**Tucson, Arizona Fire Department (TFD) and Sonora Environmental Research Institute, Inc. (SERI), Community Assist of Southern Arizona (CASA) Case Study**

550,000 population

36% of the population speaks Spanish. The TFD is staffed with many Spanish speaking responders that reflects the diversity of the community.

690 uniformed fire department members, 21 fire stations, 30 fire companies, 17 paramedic companies

6 fire deaths are average on an annual basis

12 fire deaths rate per million population (estimated) national fire death rate is 13.2

Arizona 7.9 fire deaths per million population, is one of the lowest in the US as reported for 2007 by the USFA. The low fire death rate may be the result of under reporting. Arizona does not have a high rate of NFIRS participation.

CASA staff installed lithium battery powered smoke alarms with hush button on every level, outside each sleeping area and in every bedroom of single family homes located in targeted high fire risk areas. Some smoke alarms were unpackaged and standard 9v batteries were replaced with long life batteries prior to installations. Another supply of smoke alarms were dual sensor long life battery alarms.

Received 2,800 smoke alarms from several sources.

All home visits conducted by CASA Healthy Homes staff after smoke alarm installation training from the Tucson Fire Department.

Sonora Environmental Research Institute, Inc. (SERI) is a not for profit organization founded in 1994 to provide research and technical assistance concerning environmental issues in southern Arizona. CASA is a service of SERI visiting more than 5,000 homes through the Healthy Homes program since 2002.

**Project Description**

Community Assist of Southern Arizona (CASA) is a project of Sonora Environmental Research Institute, Inc. (SERI) delivering health and safety services to low income homes. Initially CASA paid and volunteer staff made Healthy Home visits to identify and mitigate lead poisoning risks and indoor air quality effecting asthma. In home visits by the lay health workers were focused on helping families evaluate environmental risks to their children and in making informed health improvement choices. The home visits are provided at no cost to the families.

Tucson Fire Department (TFD) Deputy Chief is a member of the SERI Community Advisory Board. Through this partnership TFD provided hazardous materials and home fire and life safety inspection training for the Healthy Homes staff. The CASA home visits were expanded to include home fire drill plans and home fire and life safety behaviors for children and adults. This partnership next expanded to included distribution of smoke alarms provided by the TFD.

The current project includes 2,800 smoke alarms provided to CASA for installation in homes which receive CASA Healthy Homes assistance. The TFD high home fire risk target area overlaps the CASA service area in the southern part of Tucson. The residences are primarily owner occupied single family and mobile homes. The TFD trained the CASA staff to test smoke alarms present in the home and to install smoke alarms in locations to meet the fire code. Homes are equipped with smoke alarms outside each sleeping area, on every level of the home, and inside each bedroom.

The Casa staff is primarily women who work in pairs. The families who are served by the program do not trust government agencies and would not be receptive to fire fighters coming into their homes. Women alone at home would not invite any male stranger into her home. The occupants in the area “trust us” according to one of the project managers. They trust SERI because of the organization’s long history in the community. SERI provides training opportunities and hires from the community. SERI is viewed as a member of the community rather than an agency coming in. All services are provided in a culturally appropriate manner and community members know that the organization is working in their best interest. This isn't a matter of SERI saying we are trusted but a proven fact by our success in the community. The demand for CASA services outweighs the resources available.

**Project name: Healthy Homes**

**Procedure:**

Trained CASA Healthy Homes staff work in pairs. Some home visits are requested by families through project outreach in community centers and churches. Most home visits are initiated by door to door canvassing in neighborhoods.

Home visits vary in time from one to two hours. The staff has equipment to install the smoke alarms when they enter the home. Home fire safety materials are reviewed and left in the home. The smoke alarm and home fire safety education section of the home visit is a minimum of 30 minutes.

The project is using a modified Spanish translation of the smoke alarm installation form. This form provides data for the project and inventory tracking of the smoke alarms. The data from the forms is compiled by the SERI staff.

**Keys to Success:**

Tucson Fire Department Deputy Chief’s long term partnership with CASA Healthy Homes as a member of the SERI Community Advisory Board is a key to the inception of including home fire safety to the home visits. The Chief’s involvement is the result of many years of working in various other community projects with the SERI President.

Tucson Fire Department as a source of training for the home visit staff is a benefit to both organizations.

Each organization brings complementary capabilities to the partnership.

High risk homes which are not receptive to fire department home visits are welcoming to the Healthy Homes staff who deliver the home fire and life safety knowledge and install smoke alarms.

**Lessons Learned:**

It would be more efficient if the smoke alarms had been available to install at the beginning of the partnership averting the need to visit some homes repeatedly to eventually install the needed smoke alarms.

**Results:**

2,800 alarms installed in about 620 homes. This is an average of 4.5 alarms per home

620 homes were visited and agreed to have alarms installed.

78% of the homes did not have working smoke alarms prior to the home visit and smoke alarm installation.

250 homes are on a waiting list for smoke alarms

**Next**

The next phase of the partnership will include fire fighters in the neighborhood fire stations which serve the homes in the CASA target areas to work with CASA Healthy Homes staff to increase the interaction with the Tucson Fire Department fire fighters. The goal is to build the relationship between the community and TFD so the community views TFD as a community resource for risk reduction. Eventually SERI anticipates TFD will take a more active role in risk reduction strategies in the community.

The fire station that will be the central focus of this next project is managed by a Captain that has been leading community involvement for some time. He attends community events taking the engine company with him. National Night Out, a police-community crime prevention program, was hosted at the fire station.

The plan also includes the fire station hosting more community meetings about the CASA Healthy Homes program and hosting other groups that need a meeting place.

The TFD fire stations have had minimum inspection experience and the IRM stations will have fire prevention training. IRM training is planned for the fire station that will be closely partnered with CASA Healthy Homes. This training will be recorded and the video broadcast through the TFD training network for all staff.

The TFD catalyst for the partnership is retiring soon. The Chief reflects that the program will need another “champion” from the TFD and that commitment to the program must “come from the top”.