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U.S. Army Japan Kicks Butts Tobacco Control Policy

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Abstract

Background: Tobacco use has short-term effects that impair mission readiness and performance and degrade soldier productivity. U.S. Army Japan Kicks Butts Action Team developed, disseminated, and promoted compliance with a local tobacco control policy. *Methods:* Policy development involved creating a draft policy, obtaining command approval through the community health promotion council, then publishing the policy. Policy dissemination involved publishing an operational order to implement the policy and conducting policy awareness and education activities. The policy was communicated using eight methods: office memorandum, command meetings, command email communication, command social media, command website, signs and posters, command announcements, and word of mouth. Compliance was promoted through site visits to inform and remind community members, Army units, and organizations of the policy. Kicks Butts Action Team also facilitated and conducted actions to correct policy violations. Tobacco-free installation and designated tobacco use signs were also used to promote compliance. *Results:* Overall, 69% of soldiers correctly identified all of the policy's principle restrictions and 80% identified at least five. Seventy-five percent of the soldiers correctly identified each of the personnel categories to which the policy applied. Overall, soldiers perceived moderate to high enforcement of the policy (62.0%). Most soldiers (40.3%) reported moderate convenience of tobacco use. Most (55.1%) reported low exposure to secondhand tobacco smoke. Nearly 60% perceived the policy as being moderately to highly effective in preventing tobacco use and promoting tobacco use cessation. Ninety percent of soldiers perceived the policy as moderately to highly acceptable.

Keywords: tobacco control, tobacco policy

Introduction

Tobacco use is associated with more than 480,000 preventable deaths each year making it the foremost avoidable cause of illness and death in America (Centers for Disease Control, 2014). The population health burden of tobacco use has motivated the United States (U.S.) Surgeon General to make tobacco use reduction one of the nation's health priorities (U.S. Department of Health and Human Services, 2009). Healthy People 2020 objectives and indicators support the goal to reduce the prevalence of tobacco among adults to 12% (U.S. Department of Health and Human Services, 2009). Despite documented and publicized evidence of the tobacco-related health hazards and despite the national priority for tobacco use reduction, 18% of American adults used some form of tobacco in 2014 (Centers for Disease Control, 2014). The rate decreased from 21% in 2008, however, the 2014 rate was well above Healthy People 2020's goal of 12% (U.S. Department of Health and Human Services, 2009).

Background

In addition to the long-term health risks associated with tobacco use, tobacco use has short-term effects that impair physical performance and wellbeing which are particularly problematic for the Department of Defense (Institute of Medicine, 2009). A study of U.S. military trainees found those who smoke cigarettes were less fit than those who do not smoke cigarettes (Conway & Conran, 1992). Nicotine withdrawal can interfere with mission focus. In times in which service members who use tobacco are not able to use tobacco, they suffer from nicotine withdrawal symptoms that include irritability, problems maintaining mental focus, and difficulty with complex information processes (Sommese & Patterson, 1995; Spilich et al., 1992). Tobacco use also degrades mission readiness. Jones and Knapik (1999), Altarac et al (2000), and Knapik et al (2001) found that smoking increases the risk for exercise related injuries for military men

and women, and increases the risk of missed duty time due to injury. They also found a dose-response relationship exists between the level of smoking and injuries. Additionally, U.S. military personnel who smoke are more likely to experience overuse injuries than U.S. military service members who do not smoke (Conway & Conran, 1992). With a 24% prevalence of smoking among U.S. military personnel, U.S. military service members use tobacco at a higher rate than the general U.S. adult population and are well above Healthy People 2020's goal of 12% (U.S. Department of Health and Human Services, 2009; Department of Defense, 2013).

According to the Institute of Medicine, smoking restrictions with broad coverage are one of the key elements for tobacco control (Institute of Medicine, 2007). The Department of Defense and the U.S. Army have established tobacco control policies incrementally through a number of directives and Army regulations. These corporate-level policies established conditions for U.S. Army installations to address the tobacco use problem locally. However, U.S. Army installations must implement tobacco control locally. The establishment of a local tobacco control policy is important to facilitate awareness and knowledge of the tobacco control principles and to facilitate compliance with tobacco control restrictions (Institute of Medicine, 2007).

Problem Statement

The rate of tobacco use among active duty U.S. Army soldiers stationed at Camp Zama, Japan, was higher than the U.S. national rate and the Healthy People 2020 goal. In 2015, Camp Zama, Japan is had 756 active duty U.S. Army soldiers. Twenty-two percent of the soldiers at used tobacco which is higher than the prevalence among American adults and the U.S. Department of Health and Human Services' Healthy People 2020 goal. (U.S. Department of Health and Human Services, 2009) (U.S. Army Dental Command Pacific, 2015). Existing knowledge indicates tobacco use impairs mission readiness; reduces worker productivity; causes

disease and conditions attributed to tobacco use, and increases health care costs. To address the tobacco use problem, development and dissemination of a local tobacco control policy was used to make the community's environment less supportive for tobacco use among the U.S. Army soldiers stationed at Camp Zama.

Review of the Literature

A search of the literature for the effectiveness of tobacco control policies was conducted using PubMed of the National Library of Medicine and Cumulative Index of Nursing and Allied Health Literature (CINAHL). The following medical subject terms were used for the PubMed search: *tobacco* and *policy*. The search was limited to English reviews conducted within the last five years. The search yielded 74 results. Search criteria in CINAHL included the MeSH terms: *tobacco* or *smoking*, and *policy*. The search was also limited to English reviews conducted within the last five years. This search resulted in the retrieval of 290 articles. Five articles related to policy effectiveness and acceptability were selected for review.

The literature supports the effectiveness of tobacco control policy. Smoke-free policies were found to contribute to cessation outcomes, decreasing smoking, decreasing secondhand tobacco smoke exposure, and reducing adverse health outcomes (Schillo, Keller, Betzner, Greenseid, Christenson, & Luxenberg, 2012; Hoffman & Tan, 2015). Smoke-free air laws were among a number of interventions including mass media, tobacco cessation treatment policies, and enforcement of youth-access tobacco restrictions that resulted in a reduction of tobacco use and decreased (Levy, Boyle, Abrams, Levy, Boyle, & Abrams, 2012).

Evidence also shows community support of tobacco control policy. Over 40% of multi-unit housing complex residents prefer a smoke-free policy for residential units. Almost one in five would choose a smoke-free building if they were to purchase a new home, and 46% indicated a

willingness to pay more for a unit in a smoke-free complex (Hewett, Ortland, Brock, & Heim, 2012). Counties with smoke-free legislation were more likely to have voluntary smoke-free home rules and smoke-free car rules than did counties with no smoke-free legislation coverage (Cheng, Okechukwu, McMillen, & Glantz, 2015). Policies banning smoking in public places were found to have a moderate independent effect of reducing the prevalence of smoking, however the accuracy of the estimated change was negatively impacted by the variability of settings, varying characteristics of the bans, varying levels of policy enforcement, and variations in the overall tobacco control environments (Wilson et al., 2012). Among tobacco control efforts, government led efforts to protect people from tobacco smoke were found to be strongly supported by individuals (Hoffman & Tan, 2015).

Theoretical Framework

U.S. Army Japan's Kicks Butts Tobacco Control Policy was administered as a health improvement initiative by U. S. Army Japan's Community Health Promotion Council. U.S. Army Japan Kicks Butts collaborated with U.S. Army Garrison Japan, tenant Army units, the Army health clinic, and the Army dental clinic to promote and enable tobacco-free living and tobacco-free environments. The Ecological Model was used as the theoretical framework to implement the tobacco control policy (Issel, 2013). The RE-AIM (Reach, Efficacy, Adoption, Implementation, Maintenance) model was used to evaluate the program at the individual, organizational, community, and population levels.

Description of the Community

Twenty-two percent of the soldiers at Camp Zama used tobacco which was higher than among American adults and the U.S. Department of Health and Human Services' Healthy People 2020 goal. Camp Zama, Japan is a United States Army military installation managed by U.S.

Army Garrison Japan which provided installation services and support to the soldiers, Department of the Army civilians, and families at Camp Zama and 16 other Army sites in Japan (U.S. Army Garrison Japan, 2015). U.S. Army Medical Activity Japan provides medical services to Camp Zama's military health system beneficiaries and is responsible for medical mission readiness and the well-being of the whole Army community in Japan (U.S. Army Garrison Japan, 2015).

Key stakeholders were soldiers at Camp Zama, U.S. Army Japan, U.S. Army Garrison Japan, U.S. Army Medical Activity Japan, and U.S. Army Dental Activity – Japan. U.S. Army Medical Activity Japan was responsible for outpatient primary care and some specialty care services to military personnel, retired veterans, Department of the Army civilians, and their respective families at Camp Zama through its outpatient clinic BG (Brigadier General) Crawford F. Sams Army Health Clinic (SAHC) (Camp Zama, 2015). The services SAHC offers that were most relevant to the active population's tobacco use issue were primary care, pharmacy, behavioral health, preventive medicine, public health nursing, and Army Wellness Center (Camp Zama, 2015).

U.S. Army Dental Activity Japan provided comprehensive dental care services for active duty U.S. military personnel as well as for retired veterans, Department of the Army civilians, and their respective families at Camp Zama based upon available appointments (U.S. Army Dental Activity Japan, 2015). The services U.S. Army Dental Activity Japan provided that were most relevant to the tobacco use issue among soldiers assigned to Camp Zama were tobacco use assessment, tobacco use documentation and reporting, and tobacco use intervention (U.S. Army Dental Command, 2008).

U.S. Army Garrison Japan provided installation services and support to the soldiers, Department of the Army civilians, and families at all Army sites in Japan including Camp Zama (Camp Zama, 2015). The U.S. Army Garrison Japan program that was most relevant to the tobacco use issue was the U.S. Army Substance Abuse Prevention program managed by U.S. Army Garrison Japan's Army Community Services. Army Community Services supports the stability, resilience and deployment readiness of soldiers, civilian employees and their families through a variety of programs (U.S. Army, 2012). U.S. Army Substance Abuse Program also provides guidance and support to Army leaders related to addressing alcohol and other drug issues in their respective organizations; provides alcohol and drug abuse prevention education and training; and provides non-clinical intervention for alcohol and other drug abuse issues (U.S. Army Center for Substance Abuse, 2015).

Under a tobacco control policy, prevalence of smoking among adults in Washington state decreased from a baseline of 22.5% to 17.6% in one year; a decrease of 5%. (Dilley, 2007). U.S. Army Japan had 166 soldiers who used tobacco in 2015. A 5% decrease in prevalence, based upon the 2015 data, would result in about eight soldiers quitting each year for the first few years of the program. Applying the Centers for Disease Control's estimate of \$1,623 a year in excess medical expenditures attributable to tobacco use, the eight former tobacco users' abstinence from tobacco for twelve months would contribute to a \$12,984 annual reduction in tobacco attributable excess medical expenditures (Centers for Disease Control, 2002).

According to Defense Enrollment Eligibility Reporting System data for the Defense Medical Information System Identifier for Camp Zama's Army health clinic, Camp Zama had 756 active duty U.S. Army soldiers assigned (U.S. Army Medical Activity - Japan, 2015).

According to the Army's housing data, most of the service members who reside on Camp Zama were of junior enlisted ranks private (E1) to specialist (E4) (31%). Thirty percent were of mid-grade non-commissioned officer ranks sergeant (E5) to staff sergeant (E6), and 14% were of senior enlisted ranks sergeant first class (E7) to master sergeant (E9) (U.S. Army Garrison – Japan, 2015). Thirteen percent were company grade officers, warrant officer to captain (WO1 to O3), and 12% were field grade or general officers of ranks major (O4) and higher (U.S. Army Garrison – Japan, 2015). The target population was made up predominantly of males with males making up 87% of the population (Army Institute of Public Health, 2015).

Nearly half of soldiers (47%) were between the ages of 25 and 34. The under 25 age group was the next largest at 27% (Army Institute of Public Health, 2015). Twenty-one percent were ages 35 to 44, and 5% were older than 44 years (Army Institute of Public Health, 2015). The operational deployment tempo was relatively low with 1.1% of the soldiers having spent time deployed in the past year (Army Institute of Public Health, 2015). Three percent of the target population had chronic obstructive pulmonary disease (COPD); 6% were diagnosed with asthma; and 17% had cardiovascular disease (Army Institute of Public Health, 2015).

The prevalence of chronic disease was highest among those over 44 females (30%) and males (49%) older than 44 years old (Army Institute of Public Health, 2015). Nearly 49% of the population was either overweight or obese as measured by body mass index (Army Institute of Public Health, 2015). The prevalence of overweight and obesity was highest among females in the 35-44 age group (70%), while, the prevalence was highest among males in the over 44 age group (91%) (Army Institute of Public Health, 2015).

Fourteen percent of the population had a behavioral health condition indicative of psychological stress; 20% among females and 13% among males (Army Institute of Public

Health, 2015). The prevalence was highest among females ages 25 to 34 (24%) and highest among males in the 35 to 44 age group (14%) (Army Institute of Public Health, 2015). Four of the top ten medical encounter diagnostic categories and subcategories for the soldiers in Japan were among injury and injury related musculoskeletal condition categories (Army Institute of Public Health, 2015). The highest rates of injury were among soldiers over 44 years of age regardless of gender (1,732 per 1,000 person-years females; 1,268 per 1,000 person-years males) (Army Institute of Public Health, 2015).

Project Site

U.S. Army Japan Kicks Butts community tobacco control policy and the supporting U.S. Army Japan Kicks Butts action team was managed by the Doctorate of Nursing Practice student. U.S. Army Japan Kicks Butts was ultimately accountable to the population served, but operated under the authority of U.S. Army Japan's Community Health Promotion Council. The Community Health Promotion Council which was chaired by the senior Army officer in Japan held U.S. Army Japan Kicks Butts accountable to achieve the stated processes and outcomes. Community Health Promotion Council oversight was provided through the quarterly Community Health Promotion Council meetings. The Community Health Promotion Council's board of directors provided U.S. Army Japan Kicks Butts guidance and support on a monthly basis, between the quarterly Community Health Promotion Council meetings. U.S. Army Japan Kicks Butts action team met twice each month. U.S. Army Japan Kicks Butts received no direct funding for the project.

U.S. Army Japan Kicks Butts was administered as a health improvement initiative by U.S. Army Japan's Community Health Promotion Council. U.S. Army Japan Kicks Butts engaged with U.S. Army Garrison Japan, tenant Army units, the Army health clinic, and the Army dental

clinic to promote and enable tobacco-free living and tobacco-free environments using the Ecological Model as the theoretical framework to implement the tobacco control policy and the RE-AIM Model to evaluate the project.

The Ecological Model conceptualizes health as an outcome related to a person's environments; individual, interpersonal networks, organizations, community, society, and supranational systems (Kok, Gottlieb, Commers, & Smerecnik, 2008). Interpersonal level is comprised of people and small groups with whom at-risk persons socialize. The community level is groups of people geographic areas which share values and are interested in mutual well-being (Kok, Gottlieb, Commers, & Smerecnik, 2008). The organizational level is a hierarchal system with a specific goal (Kok, Gottlieb, Commers, & Smerecnik, 2008). The societal or policy level has authority to control facets of livelihood and development of those in defined territories. Two or more societies constitute the supranational level (Kok, Gottlieb, Commers, & Smerecnik, 2008).

Project Design

U.S. Army Japan Kicks Butts used a descriptive design, incorporating single-group measures and multi-factor analysis of soldiers' awareness, knowledge, and perceptions of U.S. Army Japan's tobacco control policy. The outcomes sought by this project were:

1. Evaluate awareness of the tobacco control policy
2. Evaluate knowledge of the tobacco control policy components
3. Evaluate compliance with the tobacco control policy.

Mixed methods analysis was used to assess quantitative and qualitative program data. The logic model shown in Table 1 depicts the inputs, activities and outcomes of the program.

RE-AIM framework with its dimensions of reach, efficacy, adoption, implementation, and maintenance was used as the model to evaluate U.S. Army Japan Kicks Butts. *Reach* evaluated

the dissemination of policy information to soldiers. (Perrin, 2014). Efficacy outcomes include physiologic, behavioral, quality of life, and participant satisfaction (Perrin, 2014). *Efficacy* evaluated perceptions of the policy's effectiveness in preventing tobacco use, promoting tobacco use cessation, and reducing second hand tobacco smoke exposure (Perrin, 2014). *Adoption* evaluated of compliance with U.S. Army Japan tobacco control policy's principle restrictions (Perrin, 2014).

Table 1

Tobacco Control Policy Logic Model

| Inputs | Outputs | Outcomes |
|---|--|--|
| Department of Defense regulations Department of the Army regulations | Develop a tobacco control policy | A published tobacco control policy |
| Tobacco use prevalence among active duty soldiers at Camp Zama, Japan | Disseminate tobacco control policy Provide education about tobacco control policy | Baseline awareness of tobacco control policy Baseline knowledge of tobacco control policy |
| Locations of unauthorized tobacco use locations | Direct observation of policy compliance Corrective actions | Baseline policy compliance data |

Implementation evaluated U.S. Army Japan Kicks Butts at the community level using direct observation to qualitatively measure compliance with U.S. Army Japan's tobacco control policy on Camp Zama (Perrin, 2014). Finally, *maintenance* evaluated U.S. Army Japan Kicks Butts at the organizational level for continuity (Perrin, 2014).

Methods

U.S. Army Japan Kicks Butts tobacco control policy was developed as a health improvement project by U. S. Army Japan's Community Health Promotion Council. U.S. Army Japan Kicks Butts collaborated with U.S. Army Japan, U.S. Army Garrison Japan, tenant Army

units, U.S. Army Medical Activity Japan, and U.S. Army Dental Activity Japan to implement the tobacco control policy. As reflected in Figure 1, Community Health Promotion Council approved the tobacco control policy proposal, and subsequently, U.S. Army Japan Kicks Butts process action team was formed. The process action team, made up of representatives of key stakeholders and other community members, developed a draft tobacco control policy and garnered preliminary support for implementation through stakeholder engagement. The draft tobacco control policy was submitted to the Community Health Promotion Council for final approval and signature endorsement by U.S. Army Japan's commander. After approval of the policy, the process action team began disseminating the policy and facilitating implementation. U.S. Army Japan Kicks Butts' action team became a permanent committee of U.S. Army Japan Community Health Promotion Council's Community Health Working Group. U.S. Army Japan Kicks Butts effectiveness outcomes were:

1. To what extent were soldiers knowledgeable of the tobacco control policy?
2. What were soldiers' perception of the effectiveness of the policy?
3. What were soldiers' perceptions of enforcement of the policy?
4. What were soldiers' perceptions of compliance with the policy?

Timeline

Kicks Butts tobacco control policy was intended to make the environment less supportive of tobacco use among active duty Army soldiers assigned to Camp Zama. The project involved policy development, dissemination, and enforcement. The Community Health Promotion Council approved the tobacco control policy proposal in April 2016. U.S. Army Japan commander signed the tobacco control policy on June 14, 2016. The tobacco control policy was incorporated into U.S. Army Japan mission command through the development and publication

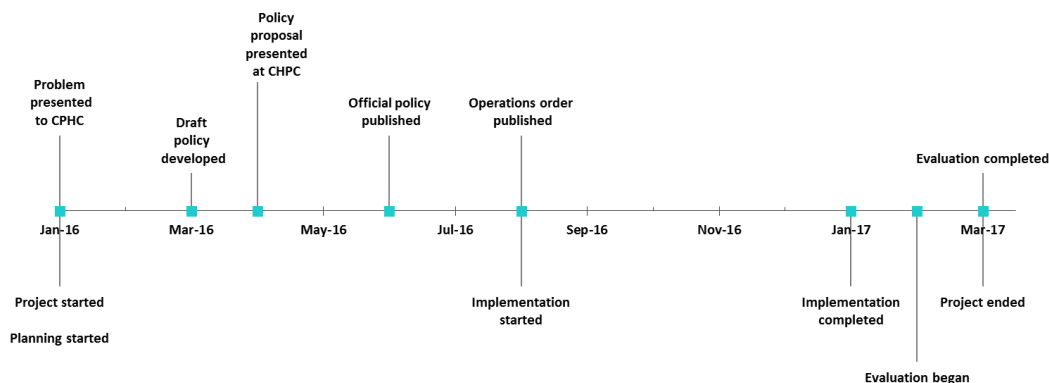
of a supporting operation order which was published on August 2, 2016. The operation order tasked subordinate Army unit and directorate leaders to, by the end of September, map the current areas in which tobacco use routinely occurred. Kicks Butts Action Team worked from August 2016 into December 2016 to implement the tobacco control policy. The leaders were obligated to, by the end of September 2016, map proposed locations for designated tobacco use areas. Leaders were required to update the Community Health Promotion Council in October 2016 on their efforts to implement the tobacco control.

Kicks Butts Action Team worked with multiple organizations to implement the tobacco control policy. Kicks Butts Action Team included the author, Community Health Promotion Council Health Promotion Officer, SAHC's detachment commander, public health nurse, health educator, and behavioral health provider, Directorate of Public Works representatives, public affairs representatives, an Army non-commissioned officer, and a family readiness group leader. Organizations included: U.S. Army Garrison Japan, Army units, health clinic, dental clinic, Directorate of Public Works, Department of Defense Schools, Child Youth and School Services, dining facility, exchange service (department store), library, education center, youth sports, intramural sports, bowling center, American Red Cross, automobile crafts shop community club, golf course, and Army Community Services.

All current tobacco use areas and proposed designated tobacco use areas were mapped. Kicks Butts Action Team approved each proposed location to ensure policy compliance and submitted maps and work orders for tobacco-free installation and designated tobacco use areas signs for erecting by Directorate of Public Works. To facilitate compliance, Kicks Butts Action Team completed site visits within the community using the Tobacco Control Checklist to guide corrective actions (Appendix A). Kicks Butts Action Team began using the site visit checklist in

September 2016. The action team also collected awareness, knowledge, and perception data using a survey questionnaire (Appendix B).

Figure 1 Project Timeline



Objectives

U.S. Army Japan Kicks Butts supported tobacco free living among active duty Army Soldiers who are assigned to Camp Zama through accomplishment of tobacco control policy development, dissemination, and implementation objectives as outlined in Table 2.

Objective 1 was to develop a tobacco control policy by September 2016. This involved developing a draft policy, obtaining approval U.S. Army Japan's commander's approval through the Community Health Promotion Council, then publishing the policy.

Objective 2 was to disseminate the tobacco control policy. Dissemination involved publishing an operational order to implement the policy and conducting policy awareness and education opportunities. The policy was communicated using eight methods; office memorandum, command meetings, command email communication, command social media, command website, signs and posters, command announcements, and word of mouth.

Objective 3 was to promote compliance with the tobacco control policy. Kicks Butts Action Team conducted compliance surveillance site visits to inform and remind community members, Army units, and organizations of the policy. Kicks Butts Action Team also facilitated and

conducted actions to correct policy violations. Tobacco-free installation and designated tobacco use signs were also used to promote compliance.

Table 2

Project Objectives

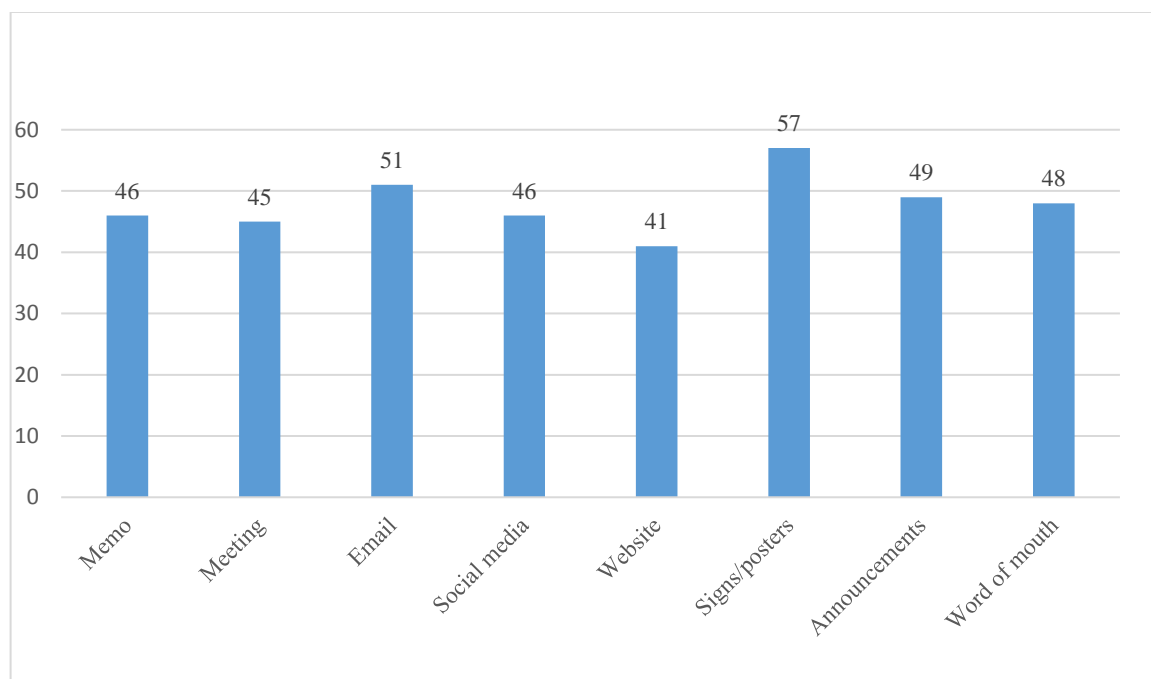
| Objective | Description |
|--|---|
| Objective 1. Develop a tobacco control policy by September 2016 | |
| Sub-objectives | |
| 1.1 | Develop a draft U.S. Army Japan tobacco control policy by April 2016. |
| 1.2 | Obtain approval of draft U.S. Army Japan tobacco control policy by May 2016. |
| 1.3 | Publish U.S. Army Japan tobacco control policy by September 2016. |
| Objective 2. Disseminate the tobacco control policy. | |
| Sub-objectives | |
| 2.1 | Disseminate policy using an operation order by September 2016. |
| 2.2 | Provide educational opportunities about the policy through December 2016. |
| 2.3 | Conduct policy promotion activities through December 2016. |
| Objective 3. Promote compliance with the tobacco control policy. | |
| Sub-objectives | |
| 3.1 | Conduct compliance surveillance during and after policy dissemination through January 2017. |
| 3.2 | Conduct corrective actions during and after policy dissemination compliance through January 2017. |

Results

Minitab 17 was used to summarize and analyze the data collected from the tobacco control survey questionnaires. Chi-square calculations were used to assess for statistically significant differences between groups based upon tobacco use status. The survey was conducted from November 1, 2016 through February 16, 2017. A total of 80 survey questionnaires were completed giving a response rate of 11%. No major errors were found in the survey responses.

The policy was communicated using eight methods; office memorandum, command meetings, command email communication, command social media, command website, signs and posters, command announcements, and word of mouth. Soldiers, on average, received information about the policy through four (61%) of the communication methods. Thirty-eight percent reported learning about the policy through each of the eight communication methods. Signs or posters were the most common and the command website was the least common methods of receiving information. (See Figure 2.) Most soldiers (58.2%) perceived the tobacco control policy as very acceptable. Almost 90% perceived the policy as moderately to highly acceptable while 10.4% rated the policy low in acceptability.

Figure 2 Reported Sources of Information



Demographics

The majority of respondents were males (83.75%) and between 30 and 39 years of age (42.50%). Seventy-one percent of the soldier were over 30 years old. (See Tables 3 and 4.)

Table 3

Gender

| Gender | Count | Percent (%) |
|--------|-------|-------------|
| Female | 13 | 16.25 |
| Male | 67 | 83.75 |
| Total | 80 | 100 |

Table 4

Age

| Age Range | Count | Percent (%) |
|-----------------|-------|-------------|
| Younger than 20 | 2 | 2.50 |
| 20-29 | 21 | 26.25 |
| 30-39 | 34 | 42.50 |
| 40 and older | 23 | 28.75 |
| Total | 80 | 100 |

Tobacco Use Status

Eighteen (22.50%) of those who submitted a survey reported tobacco use. Cigarettes was the most commonly reported tobacco used (66.67%) as shown in Table 5. Cigars was the second most common type of tobacco used followed by electronic delivery devices; either alone or in combination with cigarettes. Most of the tobacco users had no short-term intention to quit tobacco and four (22.22%) tobacco users intended to quit using tobacco within the next six months.

Table 5
Types of Tobacco Used

| Types of Tobacco | Count | Percent (%) |
|--|-------|-------------|
| Cigarettes | 12 | 66.67 |
| Cigars | 3 | 16.67 |
| Cigarettes and electronic delivery devices | 1 | 5.56 |
| Electronic delivery devices | 1 | 5.56 |
| Smokeless | 1 | 5.56 |
| Total | 18 | 100 |

Policy Awareness and Knowledge

U.S. Army Japan Kicks Butts policy contained six principle restrictions. Overall, 69% of soldiers correctly identified all the principle restrictions and 80% identified at least five (See Table 6). Soldiers were most likely to identify “tobacco use closer than 50 feet from buildings is prohibited” and “tobacco use is permitted only in designated tobacco use areas” as policy restrictions and were least likely to identify “tobacco use is prohibited in tower housing” as being part of the policy (See Table 7). Eighty-three percent of soldiers who used tobacco correctly identified 90-100% of the policy's principle restrictions compared to 64% of those who did not use tobacco. (See Table 8.) Soldiers who did not use tobacco made up a greater proportion of those who could not identify 70% or more of the principle restrictions (22.6%) than did those who used tobacco (11.1%). (See Table 8.) Chi-square analysis of differences between the groups was not valid due to expected cells counts less than five. Differences in total proficiency in knowledge of the policy restrictions was assessed as shown in Table 9. There appeared to be no significant difference in total knowledge proficiency between the groups.

Table 6
Knowledge of Policy Restrictions

| Number Correctly Identified | Count ^a | Percent (%) |
|-----------------------------|--------------------|-------------|
| 0 | 5 | 6.25 |
| 1 | 3 | 3.75 |
| 3 | 1 | 1.25 |
| 4 | 7 | 8.75 |
| 5 | 9 | 11.25 |
| 6 | 55 | 68.55 |

^an=80

Table 7
Knowledge of Each Principle Restriction

| Percent Correct (%) | Count ^a | Percent (%) |
|-------------------------------|--------------------|-------------|
| 50 feet minimum | 73 | 91.25 |
| Designated tobacco use areas | 73 | 91.25 |
| Tower housing | 61 | 76.25 |
| Buildings, vehicles, aircraft | 72 | 90.00 |
| Entrances and common areas | 70 | 87.50 |
| Safety | 65 | 81.25 |
| Do not know | 6 | 7.50 |

^an=80

Table 8
Percent Correct, Applicable Principle Restriction by Tobacco Use

| Percent Correct (%) | Tobacco Use ^a Yes | Tobacco Use No |
|---------------------|---------------------------------|-------------------|
| 0 | 0 | 5 (8.06%) |
| 17 | 0 | 3 (4.84%) |
| 50 | 0 | 1 (1.61%) |
| 67 | 1 (11.11%) | 5 (8.06%) |
| 83 | 1 (5.56%) | 8 (12.90%) |
| 100 | 15 (83.33%) | 40 (64.52%) |

^an=79

*Pearson Chi-Square = 4.149, DF = 5, Likelihood Ratio Chi-Square = 6.197, DF = 5, 8 cells with expected counts less than 5

Table 9
Fisher Exact Analysis, Knowledge of Restrictions by Tobacco Use

| Category | Tobacco Use ^a Yes | Tobacco Use No |
|----------------|---------------------------------|-------------------|
| 100% | 15 | 40 |
| Less than 100% | 2 | 22 |
| Total | 17 | 62 |

^an=79

*Fisher's exact test: The two-tailed P value equals 0.0768. The association between policy knowledge proficiency and tobacco use status was not statistically significant.

The tobacco control policy applied to seven personnel categories; military, Department of the Army civilians, contractors, family members, local national employees, visitors, and interagency personnel. Seventy-five percent of the soldiers correctly identified each of the personnel categories as shown in Table 10. Soldiers were least likely to identify visitors (79.8%) as an applicable personnel category (See Table 11). Seventy-five percent of soldiers who did not use tobacco correctly identified all the categories of personnel to whom the policy applied

compared to 72% of those who used tobacco (See Table 12). Chi-square analysis of differences between the groups was not valid due to expected cells counts less than five. Differences in total proficiency in knowledge of the personnel applicability was assessed as shown in Table 13. There appeared to be no significant difference in total knowledge proficiency between the groups.

Table 10
Knowledge of Applicable Personnel

| Percent Correct (%) | Count ^a | Percent (%) |
|---------------------|--------------------|-------------|
| 0 | 5 | 6.33 |
| 14 | 4 | 5.06 |
| 29 | 1 | 1.27 |
| 43 | 3 | 3.80 |
| 57 | 2 | 2.53 |
| 86 | 5 | 6.33 |
| 100 | 59 | 74.68 |

^an=79

Table 11
Knowledge of Each Applicable Personnel Category

| Personnel Category | Count | Percent (%) |
|-------------------------------|-------|-------------|
| Military | 75 | 94.94 |
| Department the Army civilians | 71 | 89.87 |
| Contractors | 68 | 86.08 |
| Family members | 67 | 84.81 |
| Local national employees | 64 | 81.01 |
| Visitors | 63 | 79.75 |
| Interagency | 65 | 82.27 |
| Do not know | 15 | 18.99 |

NOTE: n=79

Table 12

Percent Correct Applicable Personnel Category

| Percent Correct (%) | Tobacco Use ^a | |
|---------------------|--------------------------|------------|
| | Yes | No |
| 0 | 1 (5.56%) | 4 (6.56%) |
| 14 | 2 (11.11%) | 2 (3.28%) |
| 29 | 0 | 1 (1.64%) |
| 43 | 1 (5.56%) | 2 (3.28%) |
| 57 | 0 | 2 (3.28%) |
| 86 | 1 (5.56%) | 4 (6.56%) |
| 100 | 13 (72.22%) | 46 (75.41) |

^an=79

*Pearson Chi-Square = 2.822, DF = 6. 5 cells with expected counts less than 1. 12 cells with expected counts less than 5.

Table 13

Fisher Exact Analysis, Knowledge of Personnel Applicability by Tobacco Use Status

| Category | Tobacco Use | |
|----------------|-------------|----|
| | Yes | No |
| 100% | 15 | 46 |
| Less than 100% | 3 | 15 |
| Total | 18 | 61 |

^an=79

*The two-tailed P value equals 0.7660. The association between knowledge of personnel applicability and tobacco use status was not statistically significant.

Policy Enforcement

As shown in Table 14, the survey measured soldiers' perceptions of how the tobacco control policy was enforced. On-the-spot correction was the most commonly reported enforcement method (61.5%). Monitoring and supervisor counseling were next most common at 34.6%

respectively. Thirty-one percent perceived no enforcement. Overall, soldiers perceived moderate to high enforcement of the policy (62.0%). Thirty-eight percent reported low enforcement (See Table 15).

Sixty-two percent of soldiers who did not use tobacco reported on-the-spot corrections as a perceived method of policy enforcement compared to 55.6% of those who used tobacco. Soldiers who did not use tobacco reported higher perceived use of enforcement methods than did those who did not use tobacco (See Table 16). As shown in Table 17, differences in perception of no policy enforcement was assessed. There appeared to be no significant difference in perception of no policy enforcement between the soldiers who used reported tobacco use and those who did not.

Table 14
Experiences with Policy Enforcement

| Enforcement Activity | Count ^a | Percent (%) |
|--------------------------------|--------------------|-------------|
| On-the-spot-corrections | 48 | 61.53% |
| Site visits | 27 | 34.62 |
| Supervisor counseling | 27 | 34.62 |
| Penalty | 22 | 28.21 |
| No experience with enforcement | 24 | 30.77 |

^an=78

Table 15
Perceived Level of Policy Enforcement

| Category | Count ^a | Percent |
|----------|--------------------|---------|
| Low | 30 | 37.97 |
| Moderate | 34 | 43.04 |
| High | 15 | 18.99 |

^an=79

Table 16
Perceived Policy Enforcement Methods by Tobacco Use Status

| Enforcement Methods | Tobacco Use ^a Yes | Tobacco Use No |
|--------------------------------|---------------------------------|-------------------|
| On-the-spot-corrections | 10 (55.56%) | 38 (62.30%) |
| Site visits | 5 (27.78%) | 22 (36.07%) |
| Supervisor counseling | 2 (11.11%) | 25 (40.98%) |
| Penalty | 3 (16.67%) | 19 (31.15%) |
| No experience with enforcement | 5 (27.78%) | 19 (31.15%) |

^an=79

Table 17
Fisher Exact Analysis, Perceived Policy Enforcement by Tobacco Use Status

| Category | Tobacco Use ^a Yes | Tobacco Use No |
|--------------------------|---------------------------------|-------------------|
| Enforcement Perceived | 13 | 42 |
| No Enforcement Perceived | 5 | 19 |
| Total | 18 | 61 |

^an=79

*The two-tailed P value equals 1.0000. The association between perceived policy enforcement and tobacco use status was not statistically significant.

Perception of the Environment

The tobacco control survey also measured soldiers' perceptions of the convenience of tobacco use on Camp Zama. As shown in Table 18, most soldiers (40.3%) reported moderate convenience. More soldiers reported high convenience (31.2%) than reported low convenience (29.6%). The survey also measured soldiers' perceptions of exposure to secondhand tobacco smoke on Camp Zama. Most (55.1%) reported low exposure while 19.2% reported high exposure. (See Table 19).

Sixteen percent of soldiers who did not use tobacco perceived high secondhand tobacco smoke exposure compared to 29.4% of those who used tobacco. Sixty percent of soldiers who did not use tobacco perceived a low level of secondhand tobacco smoke exposure at Camp Zama while 35.3% of those who used tobacco did (See Table 20). As shown in Table 21, difference in perception of low secondhand smoke exposure was assessed. There appeared to be a significant difference in perception of low secondhand smoke exposure between the soldiers who used reported tobacco use and those who did not.

Table 18

Perceived Convenience of Tobacco Use on the Installation

| Category | Count ^a | Percent |
|----------|--------------------|---------|
| Low | 22 | 28.57 |
| Moderate | 31 | 40.26 |
| High | 24 | 31.17 |

^an=77

Table 19

Perceived Exposure to Secondhand Tobacco Smoke

| Category | Count ^a | Percent |
|----------|--------------------|---------|
| Low | 43 | 55.13 |
| Moderate | 20 | 25.64 |
| High | 15 | 19.23 |

^a n=78

Table 22

Perceived Exposure to Secondhand Tobacco Smoke by Tobacco Use Status

| Category | Tobacco Use ^a Yes | Tobacco Use No |
|----------|---------------------------------|-------------------|
| Low | 6 (36.26%) | 37 (60.65%) |
| Moderate | 6 (35.29%) | 14 (22.95%) |
| High | 5 (29.41%) | 10 (16.40%) |

^an=78

Table 23

Fisher Exact Analysis, Perceived Secondhand Smoke Exposure by Tobacco Use Status

| Category | Tobacco Use ^a Yes | Tobacco Use No |
|------------------|---------------------------------|-------------------|
| Moderate or High | 11 | 24 |
| Low | 5 | 37 |
| Total | 16 | 61 |

^an=77

*The two-tailed P value equals 0.0490. The association between perceived secondhand smoke exposure and tobacco use status was statistically significant.

Perceived Impact on Behavior

Soldiers were asked if they thought the tobacco control policy was effective in preventing tobacco use. Sixty percent perceived the policy as being moderately to highly effective while (40%) perceived the policy as not effective(See Table 24.) Almost 62% thought the policy was moderately to highly effective in promoting tobacco use cessation compared to 38% percent who perceived it as ineffective in promoting tobacco use cessation as depicted in Table 25.

Table 24
Perceived Effectiveness in Preventing Tobacco Use

| Category | Count ^a | Percent |
|----------|--------------------|---------|
| Low | 31 | 40.26 |
| Moderate | 28 | 36.36 |
| High | 18 | 23.27 |

^an=77

Table 25
Perceived Effectiveness in Promoting Tobacco Use Cessation

| Category | Count ^a | Percent |
|----------|--------------------|---------|
| Low | 30 | 38.47 |
| Moderate | 31 | 39.74 |
| High | 17 | 21.80 |

^an=77

1

Sixty-two percent of soldiers who did not use tobacco thought the policy was moderately to highly effective in preventing tobacco use compared to 52.9% of those who used tobacco. Thirty-eight percent of soldiers who did not use tobacco thought the policy was not effective in preventing tobacco use compared to 47% percent of the soldiers who used tobacco as shown in Table 26. As shown in Table 28, difference in perception effectiveness in preventing tobacco use was assessed. There appeared to be a no significant difference in perception effectiveness in preventing tobacco use between the soldiers who used reported tobacco use and those who did not.

Table 26

Perceived Effectiveness in Preventing Tobacco Use by Tobacco Use Status

| Category | Tobacco Use ^a | |
|----------------------|--------------------------|-------------|
| | Yes | No |
| Ineffective | 8 (47.06%) | 23 (38.33%) |
| Moderately Effective | 8 (47.06%) | 20 (33.33%) |
| Highly Effective | 1 (5.88%) | 17 (28.33%) |

^an=77

Table 27

Fisher Exact Analysis, Perceived Effectiveness in Preventing Tobacco Use by Tobacco Use Status

| Category | Tobacco Use ^a | |
|--------------------------------|--------------------------|----|
| | Yes | No |
| Moderately or Highly Effective | 9 | 37 |
| Ineffective | 8 | 23 |
| Total | 17 | 60 |

^an=77

*The two-tailed P value equals 0.5812. The association between , perceived effectiveness in preventing tobacco use and tobacco use status was not statistically significant.

Sixty-three percent of soldiers who did not use tobacco thought the policy was moderately to highly effective in promoting tobacco use cessation compared to 56% of those who used tobacco. Thirty-seven percent of soldiers who did not use tobacco thought the policy was not effective in promoting tobacco use cessation compared to 44% percent of soldiers who used tobacco (See Table 28.) The difference in perception effectiveness in promoting tobacco use cessation was also assessed. There appeared to be a no significant difference in perception effectiveness in promoting tobacco cessation between the soldiers who used reported tobacco use and those who did not. (See Tables 28 and 29.)

Table 28

Perceived Effectiveness in Promoting Tobacco Use Cessation by Tobacco Use Status

| Category | Tobacco Use ^a Yes | Tobacco Use No |
|----------------------|---------------------------------|-------------------|
| Ineffective | 8 (44.45%) | 22 (36.67%) |
| Moderately Effective | 7 (38.89%) | 24 (40.00%) |
| Highly Effective | 3 (16.67%) | 14 (23.33%) |

^a n=78

Table 29

Fisher Exact Analysis, Perceived Effectiveness in Promoting Tobacco Cessation by Tobacco Use Status

| Category | Tobacco Use ^a Yes | Tobacco Use No |
|--------------------------------|---------------------------------|-------------------|
| Moderately or Highly Effective | 10 | 38 |
| Ineffective | 8 | 22 |
| Total | 18 | 60 |

^an=78

*The two-tailed P value equals 0.5890. The association between perceived effectiveness in promoting tobacco cessation and tobacco use status was not statistically significant.

Perceived Acceptability

Ninety percent of soldiers perceived the policy as moderately to highly acceptable (See Table 30). Seventy-eight percent of soldiers who did not use tobacco thought the policy was acceptable compared to 93% of those who used tobacco. Twenty-two percent of soldiers who did not use tobacco thought the policy was not acceptable compared to 7% percent of the soldiers who did not use tobacco (See Table 31). As shown in Table 32, difference in perceived acceptability of the tobacco control policy was assessed. There was no significant difference in

perception effectiveness in promoting tobacco cessation between the soldiers who used reported tobacco use and those who did not (See Tables 28 and 29.)

Table 30

Perceived Acceptability

| Category | Count ^a | Percent |
|----------|--------------------|---------|
| Low | 8 | 10.13 |
| Moderate | 25 | 31.65 |
| High | 46 | 58.23 |

^an=79

Table 31

Perceived Acceptability by Tobacco Use Status

| Category | Tobacco Use Yes (n=18) | Tobacco Use No (n=61) |
|----------|---------------------------|--------------------------|
| Low | 4 (22.23%) | 4 (6.56%) |
| Moderate | 9 (50.00%) | 16 (26.23%) |
| High | 5 (27.78%) | 41 (67.22%) |

^an=79

Table 32

Fisher Exact Analysis, Perceived Policy Acceptability by Tobacco Use Status

| Category | Tobacco Use Yes (n=18) | Tobacco Use No (n=61) |
|------------------------------------|---------------------------|--------------------------|
| Moderately or Highly Acceptable | 14 | 57 |
| Low Acceptability | 4 | 4 |
| Total | 18 | 60 |

^an=79

*The two-tailed P value equals 0.0744. The association between perceived policy acceptability and tobacco use status was not statistically significant.

Facilitators and Barriers

Kicks Butts Action Team received support from community stakeholders and leaders. The senior and garrison commanders, health promotion officer, Army health clinic, public affairs office, Army Community Services, Department of Defense Schools, and Child Youth and School Services were helpful. The senior commander adopted tobacco use reduction as his top community health priority which was instrumental in obtaining Army unit support and catalyzing action. The garrison commander was instrumental in getting community agency support in implementing the policy. His leadership was important in developing the designated tobacco use areas for civilian-led organizations on the Army installation. Public affairs gave Kicks Butts action team, senior commander, and garrison commander multimedia platforms to communicate the tobacco control policy and promote TFL. The Army health clinic's health educator was key in working with public affairs to develop community education videos about the tobacco control policy and tobacco free living benefits. The health educator also arranged events to promote the policy including "I Can Do Without It" pledge banner was circulated around the community and displayed during the high school's homecoming parade. The health educator also arranged information tables at the dining facility, community club, and post exchange. The health educator also used health walks, the Cold Turkey Trot, and Great American Smokeout activities to educate the community about tobacco control policy while promoting tobacco free living. Department of Defense Schools and Child Youth and School Services coordinated opportunities for Kicks Butts Action Team to educate their faculty, staff, and students about the tobacco control policy and tobacco free living. Kicks Butts action team found Department of Defense Schools and Child Youth and School Services engagement particularly rewarding because of the opportunities to also engage in primary prevention of tobacco use among youth.

The lack of funds dedicated to U.S. Army Japan Kicks Butts policy implementation served as a persistent barrier. Although Directorate of Public Works was an important supporter of policy implementation, Directorate of Public Works funding constraints precluded having “smoking only allowed in designated area” signs at all building entrances. An alternative was developed to install large signs which read “tobacco use only allowed in designated areas” at all entrance gates. The intent was to rely on the large signs and the designated tobacco use area signs to communicate the restriction and to facilitate compliance. Essentially, if a person using tobacco on Camp Zama was not doing so next to a designated tobacco use area sign, he or she was in violation of the policy. Another barrier was the delay in the signage. Higher level of approval within Installation Management Command was necessary for the signs, because the verbiage of the signs was different from the standard “no smoking within 50 feet” signs. Approval was obtained in October 2016. After the compromise and approval of the verbiage, the selected locations entrance signs were rejected by the physical security department. Kicks Butts action team selected alternate locations for those three entrance signs in November 2016. Kicks Butts Action Team received approval for those locations in December 2016, and the signs were installed. Based upon the submitted work order, installation of the entrance signs took priority over the designated tobacco use area signs. Subsequently, all of the designated tobacco use area signs were not installed by the end of this project. Sign delays made it difficult to enforce the policy at this point. Kicks Butts Action Team found people were knowledgeable of the tobacco control policy. Lack of the designated tobacco use area signs made it difficult for tobacco users to comply and for others to help with enforcement.

Discussion

U.S. Army Japan Kicks Butts addressed the public health issue of tobacco use, specifically among U. S. Army soldiers at Camp Zama. Soldiers must maintain health and readiness to perform their respective missions in austere environments and situations, and abstaining from or quitting tobacco use helps prevent tobacco-related health problems. U.S. Army Japan Kicks Butts focused on making the daily environment on Camp Zama less amenable to tobacco use through local policy development, dissemination, and enforcement. The evaluation of U.S. Army Japan Kicks Butts was designed to determine the effectiveness of U.S. Army Japan Kicks Butts policy dissemination, effectiveness of generating positive perceptions of the policy, and effectiveness of generating community enforcement of the policy. The results of the project indicate general knowledge of the existence of the policy and of key components of the policy, moderately positive perceptions of the policy's effects, a moderately positive level of policy enforcement, and strongly positive perception of the acceptability of the policy.

The combinations of moderate compliance with and high acceptability of the policy indicate the policy was adopted by the population of soldiers. *Adoption* is a RE-AIM model measure of effectiveness. Objective 1 was to develop a U.S. Army Japan tobacco control policy. After developing the draft policy and processing it through the community health promotion council, the policy was approved by the council during the January 2016 council meeting. Objective 1 was met when the policy was published on June 14, 2016. The supporting operations order was published in August 2016. Although the policy was completed within the goal time, the unexpectedly long time before work began on the tobacco-free installation and designated tobacco use area signs indicated, in retrospect, a need to have published the policy and supporting operations order earlier. Given the six-month gap between policy publication and the

installation of the signs, there was an underestimation of the time needed to translate the policy into public works missions.

Objective 2 was to disseminate the tobacco control policy through December 2016. In terms the *Reach* component of RE-AIM model, the findings of soldier awareness the policy and knowledge of the principle restrictions of the tobacco control policy, and knowledge of the personnel categories to whom the policy applied indicate the policy had effective reach.

Objective 3 was to promote compliance with the tobacco control policy. Findings show enforcement using on-the-spot correction was most frequently reported. However, there was a concerning perception of no enforcement. The number of soldiers who reported a perception of no enforcement ranked second in quantity to on-the-spot corrections. Additionally, the proportions of soldiers who reported any type of enforcement were below 50% for each respective policy enforcement activity. Regarding the *Efficacy* component of RE-AIM, the policy was moderately enforced and moderately effective in creating an environment for soldiers which was inconvenient for tobacco use. The policy was effective in creating an environment with low perception of exposure to secondhand tobacco smoke. The policy was not effective in creating perceptions the policy could prevent tobacco use or promote tobacco cessation.

The achievement of the project's objectives indicates achievement of the *Implementation* component of RE-AIM. The delays in the tobacco-free installation and designated tobacco use area sign missions likely blunted the overall perception of enforcement. The number of personnel directly involved with U.S. Army Japan Kicks Butts Action Team who directly worked to promote policy enforcement was relatively small as compared to the community population. A larger community coalition to promote enforcement may improve perception of enforcement. Better results are likely achievable over a longer timespan than that of this project. The

Maintenance component of RE-AIM was achieved by the establishment of U.S. Army Japan Kicks Butts Action Team as an enduring part of the community health promotion council under the community health working group.

The overall moderate project results could be due to several factors. The length of the project may have been too short for the action team to achieve better results. Also, the lack of a program budget; specifically, funds for marketing, limited the range of communication methods available to Kicks Butts Action Team. Another factor was the prolonged timeframe needed to complete the signage mission, because having designated tobacco use areas was a key element for policy communication, enforcement, and compliance. U.S. Army Japan Kicks Butts Action Team was a small group with variable member participation. A broader community coalition may have enabled better results. The survey respondents were not limited to soldiers who lived on or worked at Camp Zama. The survey was disseminated to all U.S. Army Japan soldiers some of whom lived or worked at other locations. Finally, the survey sample size lacked enough power to detect significant differences between groups due to small cell sizes in the Chi-square calculations. Other community-level surveys were being conducted, performance triad, fitness facilities, and community needs surveys were run concurrently with U.S. Army Japan Kicks Butts. A major training exercise occurred between November and December, and liberal holiday leave started in mid-December. Another factor is that many young enlisted soldiers, based upon their lines of work, do not have regular access to computers during their duty days,

Conclusion

This community tobacco control project was a local action-focused initiative to make the environment one in which it is not convenient to use tobacco. This U.S. Army Japan Kicks Butts policy's purpose was consistent with Healthy People 2020's and U.S. Department of Defense's

tobacco use reduction goals and was the beginning of an enduring tobacco control program targeting the short-term effects of tobacco which affect health and readiness of U.S. Army soldiers at Camp Zama, Japan. The moderate results are encouraging given the short-term nature of the project. The results should support continuity of U.S. Army Japan Kicks Butts Action Team for performance improvement. Continuity and performance improvement are also important for U.S. Army Japan Kicks Butts to achieve long-term outcomes not feasible within the timespan of this project such as preventing tobacco use, reducing tobacco use, and improving health and readiness of soldiers at Camp Zama.

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APPENDIX A

TOBACCO CONTROL CHECKLIST

| STANDARD | | RATING | | | COMMENTS | RECOMMENDATIONS |
|----------|---|--------|-----|----|----------|-----------------|
| | | NA | YES | NO | | |
| 1 | Is the use of tobacco products in military vehicles observed? | | | | | |
| 2 | Is the use of tobacco products observed in areas where it poses a safety hazard like firing ranges, ammunition storage areas, fuel dumps, motor pools, and equipment maintenance shops? | | | | | |
| 3 | Are designated smoking areas closer than 50 feet from common points of entering or exiting a workplace? | | | | | |
| 4 | Are designated smoking areas located in areas commonly used by non-smokers? | | | | | |
| 5 | Is signage posted for the designated smoking areas? | | | | | |
| 6 | Are notices displayed at entrances to buildings and facilities which state tobacco use is not allowed except in designated areas? | | | | | |
| 7 | Is tobacco use observed in workplaces? | | | | | |
| 8 | Is smoking observed in the family housing towers (including balconies and hallways)? | | | | | |
| 9 | Is smoking observed in unaccompanied personnel housing? | | | | | |
| 10 | Is smoking observed in the common areas of any permanent or temporary personnel housing area or building? | | | | | |
| 11 | Is smoking observed outside of designated smoking areas at child care facilities and youth sports fields? | | | | | |
| 12 | Is adult smoking observed outside of designated smoking areas at the schools? | | | | | |
| | | 0 | 0 | 0 | | |

APPENDIX B**ACTIVE DUTY TOBACCO CONTROL EVALUATION QUESTIONNAIRE**

1. What is your gender?

☐ Female ☐ Male

2. What is your age?

☐ Under 20 years old ☐ 20-29 years old ☐ 30-39 years old ☐ Over 40 years old

3A. Do you use tobacco?

☐ Yes ☐ No

3B. If yes, what type of tobacco do you use? (Check all that apply)

☐ Cigarettes

☐ Cigars

☐ Pipes

☐ Smokeless tobacco (snuff and chewing tobacco)

☐ Electronic nicotine delivery devices (e.g. e-cigarettes, e-pipes, e-cigars)

☐ Other _____

3C. Do you intend to quit using tobacco within the next six months?

4. Does U.S. Army Japan have a tobacco control policy?

☐ Yes ☐ No

5. What controls are part of U.S. Army Japan's tobacco control policy? (Check all that apply)

☐ Tobacco use closer than 50 feet from buildings is prohibited.

☐ Tobacco use is permitted only in designated tobacco use areas.

- ☐ Tobacco use is prohibited in tower housing.
- ☐ Tobacco use is prohibited in government buildings, vehicles and aircraft.
- ☐ Designated tobacco use areas cannot not be near building entrances/exits, in areas commonly used by non-smokers, or within eyesight of children at DoD schools and childcare centers.
- ☐ Tobacco use is prohibited any place where it posed a safety hazard.

6. To whom does the U.S. Army Japan's tobacco control policy apply? (Check all that apply)

- ☐ Military
- ☐ Department of the Army Civilians
- ☐ Contractors
- ☐ Family Members
- ☐ Local National Employees
- ☐ Visitors
- ☐ Personnel of other agencies and business operating within or visiting U.S. Army Japan installations and facilities
- ☐ Other _____
- ☐ Guidance is not clear on who this policy applies to

7. How have U.S. Army Japan Soldiers, employees, and community members been informed or introduced to U.S. Army Japan's tobacco control policy? (Check all that apply)

- ☐ Office memo
- ☐ Staff meetings
- ☐ Email communication
- ☐ Command social media communication (Command Channel, Armed Forces Network, Facebook, Twitter, etc.)
- ☐ Command website information
- ☐ Signs/posters around installation
- ☐ Command announcements
- ☐ Word of mouth

☐ Other _____

☐ None - no information given in the past 12 months

8. How has U.S. Army Japan's tobacco control policy been enforced? (Check all that apply)

☐ On-the-spot correction of violators

☐ Systematically monitored compliance to policy (deliberate, routine and random oversight of violations)

☐ Supervisors counseled violators

☐ Penalties for violators

☐ Other _____

☐ None – This policy has not been enforced

9. On a scale of 1 to 5 (1 = little or no enforcement; 3 moderately enforced; 5 = high enforcement), how well do you think the tobacco control policy is being enforced?

10. On a scale of 1 to 5 (1 = very convenient; 3 moderately convenient; 5 = very inconvenient), how convenient do you think it is to use tobacco within U.S. Army Japan installations and facilities?

11. On a scale of 1 to 5 (1 = often exposed; 3 sometimes exposed; 5 = frequently exposed), how often are you exposed to secondhand tobacco smoke while on U.S. Army Japan installations?

12. On a scale of 1 to 5 (1 = little or no effect; 3 moderately effective; 5 = very effective), how effective do you think U.S. Army Japan's tobacco control policy is in preventing tobacco use?

13. On a scale of 1 to 5 (1 = little or no effect; 3 moderately effective; 5 = very effective), how effective do you think U.S. Army Japan's tobacco control policy is in promoting tobacco use cessation?

14. On a scale of 1 to 5 (1 = not acceptable; 3 moderately acceptable; 5 = totally acceptable), how acceptable to you is U.S. Army Japan's tobacco control policy?