



BARC*first*

Bay Area Response Coalition

Financial Industry Resilience, Security, and Teamwork

BARC*first*

Pandemic Exercise

May 9, 2007

After Action Report

Table of Contents

- ▶ **INTRODUCTION**
- ▶ **DOCUMENT PURPOSE & DESCRIPTION**
- ▶ **EXERCISE OVERVIEW**
- ▶ **PANDEMIC PLANNING ISSUES & LESSONS LEARNED**
- ▶ **APPENDICES**
 - Appendix A: Exercise Background & Structure
 - Appendix B: Exercise Participants
 - Appendix C: Exercise Scenario
 - Appendix D: Exercise Team Actions
 - Appendix E: Exercise Team Plenary Session Briefings

Introduction

BAY AREA RESPONSE COALITION (BARCfirst)

BARCfirst was formed in November 2005 by San Francisco Bay Area financial organizations as a means to enhance the resilience of the Bay Area's financial community. As the regional coalition for the Bay Area's financial services sector, BARCfirst has established relationships between the Bay Area's financial community and all levels of government regarding emergency management and homeland security issues. BARCfirst also partnered with both private sector entities and public sector agencies to produce several cross-sector pandemic preparedness educational events. BARCfirst is well-positioned to play a vital role in the area's coordination efforts in the event of a pandemic influenza.

On May 9, 2007, BARCfirst held its first protective response/resilience exercise focusing on pandemic influenza. The exercise was sponsored by the U.S. Department of the Treasury and hosted at the San Francisco International Airport's Emergency Operations Center. The exercise brought together over fifty participants, including representatives from the San Francisco Bay Area's financial services sector, members of the

Financial and Banking Information Infrastructure Committee (FBIIC), infrastructure providers, and public health sectors, as well as the Federal and local governments

EXERCISE OBJECTIVES

The objectives of the exercise were the following:

- ▶ Explore the business and operational impacts of a pandemic influenza outbreak on the San Francisco Bay Area's financial services community and ripple implications;
- ▶ Practice a coordinated and cooperative response in the private and public sectors to a pandemic influenza outbreak;
- ▶ Identify strengths and weaknesses in the San Francisco Bay Area's response to a pandemic; and
- ▶ Identify actionable items to close any existing gaps in response efforts.

Participants explored the challenges inherent in a pandemic influenza outbreak in a globalized and mobile world. These challenges included high absenteeism, strains on their supply lines, increased telecommunications demands, management and oversight of employees working at home and

***BARCfirst Pandemic Exercise
After Action Report***

abroad, high demand for limited medical supplies and personnel, and the struggle to maintain operations at the most complete level possible.

The challenges tested the effectiveness of pandemic

preparedness and business continuity plans, including the mechanisms and procedures for information sharing between sectors, within the financial services sector, and within individual organizations.

Document Purpose & Description

The purpose of this report is to summarize the exercise itself, to highlight the pandemic planning issues raised during the exercise, and to suggest possible next steps in coordinating pandemic planning in the San Francisco Bay Area. The appendices to this document provide detailed information about the

exercise structure, participants, scenario, team actions, and team conclusions.

This report is not intended to assign tasks to specific financial institutions, but rather to recommend actions that could be taken to improve current pandemic planning efforts.

Exercise Summary

A. STRUCTURE

Exercise participants were organized into five teams and instructed to respond to simulated crises based upon their real-world roles, responsibilities, and plans.

- ▶ Teams 1 and 2 represented the financial services sector, focusing on aspects of the San Francisco Bay Area financial services sector.
- ▶ Team 3 simulated an interdependency team, which represented public services providers both locally and nationally, including the San Francisco International Airport, the Federal Bureau of Investigation (FBI), AT&T, and the San Francisco Bay Area Rapid Transit District (BART).

- ▶ Team 4 represented the public health sector, including participants from local health departments, as well as those from Federal health agencies like the Centers for Disease Control and Prevention (CDC).
- ▶ Team 5 was the leadership cell, which played the role of those key entities not represented on the other stakeholder teams. This included the Department of the Treasury, the Department of Homeland Security (DHS), the FBIIC, other Federal agencies, the media, and the public.

For further information about the exercise structure and participants, see Appendices A and B.

B. SCENARIO

The exercise presented the participants with an outbreak of pandemic influenza, asking them to consider the potential cascading effects such an event would have on the financial services industry, public service providers, and the public

health sector in the San Francisco Bay Area.

The exercise was conducted over two moves. The first move introduced a genetic change in the avian influenza that allowed for greater human-to-human

***BARCfirst Pandemic Exercise
After Action Report***

transmission overseas. Move 1 ended with no confirmed cases within the United States, focusing primarily on the necessary preparations that participants would be making. Move 2 opened with

more than 750 cases in the United States, pushing participants to move quickly into response mode.

For a detailed summary of scenario elements, see Appendix C.

C. PARTICIPANT ACTIONS

Participant actions and decisions were communicated through email exchanges established for the exercise to simulate real-world communications. All input was made on a non-attributable basis.

exercise encouraged participants to consider innovative ideas to address gaps in current pandemic planning, procedures, and established means of communication.

The diverse and well-rounded nature of each team's participants allowed for many perspectives to be addressed and considered. The

For a detailed description of actions discussed or taken by the participant teams in response to scenario developments, see Appendix D.

Pandemic Planning Issues & Lessons Learned

The financial services sector has expended a great deal of effort in developing robust plans and seeking solutions to the unique challenges a pandemic influenza presents. In this exercise, participants concentrated on the stresses such an event would bring to the financial services sector, and how the sector would work together through BARCfirst as well as with other sectors to mitigate the impact in the San Francisco Bay Area region.

There were five critical pandemic planning issues addressed repeatedly, thoroughly, and effectively throughout the *BARCfirst* Pandemic Exercise. In this section, each issue is described and followed by suggested next steps to promote continued progress.

Pandemic planning issues:

- A. Clear communication between and within sectors will be integral to a pandemic response, necessitating single points of contact in each sector.
- B. There are a myriad of jurisdictions in the Bay Area,

leading to the possibility of inconsistent public health thresholds across jurisdictions during a pandemic, and resulting in different recommendations to industry and potential confusion in the implementation of organizations' pandemic plans.

- C. Given the various stages of a pandemic, organizations may need to consider how best to shift resources and operations to meet their obligations.
- D. The process for disseminating information in a pandemic environment should be clearly articulated and planned before any pandemic.
- E. During a pandemic crisis, institutions may choose to request that the financial regulators provide temporary relief from certain guidelines, regulations and/or procedures should concerns arise pertaining to financial sector stability.

Pandemic Planning Issue A:

Clear communication between and within sectors will be integral to a pandemic response, necessitating single points of contact in each sector.

Effective communication during a pandemic or other crisis requires an established and recognized source of information within the financial services sector, as well as the individual financial organizations themselves. This central source of communication serves as a clear point of contact for other sectors. Similar centralized communication is desirable in other sectors.

Lesson Learned:

BARC*first* is poised to assume the role of the financial services sector point of contact for the public sector and other sector alliances, such as Business Executives for National Security (BENS) and the Business Recovery Managers Association (BRMA). It does not have the capacity to be the contact point for individual banks and organizations, nor is that necessarily a present goal of the organization.

Continuing and Future Actions:

- ▶ Continued coordination within the financial services sector is necessary to establish BARC*first* as the contact point for sector alliances in Northern California. BARC*first* also coordinates with the Southern California Coalition (SoCal*first*), which is the contact point for Southern California. BARC*first* and SoCal*first* are forming partnerships with additional private sector entities including the Business Owners

and Managers Association (BOMA), the Business Recovery Managers Association (BRMA), the Association of Contingency Planners (ACP), Business Executives for National Security (BENS), and many others.

- ▶ Communication with various public sectors to assert BARC*first* as the point of contact for financial services sector alliances is a crucial step once significant coordination within the sector is completed.
- ▶ The Governor's Working Group on pandemic influenza should prove a helpful resource for the financial services sector in the San Francisco Bay Area, one which can be utilized through greater involvement by BARC*first*. Coalitions are moving towards the goals

***BARCfirst Pandemic Exercise
After Action Report***

established for this working group.

- ▶ Following the exercise, *BARCfirst* committee members compiled a matrix of public and private sector resources and contacts. Those resources/contacts included entities as diverse as the Northern California Regional

Terrorism Threat Assessment Center (public sector), the BOMA (private sector), and many others. These alliances were formed toward improving cross-sector communication, coordination, and cooperation before, during, and after a crisis.

Pandemic Planning Issue B:

There are a myriad of jurisdictions in the Bay Area, leading to the possibility of inconsistent public health thresholds across jurisdictions during a pandemic, and resulting in different recommendations to industry and potential confusion in the implementation of organizations' pandemic plans.

There is potential for separate and autonomous public health jurisdictions providing varied, and possibly inconsistent, advice and recommendations to industry. These recommendations could result in different levels of response by financial institutions in accordance with their individual pandemic preparedness plans, creating confusion and a clear lack of universal response within organizations in the Bay Area. This is particularly critical for regional, national, and multi-national BARC*first* member banks. Additionally, these differing public health thresholds can impact individual bank branches differently, according to their location, thus requiring additional flexibility on the part of the parent institution.

Lesson Learned:

Though corporate policies may be clearly defined, local or State public health agencies will likely maintain different courses of action with different thresholds for implementing that action. This can affect business operations in various ways, including vendor shipments, different standards applied at different branch locations, and personnel issues rising from the closing of schools.

Continuing and Future Actions:

- ▶ BARC*first* may choose to address through its membership the issue of appropriate bank responses in the event of conflicting advice coming from different jurisdictions, states, or countries in which members' headquarters are located.
- ▶ Organizations should internally address any potential inconsistencies in public health thresholds that may apply at their various business operation locations. These public health thresholds may impact the implementation of an organization's pandemic plan.
- ▶ The San Francisco Department of Public Health and other area health departments are continuing their involvement in similar exercises to further develop the cooperation witnessed during this exercise.

Pandemic Planning Issue C:

Given the various stages of a pandemic, organizations may need to consider how best to shift resources and operations to meet their obligations.

Participants devoted significant time to seeking ways to maintain financial institutions' *current* level of operations, i.e., maintaining the status quo. Consideration of alternative levels of operation would be necessary should resuming the pre-pandemic *status quo* prove unattainable at that time.

Lesson Learned:

A pandemic, with its various phases, will require a flexible response and a shifting understanding of what operations are critical at different stages. Maintaining operations at a reduced level is better than being unable to maintain them at all.

Continuing and Future Actions:

- ▶ Financial organizations should identify various operation levels and determine the coinciding staffing requirements, to be incorporated in each organization's pandemic plans. These plans should

have a built-in flexibility that allows them to shift in response to the kind of changing environment expected during an influenza pandemic.

- ▶ Organizations should review service level agreements with vendors to understand their priority of service, and inform applicable public service providers of their priorities. Where possible, organizations should investigate additional possibilities to compensate for low priority status with public service providers.

Pandemic Planning Issue D:

The process for disseminating information in a pandemic environment should be clearly articulated and planned before any pandemic.

While participants highlighted information dissemination as a key action, how information would be disseminated was unclear. In particular, participants were uncertain where financial services organizations would be able to acquire updated information impacting their operations and in what manner it would be disseminated. Internal information dissemination provides a more manageable issue, one in which most organizations already have some planning in place.

Lesson Learned:

Information dissemination will require thorough prior discussion and identification of how information will travel and through what means, possibly through flow charts.

Continuing and Future Actions:

- ▶ Organizations should maintain and update robust internal and/or external websites if the communications plan includes website use as a means to disseminate information. One participant discussed alternate hosting capabilities to ensure continued service if increased demand on the Internet strains available bandwidth.
- ▶ Organizations must clearly dictate how official information and updates will flow both within the organization and beyond in the event of a pandemic. This information flow may be disseminated to all employees to help them understand who would play key roles in the dissemination.
- ▶ Financial organizations should develop and/or maintain relationships with the media now, in advance of any pandemic, so that they may work with the media as a part of an organization's own communications efforts.
- ▶ *BARCfirst* now has access to the MIR3 Emergency Broadcast System for emergency broadcasting to key contacts within both the private and public sectors. This system is also available to the membership and key contacts of *SoCalfirst*, a regional financial partnership in Southern California.
- ▶ *BARCfirst* and its members are in communication with the Los Angeles County Sheriff's Department, Business Executives for National Security, and the California State Office of Emergency Services regarding the

***BARCfirst Pandemic Exercise
After Action Report***

establishment of a database
containing an inventory of
private sector resources that

could be available to the public
sector in times of crisis.

Pandemic Planning Issue E:

During a pandemic crisis, institutions may choose to request that the financial regulators provide temporary relief from certain guidelines, regulations and/or procedures should concerns arise pertaining to financial sector stability.

As with any crisis, a pandemic may force businesses to operate under different circumstances. In certain circumstances regulators have the authority under their emergency powers to provide limited temporary relief. Examples of previous relief during crises may provide insights into the types of conditions that warrant this action and under what conditions this relief was provided.

Lesson Learned:

Financial institutions may choose to consider consulting with their regulators about the types of regulatory relief that is within their authority and review previous situations of when this relief was granted.

Continuing and Future Actions:

- ▶ Financial institutions should know the scope of relief options financial regulators would be able to offer in a crisis and incorporate alternative compliance mechanisms into their plans.

BARC*first*

Pandemic Exercise
After Action Report

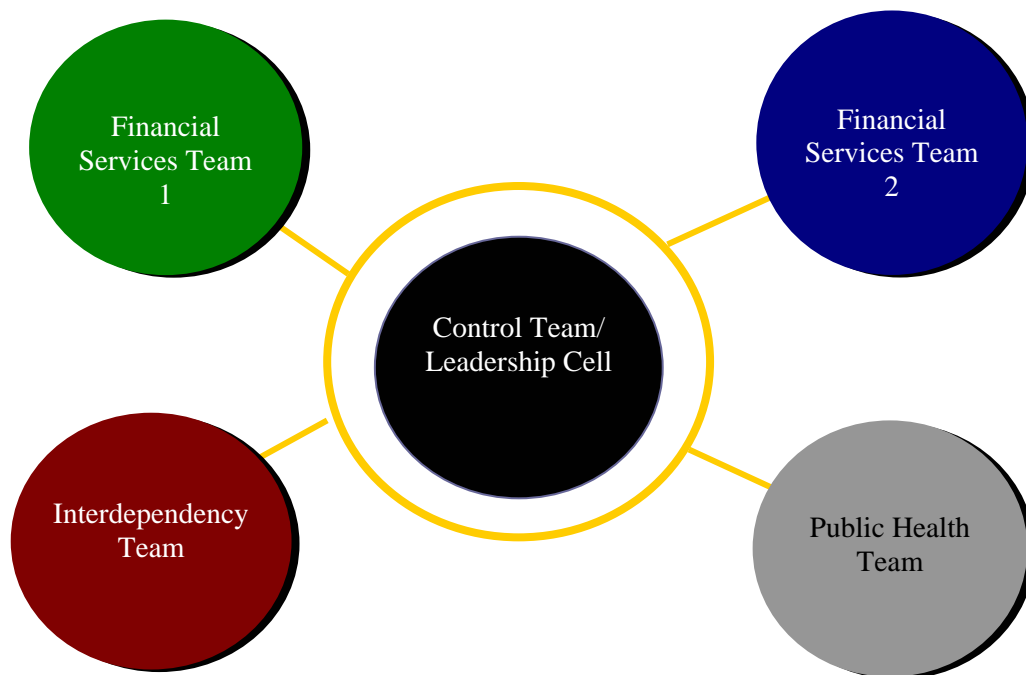
Appendices

Appendix A: Exercise Organization & Structure

Exercise participants were organized into five teams – two financial services teams, an interdependency team, a public health team, and a control team/leadership cell.

- ▶ The financial services sector teams comprised various financial institutions including, but not limited to, banks, credit unions, investment management organizations, and the New York Stock Exchange.
- ▶ The interdependency team included representatives from the San Francisco International Airport's Emergency Operations Center, a local police department, an area fire department, and the telecommunications industry.
- ▶ The public health team participants represented local and Federal public health organizations, area hospitals, and humanitarian organizations.
- ▶ The control team/leadership cell included representatives from the Federal government and the exercise design team. They orchestrated exercise injects and played the role of all those stakeholders not represented on the other teams, including the media, financial regulators, and Federal, State and local governments.

Figure I: Simulation Teams and Team Structure



Appendix B: Exercise Participants

The BARCfirst Pandemic Exercise brought together senior officials from the San Francisco Bay Area's financial services, public services, and public health sectors, as well as the Federal government and Federal agencies.

PRIVATE SECTOR ORGANIZATIONS

- ▶ America California Bank
- ▶ AT&T
- ▶ BARCfirst
- ▶ Barclays Global Investors
- ▶ BNP Paribas
- ▶ Brink's, Inc.
- ▶ Business Recovery Managers Association
- ▶ Charles Schwab
- ▶ E. Dugan Associates
- ▶ Fireside Bank
- ▶ First Federal Savings & Loan of San Rafael
- ▶ First Republic Bank
- ▶ Franklin Templeton
- ▶ Fremont Bank
- ▶ New York Stock Exchange
- ▶ Pacific Coast Banker's Bank
- ▶ Seton Hospital
- ▶ Stanford Federal Credit Union
- ▶ Summit State Bank
- ▶ Tech Federal Credit Union
- ▶ United American Bank
- ▶ Verizon
- ▶ VISA
- ▶ Washington Mutual
- ▶ Wells Fargo Bank

PUBLIC SECTOR ORGANIZATIONS

- ▶ American Red Cross
- ▶ BART
- ▶ Centers for Disease Control and Prevention
- ▶ City and County of San Francisco Office of Emergency Services
- ▶ East Bay Municipal Utility District
- ▶ Federal Bureau of Investigation
- ▶ Federal Deposit Insurance Corporation
- ▶ Federal Reserve Bank of San Francisco
- ▶ San Francisco Department of Public Health
- ▶ San Francisco Fire Department
- ▶ San Francisco International Airport
- ▶ San Francisco Police Department
- ▶ San Mateo County Department of Public Health
- ▶ San Mateo County Office of Emergency Services
- ▶ U.S. Department of Homeland Security
- ▶ U.S. Department of the Treasury
- ▶ U.S. Securities and Exchange Commission

Appendix C: Exercise Scenario

The exercise scenario consisted of two moves. The first move addressed the growing concern over a new influenza outbreak rapidly spreading throughout Southeast Asia and beyond. The second move focused on the introduction of the pandemic at multiple points in the United States, and how the advanced impact of the pandemic overseas foreshadowed the

imminent situation within the United States.

To simulate a “real world” pandemic outbreak during this exercise, reference was made to both the World Health Organization (WHO) Phases and the U.S. Federal Response Stages (see the table below) to assist participants who utilize both in their internal pandemic planning.

Figure II: Pandemic Influenza Alert Phases and Response Stages

WHO Phases		US Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	Low risk of human case	0	New domestic animal outbreak in at-risk country
2	Higher risks of human cases		
PANDEMIC ALERT PERIODS			
3	No, or very limited human-to-human transmission	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Increased human-to-human transmission	2	Confirmed human outbreak overseas
5	Significant human-to-human transmission		
PANDEMIC PERIOD			
6	Pandemic phase: Increased and sustained transmission in general population	3	Widespread human outbreaks in multiple locations overseas
		4	First human cases in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves

Move One: Significant human-to-human transmission of influenza abroad

The first move commenced on May 9, 2007, at which point the outbreak of a new influenza virus had already claimed over 300 victims worldwide.

- ▶ The WHO and the Centers for Disease Control and Prevention (CDC) stationed medical experts in affected areas, gathering samples for study and comparison.
- ▶ The WHO raised the Pandemic Alert level to Phase 4, indicating increased human-to-human transmission.
- ▶ The U.S. Federal Government Response Stage designation was Stage 2, to indicate a confirmed outbreak abroad.
- ▶ While the flu had not yet reached the United States, health experts predicted that it would in a matter of days.
- ▶ The impact of the flu was felt around the world, with reports of increased absenteeism at schools and workplaces, a noted lack of people frequenting public forums, and increased demand for medical supplies.
- ▶ China slowed the export of its medical supplies to prepare for the potential pandemic.
- ▶ Air travel, especially from affected areas, was restricted

and, in some cases, cancelled all together, leaving tourists and business travelers alike stranded.

- ▶ The U.S. Federal government urged State and local governments to prepare implementation plans against the new flu's arrival in the United States.

Move Two: Pandemic both in the United States and abroad

Move Two began two weeks later on May 23, 2007, with a full blown worldwide pandemic.

- ▶ The WHO was at Phase 6, indicating a pandemic, with increased and sustained transmission in the general population.
- ▶ Accordingly, the U.S. Federal Government Response Stage designation was Stage 4, in response to confirmed human cases in North America.
- ▶ In the United States alone, there were 760 confirmed cases and 35 deaths in major metropolitan areas across the country.
- ▶ San Francisco had 34 cases, with 2 deaths.
- ▶ Constant media coverage of the pandemic, and the rumors perpetuated through media outlets, increased the level of fear in the general population.

***BARCfirst Pandemic Exercise
After Action Report***

- ▶ Demand for non-essential goods and services dropped drastically, creating a ripple effect across several industries.
- ▶ Hospitals around the world and across the United States were

overwhelmed with an influx of patients seeking treatment, simultaneously dealing with a lack of personnel resources and physical supplies (such as ventilators).

Appendix D: Team Actions

MOVE ONE MAJOR TEAM ACTIONS

Financial Team 1

- ▶ Implemented international business travel restrictions and encouraged limiting international personal travel
- ▶ Encouraged social distancing through work-at-home and alternate work schedule strategies
- ▶ Examined continuity plans to ensure long-term viability to last through a full pandemic cycle
- ▶ Communicated a message of reassurance and readiness to employees, management, vendors, and customers by leveraging web presence, email, and technological tools
- ▶ Reviewed and refreshed existing response plans relative to critical operations and employees, including work-from-home plans

Financial Team 2

- ▶ Analyzed current plans and identified responsibilities within the plan
- ▶ Stockpiled sanitizer and began stationing outside branches, with additional cleansers in offices
- ▶ Loaded tests to test critical infrastructure
- ▶ Examined priorities and allocated available resources
- ▶ Developed communication plan, both internally and with customers and vendors
- ▶ Developed list of those who can cross-functionalize

Interdependency Team

- ▶ Employed pandemic flu response plans
- ▶ Prepared Emergency Operations Centers
- ▶ Trained personnel through personal hygiene and wellness programs
- ▶ Issued public information alerts
- ▶ Adopted alternate shifts for identified critical personnel
- ▶ Kept personnel informed of risks and
- ▶ Ensured compliance with public health regulations

Public Health Team

- ▶ Reinforced prevention messaging on hygiene, etc.
- ▶ Implemented basic screening at airports
- ▶ Established that antiviral supplies would be used as treatment, not prophylaxis
- ▶ Activated incident command centers within institutions

MOVE TWO MAJOR TEAM ACTIONS

Financial Team 1

- ▶ Expanded internal and external communications
- ▶ Cross-trained employees to maintain critical function capabilities
- ▶ Focused on maintaining critical staff
- ▶ Reassigned staff from less essential activities
- ▶ Employed more extensive social distancing where possible
- ▶ Equipped call centers to address customer questions and concerns
- ▶ Reevaluated scaled back activities

Financial Team 2

- ▶ Implemented telework plans
- ▶ Enacted social distancing strategies
- ▶ Prioritized critical functions and reassigned personnel from nonessential functions
- ▶ Cancelled nonessential travel and face-to-face meetings
- ▶ Polled employees to determine extent and nature of impact of pandemic (family, etc.)
- ▶ Evaluated state of customer demand
- ▶ Fully implemented cleaning/sanitation protocol
- ▶ Began screening employees (including vendors, delivery people) upon arrival
- ▶ Updated external hotline

Interdependency Team

- ▶ Maintained communications with key organizations
- ▶ Sought instructions regarding transportation, mass gatherings, schools, religious gatherings
- ▶ Executed plans that cover short, long, and intermediate plans
- ▶ Activated Emergency Operations Centers
- ▶ Implemented employee service plans
- ▶ Focused primarily on public safety

Public Health Team

- ▶ Distributed public information/education materials
- ▶ Focused message on mitigating transmission
- ▶ Conducted screenings at airports and other points of entry
- ▶ Ordered cessation of public gatherings (schools, churches, businesses, etc.)
- ▶ Mandated social distancing and the use of surgical masks on public transportation
- ▶ Planned for anticipated strain on mortuary services