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**TOBACCO USE, EXPOSURE TO ENVIRONMENTAL TOBACCO  
SMOKE, AND CREW ATTITUDES REGARDING SMOKING  
POLICY ABOARD THE USS THEODORE ROOSEVELT (CVN-71)**

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**Tobacco Use, Exposure to Environmental Tobacco Smoke, and Crew Attitudes  
Regarding Smoking Policy Aboard the USS THEODORE ROOSEVELT (CVN-71)**

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## **SUMMARY**

### **Problem**

The Commander Naval Air Force, U. S. Atlantic Fleet (COMNAVAIRLANT) recently established a policy stating that a no-smoking environment shall be the norm within all U. S. Atlantic Fleet facilities, including aircraft carriers. In accordance with this policy and because the Environmental Protection Agency recently classified tobacco smoke as a human lung carcinogen, the USS THEODORE ROOSEVELT (CVN-71) prohibited the use of tobacco products aboard ship on 4 July 1993. To assess the impact of this policy over time, baseline levels of tobacco use, exposure to environmental tobacco smoke (ETS), and crew attitudes regarding smoking policy needed to be established prior to implementation of the no-smoking policy.

### **Objective**

The purpose of this study was to determine baseline data on tobacco-use rates, exposure to ETS, and crew attitudes regarding smoking policy prior to the implementation of the no-smoking policy aboard the USS THEODORE ROOSEVELT.

### **Approach**

The entire crew aboard the USS THEODORE ROOSEVELT was asked to participate in the study by completing a four-page survey. The survey items covered current tobacco use and history of tobacco use, exposure to ETS, crew attitudes related to COMNAVAIRLANT's smoking policy, and demographics.

### **Results**

A total of 2,221 surveys were completed, which resulted in a participation rate of 74%. Thirty-six percent of participants classified themselves as current cigarette smokers, 42% as never smokers, and 22% as former smokers. Nonsmokers rated their general exposure to ETS between "low" to "moderate" and nonsmokers estimated that they were exposed to ETS an average of 10 minutes per day. Across all smoking status subgroups, 57% of participants were in favor of AIRLANT's restricted smoking policy and most participants rated the smoking policy as "somewhat unfair" to "generally fair." Differences in responses to ETS exposure and attitude items by smoking status and enlisted/officer status were seen. General support for the no-smoking policy or disagreement with the policy because it violates an individual's right to smoke were common themes in the written comments.

### Conclusions

This study indicated that nonsmokers' perceived exposure to ETS was "low" to "moderate." While most current smokers did not favor the restricted smoking policy, more than half of all participants favored the restricted smoking policy, and participants thought that the smoking policy was basically fair. Follow-up research has been planned to assess the long-term impact of the no-smoking policy on changes in attitudes regarding policy, tobacco-use rates, and ETS exposure.

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## **Tobacco Use, Exposure to Environmental Tobacco Smoke, and Crew Attitudes Regarding Smoking Policy Aboard the USS THEODORE ROOSEVELT (CVN-71)**

A primary health promotion objective in the U. S. Navy is to create a healthy work environment that discourages the use of tobacco products, supports abstinence, and provides tobacco users with assistance to stop using tobacco products (2,7). To create a healthy social and work environment, several factors are emphasized, including support of tobacco-related policy by top leadership, discouragement of tobacco use at initial entry and during training, education regarding nicotine addiction and the health risks associated with tobacco use, and restriction of tobacco use in Navy facilities, anywhere tobacco use might impair the health of nonusers of tobacco or endanger life or property (7).

In accordance with Navy policy and in support of the Secretary of the Navy's goal of "improving our state of health," the Commander Naval Air Force, U.S. Atlantic Fleet (COMNAVAIRLANT), established a no-smoking environment within all U. S. Atlantic Fleet facilities, including aircraft carriers (3). This policy prohibits the use of smoking tobacco in any form in all spaces in and on COMNAVAIRLANT ships unless each of four conditions are met: (a) the space must exhaust directly overboard and must not be on a common return air ventilation system; (b) the space must not be shared by nonsmokers; (c) where conflicts arise between the rights of smokers and nonsmokers, the rights of the nonsmoker shall prevail; and (d) smoking in the space is not prohibited by fire or other safety regulations.

Onboard the Atlantic Fleet carrier, USS THEODORE ROOSEVELT (CVN-71), several strategies were implemented to prevent the exposure of nonsmokers to tobacco smoke while allowing smoking onboard. These included reduced smoking days, specific smoking hours, and finally the limitation of smoking to a few spaces. At the time of this study, smoking was permitted in only 10 bathrooms aboard ship. However, because the Environmental Protection Agency recently classified tobacco smoke as a human lung carcinogen and nonsmokers were still not adequately being protected from tobacco smoke aboard ship, the USS THEODORE ROOSEVELT prohibited the use of tobacco products aboard ship on 4 July 1993.

The purpose of this study was to determine baseline data on tobacco-use rates, exposure to environmental tobacco smoke (ETS), and crew attitudes regarding smoking policy prior to the implementation of the no-smoking policy aboard the USS THEODORE ROOSEVELT.

## **Method**

### **Study Population and Procedures**

All crew members aboard the USS THEODORE ROOSEVELT were asked to participate in the survey. The ship's Senior Medical Officer coordinated the distribution and collection of the surveys aboard ship, which occurred primarily during June 1993, before the ship went non-smoking.

### **Survey Instrument**

The survey was a four-page, 51-item, self-administered questionnaire. The survey items were grouped into four categories: (a) demographics, (b) exposure to ETS, (c) crew attitudes related to COMNAVAIRLANT'S smoking policy, and (d) current tobacco use and history of tobacco use.

**Demographics.** Participants were asked about their age, level of education, paygrade, marital status, ethnicity/race, and department in which they worked.

**Exposure to ETS.** Perceived exposure to ETS was measured with several items: overall exposure, frequency of exposure on and off duty, average number of minutes exposed per day, area aboard ship where typically exposed, degree bothered by ETS, level of physical discomfort caused by ETS, and number of household members that smoke.

**Attitudes.** Participants were asked if they were aware of the no-smoking policy and how they were informed. Participants were also asked if they were in favor of the restricted smoking policy and how fair they thought it was. Regarding smoking policy, participants were asked about the degree that they were allowed to contribute to the formulation of the policy, level of organizational smoking-cessation support, leadership adhering to the policy, strictness of enforcement, and desire to transfer off of the ship because of the no-smoking policy. The survey also asked for open-ended, written comments.

**Tobacco Use.** Current tobacco use was measured by asking participants to classify themselves as either a never user, former user, or current user of cigarettes, chewing tobacco/snuff/dip, and cigars/pipe. Participants were also asked if they used any tobacco products specifically aboard ship and when not aboard ship. Smoking history items included age when started using tobacco regularly, years of regular tobacco use, most recently smoked cigarette,

number of cigarette, smoked per day, frequency of smokeless tobacco and cigar or pipe use, number of serious quit attempts, and methods used in most recent quit attempt.

### **Statistical Analyses**

Primary statistical analyses were used to obtain frequency distributions, percentages, means, and standard deviations. Descriptive results are presented for the total sample, by smoking status and enlisted/officer status for applicable items.

## **Results**

### **Participation Rate and Participants**

A total of 2,221 surveys were completed, which resulted in a participation rate of 74%. Notably, 99% of the respondents had at least a high school education and, as expected, the majority of the respondents were enlisted members (Table 1). The largest percentage of respondents worked in the Air Department, (22%), followed by Operations, (17%), and Weapons, (13%).

### **Tobacco-Use Status and History**

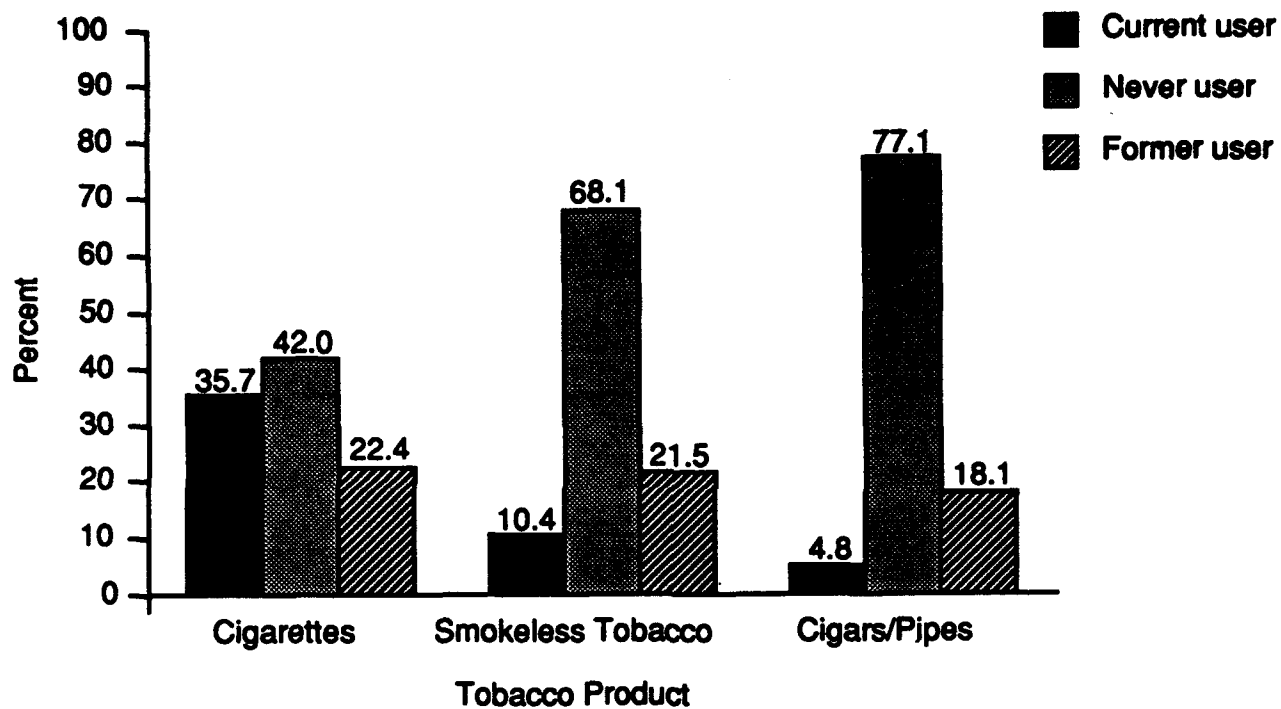
Thirty-six percent of participants classified themselves as current cigarette smokers, 42% were never smokers, and 22% were former smokers (Fig. 1). Regarding smokeless tobacco, 10% classified themselves as current users, and 5% classified themselves as current cigar or pipe smokers (Fig. 1). When asked about tobacco use aboard ship, 37% of participants reported themselves as current cigarette smokers, 9% smokeless tobacco users, and 2% cigar or pipe users. When asked about tobacco use when not aboard ship, cigarette use remained about the same as cigarette use when aboard ship (38%), but more participants reported using smokeless tobacco (15%), and cigars or a pipe (10%).

Considering smoking rates and demographic variables, the percentage of enlisted smokers was nearly three times that of officers (Fig. 2). One-half of the crew with less than a high school education were smokers while 38% of participants with a high school education and 32% of those with more than a high school education were current smokers (Fig. 2). Additionally, smoking rates did not vary greatly by age or department.

**Table 1****Percentage Distributions and Means of Demographics  
for USS THEODORE ROOSEVELT, June 1993**

	<b>% or Mean</b>	<b>n</b>
<b>Age (SD = 6.44, range = 16-67)</b>	<b>25.5</b>	<b>2204</b>
<b>Highest level of education</b>		<b>2200</b>
Less than high school	.8	
High school	57.5	
More than high school	41.7	
<b>Paygrade (Median = E-4)</b>		<b>2218</b>
E-1 to E-3	37.0	
E-4 to E-6	52.2	
E-7 to E-9	6.0	
W-1 to W-4	.5	
O-1 to O-6	4.3	
<b>Ethnicity</b>		<b>2189</b>
American Indian/Alaskan Native	1.8	
Black	19.4	
Hispanic	4.7	
Oriental/Asian/Filipino	1.7	
White	69.9	
Other	2.5	
<b>Marital Status</b>		<b>2216</b>
Single, never married, and not living as married	48.7	
Married or living as married	46.1	
Separated/divorced/widowed and not living as married	5.2	
<b>Department</b>		<b>2211</b>
AIMD	10.3	
Air	22.4	
Communications	2.3	
Engineering	1.6	
EXEC/ADMIN	2.5	
Medical/Dental	2.0	
Navigation	.8	
Operations	16.6	
Supply	12.6	
Weapons/Mar Det	13.3	
Other	15.6	





**Figure 1. Percentage distributions for tobacco-use status by tobacco products, USS THEODORE ROOSEVELT, June 1993 (n ranged from 2,088 to 2,162).**

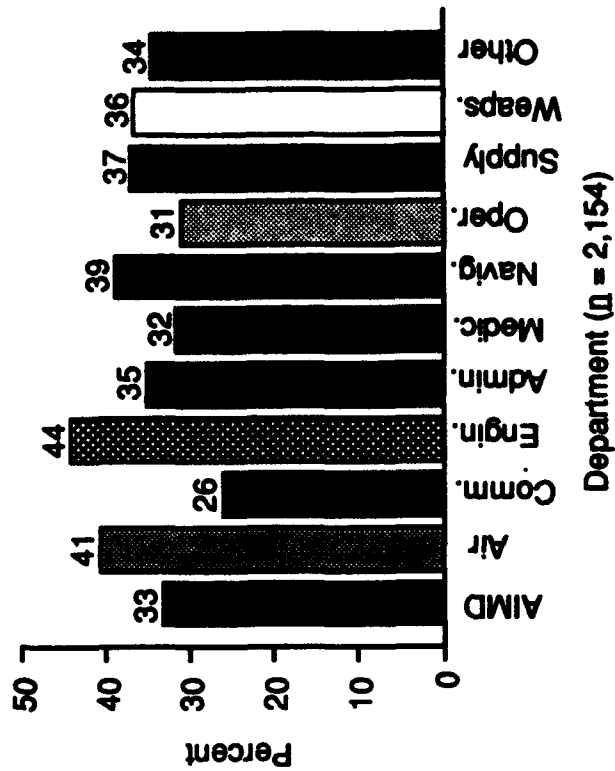
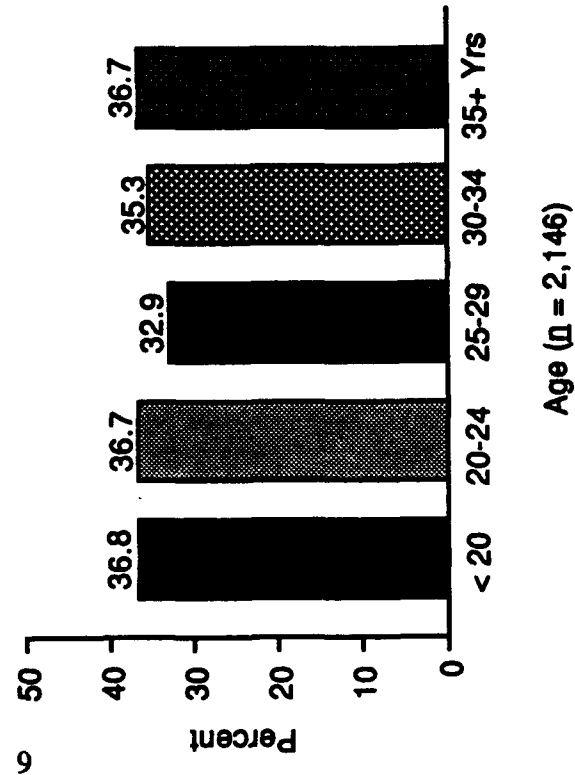
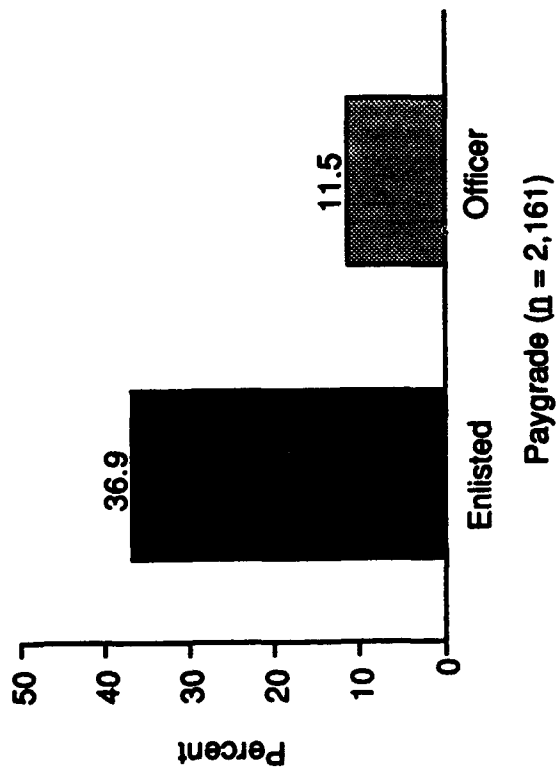
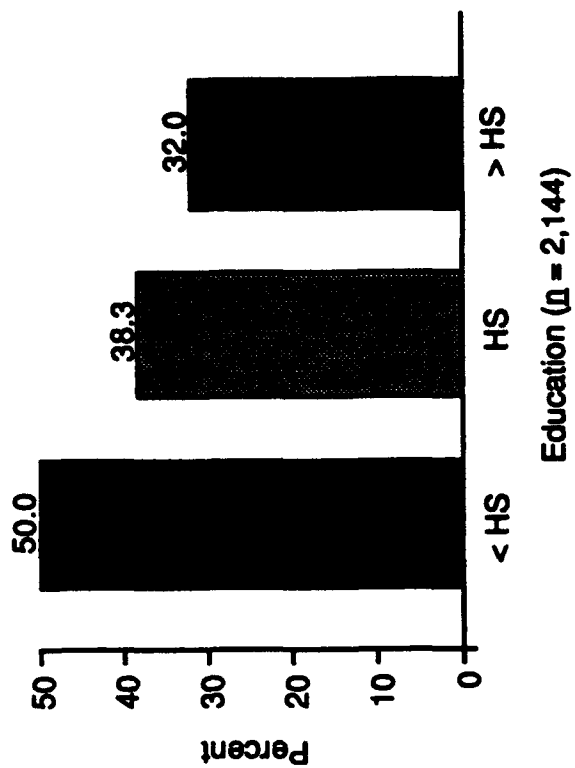


Figure 2. Percentage of current cigarette smokers, by demographics, USS THEODORE ROOSEVELT, June 1993.

### Tobacco-Use History

The average age that current cigarette smokers first started using tobacco on a regular basis was 16 with current cigarette smokers reporting having used tobacco regularly for an average of 8.5 years (Table 2). On the average, smokers reported smoking 15.3 cigarettes per day. Current smokeless-tobacco users used chewing tobacco an average of 7 days a week and used 4.4 dips or chews per day. Current cigar and pipe smokers smoked cigars or a pipe about one half a day a week and smoked an average of 2 cigars or bowlfuls of tobacco per day.

Current smokers made an average of one serious quit attempt in their life. The smoking cessation method most commonly used among current smokers in the most recent quit attempt was "cold turkey" (69%) (Table 3).

### Exposure to ETS

Overall, nonsmokers rated their general exposure to ETS between "low" and "moderate." When both on or off duty aboard the ship, nonsmokers were "seldom" (less than once a week) to "sometimes" (1 to 6 times per week) exposed to ETS. Approximately 50% of nonsmokers indicated that they were typically exposed to ETS in the bathrooms. While nonsmokers reported that they were "seldom" to "somewhat" bothered by ETS aboard ship, 52% of former smokers and 75% of never smokers indicated "some" to "great" discomfort caused by ETS aboard ship. Nonsmokers indicated that 3 people smoked in their immediate work environment and reported that they were exposed to ETS an average of 10 minutes per day. Among current smokers, 28% had a spouse or partner who smoked in their current household. Six percent of never smokers and 13% of former smokers had a spouse or partner who smoked in their current household. (See Appendix A for percent distributions, means, and standard deviations for exposure items for the total sample and smoking status subgroups.)

Considering officer and enlisted differences, nonsmoking officers rated their overall ETS exposure lower than enlisted nonsmokers (1.09 vs. 1.45), and reported fewer minutes per day exposed to ETS than enlisted nonsmokers (5.0 min vs. 10.0 min).

### Attitudes Toward Smoking Policy

In general, across all smoking status subgroups, 57% of participants were in favor of AIRLANT's restricted smoking policy aboard ship. Overall, participants rated the smoking

**Table 2**

**Means and Standard Deviations of Tobacco-Use History,  
USS THEODORE ROOSEVELT, June 1993**

	Mean	SD	n
Age first started using tobacco regularly <sup>1</sup>	16.06	2.85	769
Years of regular tobacco use	8.48	4.49	766
Most recent time smoked a cigarette (days ago) <sup>1,2</sup>	1.00	--	759
Cigarettes smoked on a typical day <sup>1</sup>	15.33	13.01	762
Day per week use chewing tobacco <sup>1,2</sup>	7.00	--	195
Dips or chews used per day	4.39	2.49	209
Days per week smoke cigars or a pipe <sup>1,2</sup>	.58	--	73
Cigars or bowlfuls smoked per day <sup>2</sup>	2.00	--	91
Serious quit attempts <sup>2</sup>	1.00	--	756

<sup>1</sup> Mean and SD (or median) are approximate because survey response options were ranges that had to be recoded to midpoint values to provide a meaningful statistic.

<sup>2</sup> Median reported.

**Table 3**

**Smoking-Cessation Methods Used in Most Recent Quit Attempt<sup>1</sup>,  
USS THEODORE ROOSEVELT, June 1993**

	%
Cold turkey	68.6
Gradually decreased the number	26.2
Substituted candy, gum, or food	24.0
Lower tar and nicotine cigarettes	12.1
With friends, relatives, or acquaintances	10.2
Nicorette (nicotine gum)	8.3
Other methods	5.5
Military program or course	4.8
Special filters or holders	4.1
The "patch" (nicotine transdermal system)	3.1
Civilian program or course	1.9
Never have tried to quit <sup>2</sup>	24.8

<sup>1</sup> n = 580, percents do not add up to 100 because respondents could circle all that apply.

<sup>2</sup> n = 771.

policy between "somewhat unfair" and "generally fair." Generally, participants reported that they were "not at all" to "slightly" allowed to contribute to decisions regarding the smoking policy aboard ship, with more than 71% of the participants indicating that they were "not at all" allowed to contribute. Participants indicated the ship provided "moderate" smoking cessation support, that leadership "sometimes" to "usually" set a good example of adhering to the smoking policy, and that the smoking policy was enforced with "moderate" strictness.

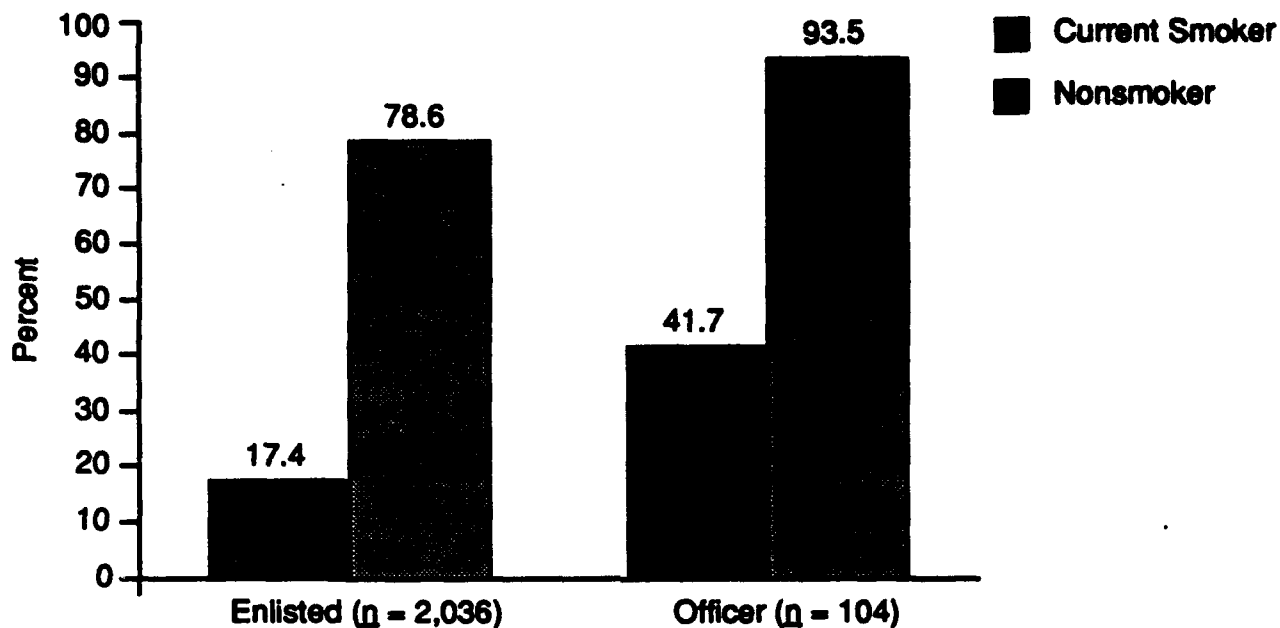
Eighty-two percent of participants were aware of AIRLANT's pending no-smoking policy. Most participants were informed about this policy through a shipboard announcement (53%), followed by a Plan of the Day notice (45%). (See Appendix B for percent distributions, means, and standard deviations for attitude items for the total sample and smoking status subgroups.)

As expected, among current smokers, 82% were not in favor of AIRLANT's restricted smoking policy, and 65% thought that the policy was "very unfair." In fact, 32% of current smokers planned to request a transfer off of the ship specifically because of the pending no-smoking policy. In contrast, 88% of never smokers and 63% of former smokers were in favor of the restricted smoking policy. Current smokers reported that they were less allowed to contribute to smoking policy decisions, that the ship provided less smoking-cessation support, and that leadership less often set a good example of adhering to the smoking policy than never and former smokers. More current smokers also reported the smoking policy was enforced more strictly than never smokers and were more likely than never and former smokers to plan a request to transfer off of the ship specifically because of the pending no-smoking policy.

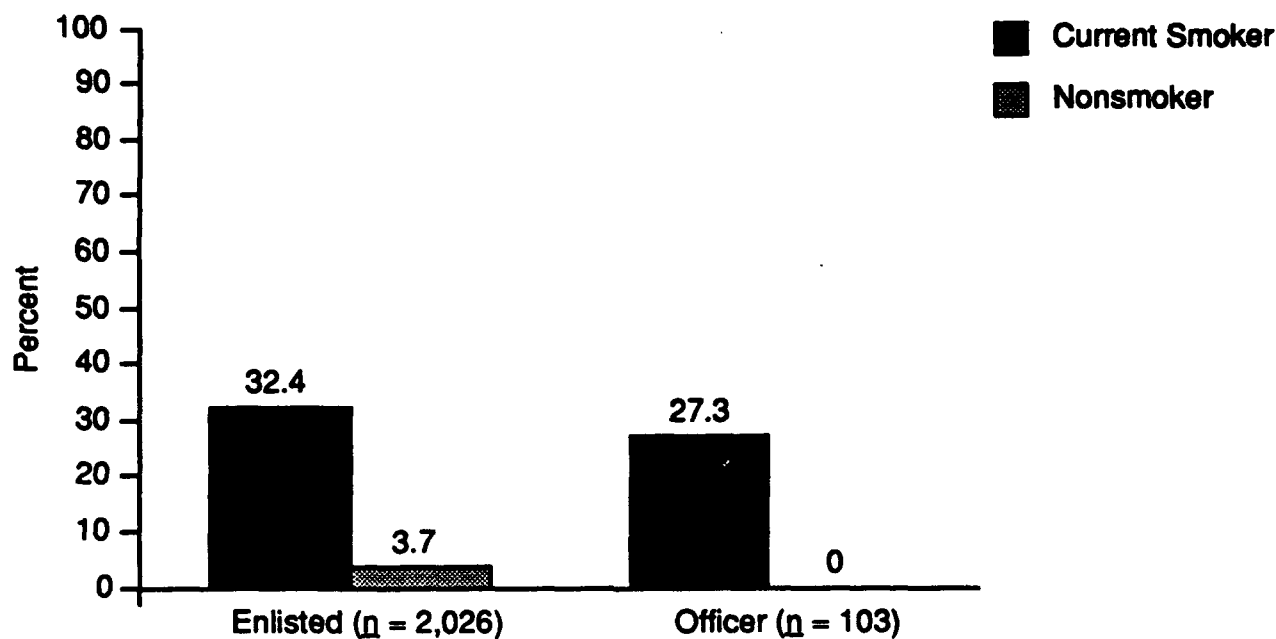
Irrespective of smoking status, a higher percentage of officers reported that they were in favor of the restricted smoking policy than enlisted members (Fig. 3). In addition, a smaller percentage of officers planned to request a transfer off of the ship specifically because of the no-smoking policy than enlisted members (Fig. 4).

### Written Comments

Out of the 2,221 completed surveys, 1,091 surveys had written comments (49%). A 20% random sample was drawn from the 1,091 surveys, resulting in 218 surveys with comments. Some surveys contained more than one idea or theme in their comments and each of these was counted as a separate comment. The 218 surveys contained a total of 400 comments; 104 comments (26%) were positive in regard to AIRLANT no-smoking policy, 190 comments (47%)



**Figure 3. Percentage who favor AIRLANT restricted smoking policy, by enlisted/officer status and smoking status, USS THEODORE ROOSEVELT, June 1993.**



**Figure 4. Percentage who plan to transfer specifically because of the no-smoking policy, by enlisted/officer status and smoking status, USS THEODORE ROOSEVELT, June 1993.**

were negative in regard to AIRLANT no-smoking policy, and 106 comments (27%) were classified as "other" but were pertinent to tobacco use and smoking policy. The most common positive comments were general support for the no-smoking policy, the no-smoking policy will improve all crew members' health, and the no-smoking policy will improve the environment aboard ship (Fig. 5). The most common negative comments were that the no-smoking policy violates an individual's right to smoke, support for designated smoking areas but not a total no-smoking policy, and general disagreement with the no-smoking policy. Concern about the timing of the implementation of the no-smoking policy and concern for smokers and tobacco-cessation support were common "other" comments. (See Appendix C for percentage distributions for written comments.)

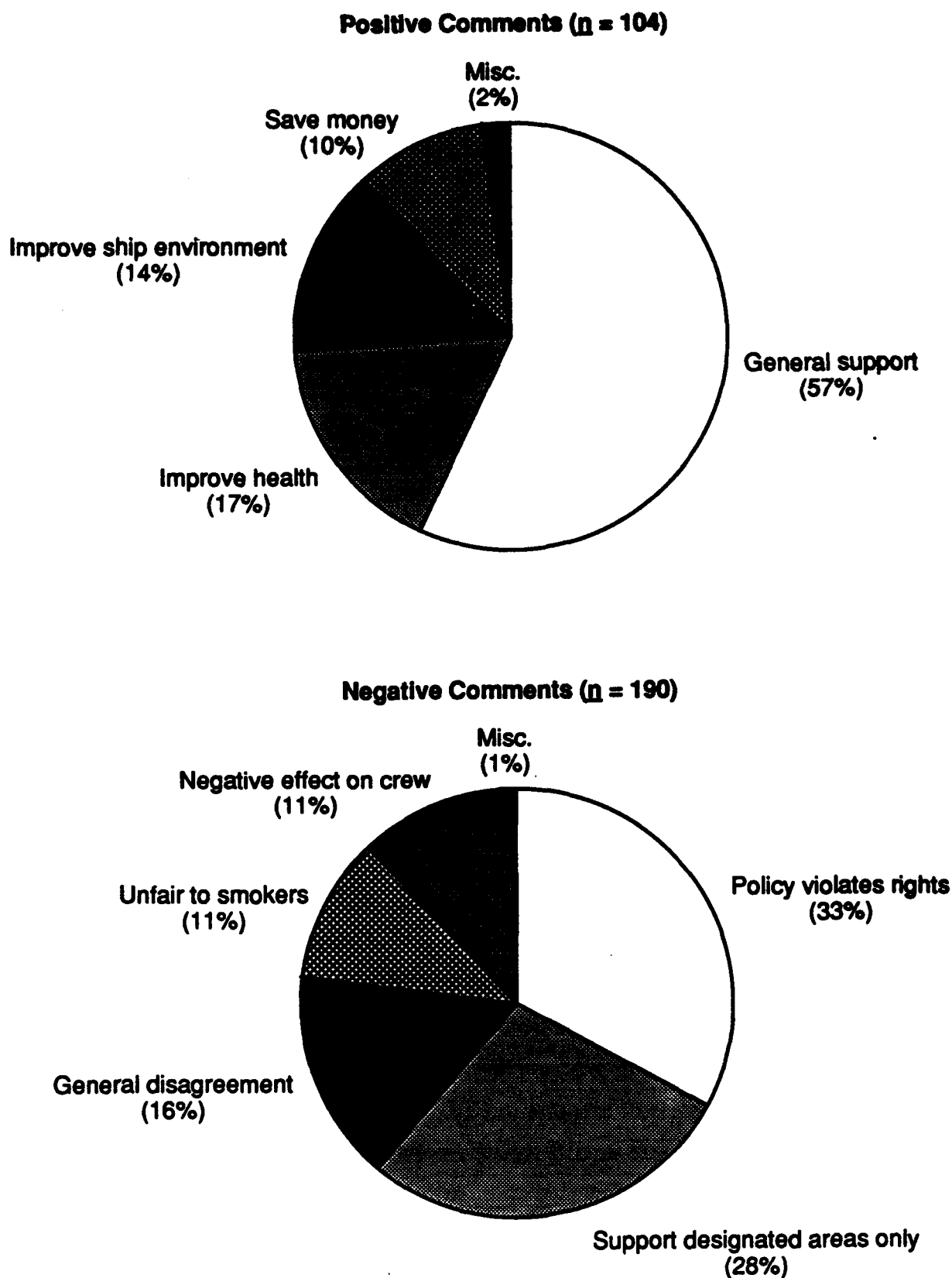
### Discussion

This study provided survey data on tobacco-use rates, subjective exposure to ETS, and attitudes toward AIRLANT smoking policy among participating crew members aboard the USS THEODORE ROOSEVELT. Findings from this study indicated that 36% of participants were current smokers and nonsmokers' exposure to ETS was "low" to "moderate." Clearly, while most current smokers did not favor the restricted smoking policy, more than half of all participants favored the restricted smoking policy, and they thought the smoking policy was basically fair.

The percentage of current smokers on this ship was slightly lower than expected. Although the overall smoking rate across all Navy communities was 37% in 1992 (1), other research has shown that smoking rates are significantly higher among the surface ship community than for the overall Navy (4). However, higher smoking rates were not observed in this study.

Self-report survey measures, such as those used in this study, are considered useful for classifying broad categories of exposure levels of ETS (6). Nonsmokers in this study reported "low" to "moderate" levels of exposure to ETS, although smoking was restricted to designated areas. In addition, exposure to ETS typically occurred in smoking-designated bathrooms and surrounding areas.

Overall, a little more than half of the participants reported that they were in favor of the AIRLANT restricted smoking policy aboard ship. While the majority of nonsmokers were in favor of the restricted smoking policy, it is interesting to note that 18% of current smokers were also in favor of the restricted smoking policy. Other attitudes and perceptions about the policy



**Figure 5. Percentages of positive and negative written comments regarding AIRLANT no-smoking policy, USS THEODORE ROOSEVELT, June 1993 ("Other" comments not pictured,  $n = 106$ ).**



indicated that overall, participants rated the smoking policy as "somewhat unfair" to "generally fair," "moderate" smoking cessation support was provided aboard ship, participants were "not at all" to "slightly allowed" to contribute to decisions regarding the smoking policy, and participants reported that only "sometimes" to "usually" leadership set a good example regarding following the smoking policy. These perceptions about the policy and its implementation may have important implications for crew member's acceptance of the policy and how effective it will be.

In addition to reducing exposure to ETS, a no-smoking policy may also be effective in reducing the overall number of smokers. One recent study conducted on Navy recruits suggested that a "live-in" no-smoking policy (similar to the total no-smoking policy recently implemented aboard the USS THEODORE ROOSEVELT) may encourage smokers to quit, even after leaving the environment in which the policy was instituted (5). Follow-up research has been planned to assess the long-term impact of the no-smoking policy aboard the USS THEODORE ROOSEVELT on changes in smoking status, ETS exposure, and attitudes regarding the policy. Such data will provide important information for Navy policy regarding shipboard tobacco use and ETS.

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## Appendix A

### Percentage Distributions, Means, and Standard Deviations of Exposure to Tobacco Smoke, by Smoking Status for USS THEODORE ROOSEVELT, June 1993

Items	Total	Smoking Status		
		Current Smokers	Never Smokers	Former Smokers
Rate overall exposure to other people's tobacco smoke aboard ship (%)				
1. Low	55.1	35.2	62.1	72.3
2. Moderate	32.2	43.9	27.9	22.1
3. Heavy	12.7	20.9	10.0	5.6
Mean	1.58	1.86	1.48	1.33
SD	.71	.74	.67	.58
n	2207	766	902	484
When <u>on duty</u> aboard ship, exposure to other people's tobacco smoke? (%)				
1. Almost never	33.5	16.8	41.2	45.7
2. Seldom (less than once a week)	16.3	6.0	22.6	20.2
3. Sometimes (1-6 times per week)	16.0	10.8	17.9	20.9
4. Often (1-2 times per day)	13.2	18.5	11.1	8.3
5. Frequently (3 or more times per day)	20.9	47.8	7.2	5.0
Mean	2.72	3.75	2.21	2.07
SD	1.55	1.51	1.28	1.20
n	2213	767	906	484
When <u>off duty</u> aboard ship, exposure to other people's tobacco smoke? (%)				
1. Almost never	28.6	13.0	37.7	34.6
2. Seldom (less than once a week)	17.0	8.6	23.0	19.3
3. Sometimes (1-6 times per week)	21.1	17.3	22.9	25.7
4. Often (1-2 times per day)	14.6	21.8	9.7	11.8
5. Frequently (3 or more times per day)	18.7	39.3	6.7	8.7
Mean	2.78	3.66	2.25	2.41
SD	1.47	1.40	1.24	1.30
n	2212	769	905	483
Area where typically exposed to other people's tobacco smoke aboard ship? <sup>1</sup> (%)				
0. I am rarely exposed	22.4	4.8	30.5	35.1
1. My usual work area	3.1	.9	5.2	2.7
2. Head	59.1	75.1	49.9	51.4
3. Enlisted messing areas	.6	0.3	.7	1.0
4. Officer messing areas	.2	--	.2	.2
5. Berthing area	1.9	--	2.9	2.3
6. Designated "smoking areas"	39.3	47.2	37.9	30.6
7. Other	2.6	1.4	3.7	2.3
n	2219	771	907	484

Appendix A (continued)

Items	Total	Smoking Status		
		Current Smokers	Never Smokers	Former Smokers
On the average, number of minutes per day exposed to other people's tobacco smoke aboard ship? <sup>2</sup> (%)				
0. Not exposed	32.9	6.5	47.8	46.4
Median	30.00	60.00	10.00	10.00
Range	1-999	1-999	1-999	1-480
n	2149	746	881	471
In immediate work environment aboard ship, number of people smoking? (%)				
0	32.9	20.5	37.5	43.6
1-3	14.3	12.5	16.1	13.1
4-6	16.1	16.7	15.1	16.3
7-9	7.3	9.0	7.0	5.6
10-20	13.5	17.1	10.6	12.9
21+	16.0	24.3	13.7	8.4
Median	4.00	7.00	3.00	2.00
SD	7.33	7.39	7.32	6.80
n	2191	762	893	479
Bothered by other people's tobacco smoke aboard ship? (%)				
1. Not at all bothered	43.9	76.5	19.2	39.7
2. Seldom bothered	19.3	17.0	16.9	26.4
3. Somewhat bothered	11.4	4.6	15.7	12.9
4. Quite bothered	8.5	1.0	15.7	7.3
5. Extremely bothered	16.9	0.9	32.4	13.7
Mean	2.35	1.33	3.25	2.29
SD	1.51	.70	1.53	1.40
n	2206	769	903	481
Physical discomfort caused by other people's tobacco smoke (irritated eyes, nose, throat, or lower respiratory tract, etc.)? (%)				
1. No discomfort	48.9	77.6	25.1	48.4
2. Some discomfort	24.6	18.3	26.7	28.8
3. Moderate discomfort	12.6	3.1	21.3	12.2
4. Great discomfort	13.9	.9	26.9	10.6
Mean	1.92	1.27	2.50	1.85
SD	1.08	.56	1.14	1.00
n	2208	769	903	483

Appendix A (continued)

Items	Total	Smoking Status		
		Current Smokers	Never Smokers	Former Smokers
Members of current household that smoke, other than self? <sup>1</sup> (%)				
0. No members of current household smoke	65.5	43.6	80.4	71.9
1. Spouse/partner	15.2	27.8	6.3	12.9
2. Roommate(s)	8.7	15.8	3.7	7.3
3. Other	10.5	13.4	8.6	8.5
<u>n</u>	2204	766	902	480

<sup>1</sup> Percents do not add up to 100 because respondents could circle all that apply.

<sup>2</sup> Zero category was not included in Median.

## Appendix B

### Percentage Distributions, Means, and Standard Deviations of Attitudes Toward Smoking Policy, by Smoking Status for USS THEODORE ROOSEVELT, June 1993

Items	Total	Smoking Status		
		Current Smokers	Never Smokers	Former Smokers
Awareness of AIRLANT's smoking policy aboard ship that states "... a no-smoking environment shall be the norm for COMNAVAIRLANT ships"? (%)				
0. No	17.8	19.9	15.9	17.6
1. Yes	82.2	80.1	84.1	82.4
<u>n</u>	2206	765	905	482
Informed of AIRLANT's restricted smoking policy aboard ship? <sup>1</sup> (%)				
1. Do not know about the policy	11.9	12.5	11.3	12.0
2. POD notice	44.6	39.0	49.6	44.4
3. Shipboard announcement (e.g., quarters)	53.5	54.3	54.0	52.5
4. Division Officer	21.9	23.6	21.7	21.1
5. LCPO	24.1	25.2	24.5	22.7
6. Read the instruction	15.7	15.8	13.7	19.8
7. Other	9.8	12.7	7.1	10.1
<u>n</u>	2215	770	904	484
In favor of AIRLANT's restricted smoking policy aboard ship? (%)				
0. No	42.6	82.2	11.7	36.6
1. Yes	57.4	17.8	88.3	63.4
<u>n</u>	2195	764	896	481
Fairness of AIRLANT's smoking policy? (%)				
1. Very unfair	32.5	65.4	8.4	25.5
2. Somewhat unfair	18.6	21.5	13.9	21.1
3. Generally fair	17.7	8.8	22.6	23.0
4. Very fair	31.3	4.3	55.1	30.5
Mean	2.48	1.52	3.24	2.58
SD	1.23	.83	.98	1.17
<u>n</u>	2185	764	891	479
Degree allowed to contribute to decisions regarding the smoking policy aboard ship? (%)				
1. Not at all allowed	71.1	86.8	58.7	69.0
2. Slightly allowed	14.4	7.7	20.2	14.6
3. Somewhat allowed	9.9	3.9	14.8	10.7
4. Very much allowed	4.6	1.6	6.3	5.6
Mean	1.48	1.20	1.69	1.53
SD	.85	.58	.94	.90
<u>n</u>	2182	766	887	478

Appendix B (continued)

Items	Total	Smoking Status		
		Current Smokers	Never Smokers	Former Smokers
Support (e.g., smoking cessation classes and materials, incentives for quitting) provided by ship to help smokers quit? (%)				
1. None or very little support	6.7	9.5	4.7	4.4
2. Some support	24.1	37.8	14.8	20.1
3. Moderate support	27.0	29.8	25.6	24.7
4. A lot of support	42.2	22.9	54.8	50.7
Mean	3.05	2.66	3.31	3.22
SD	.96	.93	.89	.92
<u>n</u>	2189	765	897	477
Leadership setting good examples of adherence to AIRLANT's smoking policy? (%)				
1. Not at all	20.6	29.4	15.5	14.8
2. Sometimes	34.9	36.4	33.0	36.1
3. Usually	28.2	24.2	30.6	30.3
4. Always	16.3	10.0	20.8	18.8
Mean	2.40	2.15	2.57	2.53
SD	.99	.96	.99	.96
<u>n</u>	2184	759	894	479
Strictness of enforcement of AIRLANT's smoking policy? (%)				
1. Not at all strictly	4.5	3.5	4.5	4.8
2. Somewhat strictly	15.3	11.2	19.9	12.8
3. Moderately strictly	26.2	21.1	30.7	25.9
4. Very strictly	54.0	64.2	44.9	56.4
Mean	3.30	3.46	3.16	3.34
SD	.89	.83	.90	.88
<u>n</u>	2167	748	895	475
Plan to request a transfer off ship specifically because of no-smoking policy? (%)				
0. No	86.3	67.6	97.2	95.2
1. Yes	13.7	32.4	2.8	4.8
<u>n</u>	2180	751	899	480

<sup>1</sup> Percents do not add up to 100 because respondents could circle all that apply.

## Appendix C

### Percentage Distributions for Written Comments, USS THEODORE ROOSEVELT, June 1993

	%	n
<b><u>Positive Comments</u></b>		
General support for the policy	56.7	59
Policy will improve health		
Policy will improve crew members' health	13.6	14
Policy will improve smokers' health by helping them to quit smoking	3.8	4
Policy will improve the ship's environment		
No exposure to ETS	9.6	10
Cleaner spaces (i.e., heads)	4.8	5
Policy will save money		
Reduce "lost time" due to smoke breaks	5.8	6
Reduce health-care costs	3.8	4
Miscellaneous	<u>1.9</u>	<u>2</u>
Total	100.0	104
<b><u>Negative Comments</u></b>		
Policy violates rights/smoking is an individual's choice	32.6	62
Support designated smoking areas/Do not support total no-smoking policy	28.5	54
In general, do not support the policy	15.8	30
Policy is unfair and cruel to addicted smokers	11.6	22
Policy will have a negative effect on crew		
Increase stress, decrease morale	8.4	16
People will want to leave the service	2.6	5
Policy will decrease safety (due to unauthorized smoking in hazardous areas)	<u>0.5</u>	<u>1</u>
Total	100.0	190
<b><u>Other Comments</u></b>		
Bad time to implement policy (mid-deployment)	14.1	15
Concern for smokers		
It will be difficult for smokers to quit	6.6	7
More tobacco cessation support is needed	3.8	4
Too much governmental control	10.3	11
The designated smoking areas were inadequate/not ventilated properly	8.5	9



Appendix C (continued)

	%	n
<u>Other Comments (continued)</u>		
Smokeless tobacco issues	8.5	9
Policy will be difficult to enforce	6.6	7
Policy is driven by political motivation (to gain status, reduce force)	5.7	6
Policy should be the same for all ships and shore commands	5.7	6
Smoking was a method to reduce stress, calm nerves	5.7	6
There are more important issues than smoking	4.7	5
Not going to change tobacco-use habits	3.8	4
Agree that quitting smoking is good for health	3.8	4
Miscellaneous	<u>12.2</u>	<u>13</u>
Total	100.0	106

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Follow-up research has been planned to assess the long-term impact of the no-smoking policy on changes in attitudes regarding policy, tobacco-use rates, and ETS exposure.