comprehensive evaluation through a formal medical consult with a physician.

The event was supported by a team of volunteer physicians and nurses and Hospitalito staff. The volunteers led the medical consultations while Hospitalito staff facilitated communication through translation. Additionally, we were supported by another local organization, Tu'ik Ruch'Lew (TRL). This non-profit is dedicated to providing clean cookstoves to low-resource families. They held a demonstration to raise awareness of cleaner alternatives to traditional cooking methods, aiming to reduce the risk of respiratory problems linked to indoor air pollution.

Resources used in the event included:

- peak flow meters
- Balloons
- lung model
- Trifold pamphlets
- Breathing exercise handouts
- Pulse oximeters
- Stethoscopes
- Sustainable cookstove model

Media outreach

To ensure broad community engagement and awareness of the HLFL event, we utilized multiple media outlets. The event was promoted through multiple channels to reach a wide audience, especially those in remote areas with limited access to direct outreach.

We utilized Hospitalito Atitlán's Facebook page to share information about the event and encourage participation, leveraging our social media presence to connect with the local community. Additionally, we organized several radio broadcasts on a local station, both prior to and during the event. To further extend our outreach, we also secured TV coverage from local stations during the event, allowing us to reach individuals who may

not have access to social media or did not have the chance to attend the event in person.

This multi-platform approach ensured that our message was visible to a wide audience, contributing to a successful turnout at the event.

Outcomes

Our HLFL event took place over a span of 2.5 days, during which we successfully engaged a significant portion of the community. On average, each full day of the event had 74 participants, with an average of 14 individuals each full day identified as having potential lung issues. A total of 16 peak flow meters were distributed to individuals who demonstrated symptoms.

In terms of social media outreach, our Facebook post garnered over 3,000 views. Notably, 44% of the post interactions came from individuals who do not follow the Hospitalito Atitlán Facebook page, indicating successful reach beyond our immediate network.

While the event was successful in terms of turnout and engagement, there were several challenges that impacted our ability to fully capture and assess all participants:

Busy Environment: Due to the nature of a larger health fair, it was challenging to maintain a precise count of all participants across the event.

Declined Participation: Surprisingly, a significant number of adults declined to partake in the balloon test, which limited that aspect of the event, however we were still able to auscultate and advise the large majority of participants.

Despite these challenges, the event was successful in reaching its targets and raising awareness about lung health in the community.

The way forward

Our event was successful in several areas:

- 1. Community engagement: Through this event we were able to reach a diverse group of adult and pediatric patients, including many who had not previously interacted with the hospital.
- 2. Delivery of culturally competent care: By providing education in both Spanish and Tz'utujil ensured that lung health messages were accessible and relevant. The presence of Hospitalito nurses who speak the local language allowed for deeper connection and understanding. We were also able to adapt the standard lung health educational talk to be more relevant to the patients we were speaking to.

- 3. Identification and support: At this event we were able to identify several members of the community to be referred for follow up treatment in the clinic, as well as provide them support with a peak flow meter.
- 4. Community partnerships: Our partnership with TRL strengthened our event, allowing us to offer immediate and sustainable solutions to participants who cook over open fires and to help support another local organization.

To build the impact of the Healthy Lungs for Life campaign in our region, future efforts will focus on expanding year-round community education and outreach beyond the health fair setting. We will continue to work with those referred for follow-up care during the event and provide ongoing education about lung health. Peak flow meters will be used in the hospital and distributed to patients who demonstrate need. The educational materials developed for the health fair will remain available throughout the hospital and be used again at future community events.

Conclusion and closing thoughts

This event reaffirmed the importance of community-based education and the need for early respiratory screening in our region. Through interactive activities, meaningful conversations, and hands-on evaluations, we were able to engage with individuals who had never been to our hospital, identify potential health concerns, and share tools for prevention and self-care. While there were challenges, we were encouraged by the level of community interest and the impact of our outreach.

Moving forward, our next steps include strengthening follow-up pathways for patients flagged during the event, integrating lung health education into our ongoing community health programming, and expanding partnerships with local organizations focused on environmental health. We are excited to continue growing the Healthy Lungs for Life initiative within our organization and we hope to ensure it remains a sustainable, relevant, and empowering part of our broader mission to improve health outcomes in rural Guatemala.

Annexes

Annex documents are attached separately to maintain quality.

Annex A: Lung Health Trifold Pamphlet

Annex B: Breathing Exercises Mini-Handout

Annex C: Event Photos

Annex D: Peak Flow Meter Instructions Sheet from American Lung Association