

PROGRAM NAME: Acute Communicable Disease Control (ACDC)
 PROJECT TITLE: Improving Emergency Notification Drill Response
 DPH STRATEGIC GOAL/OBJ.: Goal 5.3 Obj 5.3.f
 PROJECT TIMELINE: September 2013 – July 2014
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PLAN
Identify an opportunity and Plan for Improvement

1. Getting Started

To ensure that all ACDC staff are prepared to serve in their roles as first responders via trainings, drills and exercises, ACDC has been performing emergency employee notification drills since 2008 using automated systems to reach 70 plus ACDC employees efficiently.

ACDC's goal is to have at least 90% of the staff respond within 60 minutes of notification initiation for each drill. The response rates were 70% and 77% (2011 and 2012, respectively).

2. Assemble the Team

A project team was created consisting of the ACDC PI Specialist, individuals who are involved in conducting the drills and those who are skilled to compile and analyze data—public health nurses, epidemiologists, and administrative staff.

The kick-off meeting was held on September 12, 2013 to introduce the project, determine project goal, describe current process, identify root causes, and determine improvement strategies.

3. Examine the Current Approach

The project team discussed the current process of conducting the drills including: frequency of the drill, how employee contact information is collected, and which contact number(s)/email address(es) are used to contact employees.

The project team also discussed issues that needed to be addressed. Two main issues were discovered: 1) difficulty maintaining accurate ACDC employee contact information due to multiple sources of contact information and 2) unnecessarily calling individuals who are no longer associated with ACDC due to outdated employee information.

4. Identify Potential Solutions

A centralized database was thought to be helpful to maintain accurate employee contact information. The database with macro functions to reconcile multiple sources of contact information will reduce duplication and eliminate information no longer needed.

5. Develop an Improvement Theory

Performance will be improved by developing a database so ACDC administrative staff can easily: 1) identify discrepancies between ACDC employee contact information to the PH Directory information, 2) track employees who leave ACDC or are recently hired, and 3) target employees with discordant data and to encourage them to update their records.

DO
Test the Theory for Improvement

6. Test the Theory

A Microsoft® Access® database along with a written procedure was created to implement and disseminated to the pertinent staff. The administrative staff who will use the new database was trained without difficulty.

The contact information comparison was done by the administrative staff a couple of weeks before every emergency drill, and the current Public Health Directory employee information was downloaded and imported into the database.

Three drills were conducted with the new procedure: November 2013, March 2014, July 2014. All drills occurred around 7pm on a Tuesday, Wednesday, or Thursday.

CHECK
Use Data to Study Results of the Test

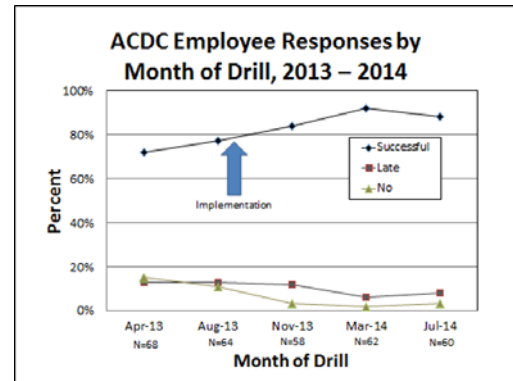
7. Check the Results

The employee responses were divided into three categories.

- Successful response: response within 1 hour of call initiation,
- Late response: response >1 hour and <24 hours later, and
- No response: response ≥24 hours later or never responded to the drill.

The number of late responses decreased from 9 (13%) in April 2013 to 4 (6%) in March 2014. No responses also dropped from 15% in April 2013 to 2% in March 2014.

Prior to the new procedure, the main reason employees did not respond was missing or wrong contact information, which was followed by approved vacation and no longer being associated with ACDC.



| Reasons | April 2013 (n=10) | August 2013 (n=7) | November 2013 (n=2) | March 2014 (n=1) | July 2014 (n=2) |
|---|-------------------|-------------------|---------------------|------------------|-----------------|
| Missing or wrong contact information | 3 (30%) | 2 (29%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Approved vacation | 3 (30%) | 1 (14%) | 2 (100%) | 1 (100%) | 0 (0%) |
| Not associated with ACDC | 2 (20%) | 2 (29%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Other (reported system malfunction, busy, new employee) | 2 (20%) | 2 (29%) | 0 (0%) | 0 (0%) | 2 (100%) |

After the implementation of the new procedure, approved vacation was the main reason employees did not respond along with other reasons (e.g., technical malfunction of the automated system, employees not being available by phone or email after hours, user error).

ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory

The new procedure will be the standard of practice at ACDC going forward with additional training as needed.

9. Establish Future Plans

Future plans include training more ACDC administrative staff and other staff to conduct the drill as back-ups to ensure coverage.