

QUALITY IMPROVEMENT PDCA STORYBOARD



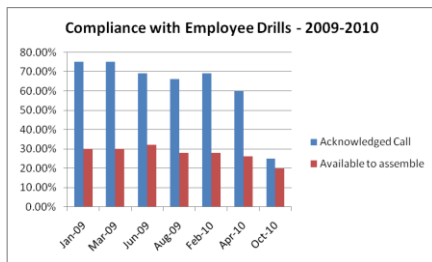
LOCAL HEALTH DEPARTMENT NAME:
 ADDRESS:
 PHONE NUMBER:
 PROJECT TITLE:

Kane County Health Department
 Office of Community Health Resources
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 Improvement of PHER Employee Drill Response

PLAN Identify an opportunity and Plan for Improvement

1. Getting Started

Public health emergency response requires regular drills to assure that, should the need to assemble KCHD staff arise, community needs would be met in a complete and timely manner. In reviewing results from drills occurring January 2009 to October 2010, an average of 69% of staff acknowledge a call placed to them through the Code Red reverse-911 system, while an average of only 29% of staff indicate that they could assemble within 2 hours of the call.



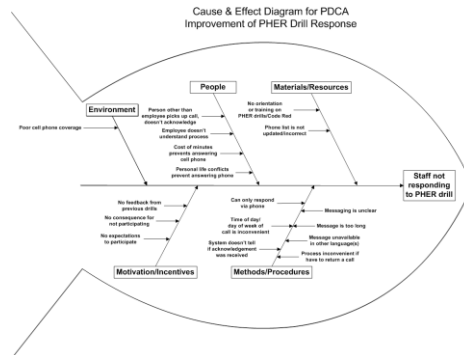
2. Assemble the Team

Members of the Office of Community Health Resources (OCHR) reporting to the Assistant Director were selected to participate in this PDCA cycle for their contributions in their areas of expertise, their involvement with PHER planning, and to create the agency's first PDCA cycle post-transition.

A two-part Aim Statement was created that, by the end of March 2011, 95% of KCHD staff will acknowledge each Code Red call, and 75% of KCHD staff, who are not on vacation, are available to assemble within 2 hours of the call.

3. Examine the Current Approach

The OCHR team flowcharted the current approach for calls. Currently, the Code Red reverse-911 system calls employees at all numbers provided by the employee at a time designated by the PHER Coordinator. These calls are completed quarterly and data is provided to the OCHR Assistant Director and Executive Director. Results are also provided to meet grant requirements. OCHR staff completed a Cause & Effect Diagram to identify potential causes of the low response numbers.



- Explore ability to text or e-mail responses.
- Simplify messaging and/or response process
- Add this outcome to performance evaluations
- Assure KCHD employee contact information is up to date, and send quarterly reminder e-mails regarding updates of contact information

5. Develop an Improvement Theory

The OCHR team felt that retraining the KCHD staff and providing feedback on previous drills was pivotal toward improvement of drill response rates and implemented the following plan.

On December 2, 2010, a Code Red drill was completed as a baseline. This was done because of the anomaly in data collected in October 2010 and would be the first drill following an agency reorganization.

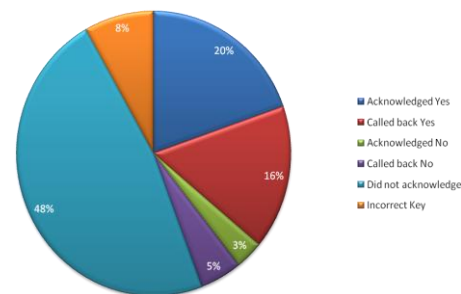
As a result of this examination, the Aim Statement was changed just to: by the end of March 2011, 95% of KCHD staff will acknowledge each Code Red call.

4. Identify Potential Solutions

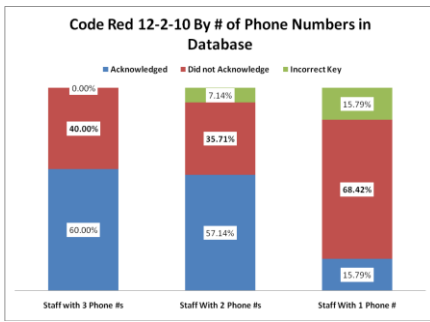
Following identification of causes, the OCHR team used brainstorming to identify potential solutions, which included:

- Retraining of staff on Code Red system and rationale for drills.
- Provide specific feedback to teams/divisions
- Survey employees on reasons they don't acknowledge calls.

Code Red Drill - Response



Based on this baseline, had there been an actual emergency, only 36% of KCHD staff would have presented to provide support. Data analysis also revealed that the amount of contact numbers provided by individuals also impacted the results:



Response rates dramatically improve when individuals provide more than one contact number.

At the January 2011 All Hands meeting, all employees would receive re-training on the purpose of the Code Red system, as well as were instructed on how to respond. During that meeting, all staff would be asked to complete an updated contact information form, and that information was to be updated in the Code Red system.

DO
Test the Theory for Improvement

6. Test the Theory

At the All Hands meeting on January 20, 2011, all staff present received retraining on the Code Red system, and feedback from the previous drills was shared (see graphic under Step 1). Staff completed contact information sheets, and that information was uploaded into the Code Red system. For the first time, that information also included KCHD staff desk numbers.

From February to March 2010, Code Red drills were initiated to all numbers in the system, including desk phones using the same call down procedure.

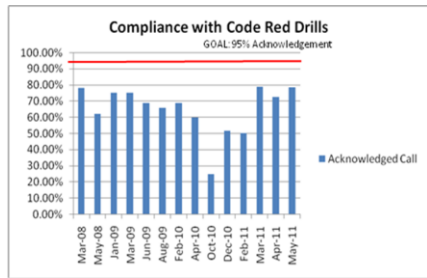
The All Hands meeting in March 2010, staff were introduced and trained in the new call down procedure which is in order to be considered as “acknowledged,” staff need to call the *IPHERP Line* within 2 hours of the time the drill was activated. If the staff receives the message AFTER the 2 hours of the time the drill was activated, they still need to call the *IPHERP Line* in

order to confirm that message was received.

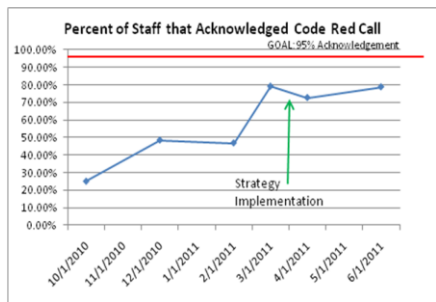
CHECK
Use Data to Study Results of the Test

7. Check the Results

The baseline data from March 2008 to December 2010 drills were analyzed, and this analysis revealed that the acknowledgement rate and the “available to assemble” rate were inaccurate. The tracking method was pulled from the Code Red system which had many technical errors and human errors, such as a “1” was pressed versus a “2” or “5.” Also, March 2011 drill was conducted during the working hour, which resulted in an increase in ‘acknowledged call.’



After the new call down procedure was implemented in April 2011, there was a 72% ‘acknowledged call’ rate for that drill and an increase to 78% in the May 2011 drill.



ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory

Upon studying the results of this test, there is a significant improvement in results. There is a 0% ‘not reached,’ meaning

inaccurate number or technical difficulty and an increase percentage of staff that respond within the 2 hours of the drill time. In order to achieve our AIM statement of 95% of KCHD staff will acknowledge each Code Red call, we hope standardize the call down procedure and results by:

- Providing feedback to all staff regarding the notification results.
- Adjusting the time of day and day of week that drill is conducted: complete a drill during lunchtime on a workday.
- Following up with individuals that exceed the 2 hour drill time.

By testing this theory, we have learned that accountability and motivation may be to blame.

9. Establish Future Plans

Our next step is to conduct our next call down drill in June 2011 during the working hour with the new call down procedure. This will allow us to compare results from the March 2011 data with the old procedure.

Throughout this process, there were several lessons learned and unexpected results, such as:

- 100% of our contact numbers is working and updated.
- Results are accurately tracked through the new *IPHERP line* that manages voicemails and provides a time stamp of each call.
- Sharing the results with the staff increased awareness and self-motivation.

We hope to continue with the new call down procedure and implementing an internal procedure of maintaining and updating staff contact information.

In addition to the solutions, we are looking at other potential ways to improve our ‘acknowledge’ rate by taking in consideration to staff that are on vacation or medical leave and are unable to respond to the notification drill.