<u>Abstract</u>

Title of Document "Promoting Responsible Action in Medical

Emergencies": Determining the Impact of a New

University of Maryland Protocol

Ranwa Hammamy, MPH, 2010

Directed By Dr. Pamela Clark, Public and Community Health

The purpose of this investigation was to determine the impact of the University of Maryland's "Responsible Action Protocol." Judicial records were evaluated to determine if calls for medical assistance increased after the protocol. Descriptive summaries indicated that the number of calls in the semester following the RAP was double the average of the previous six semesters. While there was no variation in calls prior to the RAP ($\chi^2 = 4.346$, p = .501, df = 5), the post-RAP Fall 2009 semester added significant variation ($\chi^2 = 25.069$, p < .001, df = 6). Student focus groups were used to evaluate student reaction to the protocol. Students seemed unaware of the RAP's provisions, and stated its language prevented them from trusting the protocol. Students further indicated the university alcohol education was not relevant and did not provide information regarding alcohol poisoning. The findings suggest that the RAP and the university's alcohol education programming will need revisions to increase their impact.

"Promoting Responsible Action in Medical Emergencies": Determining the Impact of a

New University of Maryland Alcohol Protocol

By

Ranwa Hammamy

Thesis submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Master of Public Health 2010

Advisory Committee:

Dr. Pamela Clark, Chair

Dr. Nancy Atkinson Dr. Kenneth Beck © Copyright by Ranwa Hammamy 2010

Table of Contents

Chapter I: Introduction	
Introduction to Promoting Responsible Action in Medical Emergencies Protocol	2
Problem Statement	2
Research Questions	3
Project Significance	4
Definition of Study Terminology	7
Chapter II: Background	10
Chapter Summary	1
Theoretical Model and Conceptual Framework	12
Literature Review	1:
University of Maryland Responsible Action Protocol	28
Chapter III: Methods	3:
Study Population	30
Sampling Procedure	38
Instrumentation and Materials	4
Procedures	4
Data Analysis Plan	4
Chapter IV: Results	5:
Quantitative Results	5.
Qualitative Results	6
Chapter V: Discussion	80
Summary of Central Findings	8
Implications of Findings	89
Limitations	9
Directions for Future Research and Intervention	9
Conclusions	9
Appendices	100
References	110

<u>List of Tables</u>

Table	Page
Characteristics of Study Sample	54
Number of Alcohol Incidents per Semester	57
Characteristics of Students Involved in Alcohol Incidents	58
Frequency of Charges and Sanctions Associated with Alcohol Violations	58
Number of Medical Transports per Semester	60
Characteristics of Students Involved in Medical Transports	61
Number of Students Requiring/Requesting Medical Transport per Semester	62
Characteristics of Medical Transports post-RAP Enactment	64
Characteristics of RAP-Eligible Cases	65
Qualitative Analysis Themes and Subthemes	67

<u>List of Figures</u>

Figure	Page
Focus Group Participants	53
Participant Perceptions of Peer Underage Alcohol Consumption	56
Number of Alcohol Incidents per Semester	57
Number of Alcohol Incidents per Fall Semester	57
Number of Medical Transports per Semester	60
Age Distribution of Students Involved in Medical Transports	61
Number of Student-Requested Medical Transports per Semester	63
Monthly Distribution of Medical Transports post-RAP	64
Monthly Distribution of RAP Cases	66
Distribution of Sanctions Imposed in RAP-Eligible Cases	66

CHAPTER I: Introduction

Introduction to the University of Maryland "Responsible Action Protocol"

Problem Statement

Research Questions

Project Significance

Definitions of Study Terminology

Introduction to the "Promoting Responsible Action in Medical Emergencies" Protocol In the fall of 2009, the University of Maryland-College Park enacted a new protocol titled "Promoting Responsible Action in Medical Emergencies." This protocol, often referred to as the "Responsible Action Protocol" or "RAP," was designed in response to a concern that students were refusing to call for medical assistance in situations where they or a peer were suffering from a severe alcohol-induced illness. Through the use of surveys and open-forums, the University of Maryland found that students were sometimes hesitant to call for medical assistance for alcohol poisoning if they believed they would face university sanctions for underage alcohol consumption (Student Conduct Committee, 2009). As a result, the university created the "Responsible Action Protocol," which protected eligible students from facing alcohol-related university charges or sanctions if they called for medical assistance in an alcohol-related medical emergency. However, the RAP was only adopted for a one-year probationary period, after which the university will reevaluate the protocol to determine whether or not it was successful in encouraging students to call for medical assistance in alcohol-poisoning incidents. The main concerns of both proponents of and opponents to the protocol were: 1) whether or not it will increase student safety on campus, and 2) whether or not it will be abused by students so that it loses its educational and protective value.

Problem Statement

While the renewal of the "Responsible Action Protocol" is dependent on the evaluation of its effectiveness at the end of the current academic year, no clear measures appeared to be in place to conduct such an evaluation. Although the Office of Student Conduct and Department of Resident Life maintain data on alcohol-related violations and

medical emergencies, they will need to conduct the appropriate analyses to determine the effect of the RAP. Furthermore, this judicial data is not enough to justify the continuation, alteration, or termination of the RAP. Qualitative data must also be collected to ascertain students' knowledge of and concerns regarding the RAP, a process that was not pursued by either department. Thus, the problem faced by those determining the future of the RAP is that a thorough data analysis must be conducted to determine the protocol's implementation and effectiveness. As a result, this investigation aimed to analyze the university judicial data to find a quantifiable effect of the RAP, while also using qualitative measures to determine the knowledge and reactions of the student body.

Research Questions

In order to determine the impact of the RAP on the calling behaviors of underage students involved in alcohol poisoning events, both quantitative and qualitative methods were utilized. As was previously mentioned, the RAP was established in an attempt to reduce the hesitation students experience when deciding to call for medical assistance in alcohol-related medical emergencies. In order to understand the implementation and effectiveness of the RAP, the proposed investigation attempted to answer the following five questions:

Question 1. Was the Responsible Action Protocol effective at increasing the number of calls made by underage students to obtain medical attention in alcohol-related medical emergencies? Was this increase independent of any increase in alcohol consumption?

Question 2. Among those residents who were aware of the Responsible Action Protocol, how did they learn about the Responsible Action Protocol? What was their

knowledge of its provisions? What, if any, misconceptions did resident students have regarding its provisions?

Question 3. What, if any, impact has or would the Responsible Action Protocol have on resident students' decision to call for medical assistance in alcohol-related emergencies? What other factors might contribute to resident students' calling behavior?

Question 4. What training did Resident Life student staff members receive regarding the Responsible Action Protocol? How did Resident Life student staff members explain and implement the protocol? From their perspective, or that of the resident students for whom they are responsible, do Resident Life student staff members perceive any barriers to implementing the protocol?

Question 5. What suggestions do resident students have for altering the Responsible Action Protocol? What suggestions do Resident Life student staff members have for altering the Responsible Action Protocol?

Project Significance

RAP Implications.

The current investigation has the potential to significantly impact the university's evaluation of the Responsible Action Protocol at the end of the 2009-2010 academic year. Because the RAP has only been approved for a one-year provisional period, the university evaluation will be conducted to determine 1) whether or not to continue applying the protocol in cases of alcohol-related emergencies, and 2) what changes, if any, to make to the protocol. In order to effectively understand whether or not the protocol has been implemented effectively, the Office of Student Conduct and Department of Resident Life need to use a variety of measures that evaluate not only the

quantifiable effect the protocol has had on students' calling behaviors, but also their knowledge, perceptions, and concerns regarding the protocol's content. Thus, while a simple quantitative analysis of the number of student calls for medical assistance in alcohol-related emergencies is a valid method of determining the impact of the RAP, it provides only a piece of the information necessary to determine the protocol's effect. Thus, this investigation, with its combined use of quantitative and qualitative measures, provides additional findings to evaluate the RAP's effectiveness. The current investigation used detailed quantitative analyses of university judicial records over the past four years, in an effort to provide a determination of any change in students' actual calling behaviors. The current investigation also relied heavily on a qualitative analysis of students' focus group responses, in an effort to identify the primary reasons for students' use, or disregard, of the RAP.

Greater Public Health Impact.

The current investigation, while limited to a protocol on a single university campus, also has significant implications for general public health. This study has the potential to make a substantial contribution to the limited body of research surrounding the use of Medical Amnesty/Good Samaritan policies. The findings of this investigation can be used to justify the use of such policies at other large public institutions, and may also serve as a helpful source in identifying additional barriers to students' calling behavior in alcohol-related emergencies. Thus, while the current investigation evaluated the implementation and effect of a University of Maryland-specific protocol, its findings provide the empirical evidence needed to develop similar policies at other institutions,

and can help reduce the negative consequences of heavy alcohol consumption experienced by college students in general.

Program Competencies.

As the final culminating activity of the Master of Public Health program in Community Health Education, the Master's thesis must demonstrate the successful attainment of several program competencies. These competencies include both those which are considered "Public Health Core Competencies," as well as those which are considered to be "Community Health Education Cognate Competencies" (University of Maryland, 2009a). The current investigation provided the opportunity to demonstrate several of these competencies, particularly those relating to research methods and program evaluation. The table below provides a list of those competencies most relevant to the current investigation, and the ways in which they were demonstrated.

Competency	Description	Method of Demonstration
Core 1.B	Explain contributing behaviors and	Literature Review and
	determinants of behaviors (e.g.	Development of Conceptual
	predisposing, enabling, reinforcing)	Framework
Core 2.C	Recognize how theory can be used	Application of Health Belief
	to address health problems	Model to Protocol Evaluation
Core 7	Describe and apply appropriate	Analysis of Judicial Record Data
	descriptive statistical methods for	
	summarizing public health data.	
Core 8 (A-D)	Apply descriptive and inferential	Analysis of Judicial Record Data
	statistical methods that are	
	appropriate to the different study	
	designs used in public health	
	research.	
Core 10 (A-	Draw appropriate inferences based	Analysis of Judicial Record Data
C)	on statistical analyses used in	
	public health research.	
Cognate 4 (A-	Apply evidence-based approaches	Literature Review and
C)	in the development and evaluation	Development of Study Methods
	of social and behavioral science	
	interventions.	
Cognate 6 (A,	Conduct evaluation and research	Implementation of Study Methods

B, C, G)	related to health education	and Analysis
Cognate 9.A	Advocate for public policy that	Dissemination of Findings to
	improves public health	Senate Conduct Committee
		(5/6/2010)

Definitions of Study Terminology

- Aggravated Violation- a violation of the university conduct codes, in which a students' possession or use of alcohol may have contributed to the behavior (OSC, 2009).
- Alcohol Poisoning- a condition in which an individual has consumed enough alcohol
 in a limited amount of time that they experience toxic effects requiring medical
 attention (College Drinking Prevention, 2005).
- Alcohol Violation- an incident in which an underage student is in possession/under the influence of alcohol; an incident involving the provision of alcohol to underage students.
- Alcohol-Related Medical Emergency- an incident occurring on the university campus
 in which a student requires medical attention for alcohol poisoning (also referred to as
 "medical emergency" or "alcohol-related emergency").
- Calling Behavior- students' practice of requesting outside assistance in an alcoholrelated medical emergency.
- Department of Resident Life- University of Maryland office responsible for monitoring residents' behaviors and evaluating RAP referrals that occur within the residence halls.

- Harm Reduction Theory- Theory that focuses on preventing harmful consequences of unhealthy behaviors, rather than preventing the actual behaviors themselves (IHRA Website, 2009).
- Health Belief Model- Value-expectancy theory that emphasizes individuals
 perceptions of illness, desire to avoid illness, and ability to prevent illness (Janz et al,
 2002).
- Heavy Episodic Drinking- The act of consuming several drinks (≥ 5) on a single occasion (also referred to as "binge drinking") (Hingson et al, 2005).
- Of-Age Alcohol Consumption- The consumption of alcohol by students 21 years or older.
- Office of Student Conduct- University of Maryland office responsible for monitoring students' behaviors and evaluating RAP referrals that occur outside of the residence halls.
- Perceived Alcohol Consumption- students' beliefs regarding the level of alcohol consumption at the campus and individual student level (Saltz, 2007).
- Resident Student- Current undergraduate student residing in an on-campus resident facility.
- Responsible Action Protocol- Protocol enacted by the University of Maryland which provides relief from university charges for underage alcohol consumption/possession when students seek assistance in alcohol-related medical emergencies (abbreviated as "RAP") (OSC, 2009).
- *RAP Denial* Event in which a student involved in an alcohol-related medical emergency is determine ineligible for relief from university charges.

- *RAP Referral* Event in which a student involved in an alcohol-related medical emergency is evaluated by a university administrator for relief from university charges under the RAP.
- Resident Life Student Staff- Students residing in the on-campus residence halls who are employed as Resident Assistants (Department of Residence Life, 2009).
- *Student Organization* Student-run groups/organizations officially recognized by the university, including fraternities or sororities.
- Underage Alcohol Consumption- The consumption of alcohol by students under 21 years.
- *Undergraduate Student* University of Maryland student enrolled as an "undergraduate"
- *University Administrator* Professional staff member in Student Conduct or Resident Life who meets with and evaluates students referred through the RAP.
- University Charge- Official charge issued by the university to the student for violations of one or more of the codes of conduct.
- University Sanction- Official punishment/consequences issued by the university for violations of one or more of the codes of conduct.

CHAPTER II: Background

Chapter Summary

Theoretical Model and Conceptual Framework

Literature Review

Detailed Description of the University of Maryland "Responsible Action Protocol"

Chapter Summary

The following section includes the following components: 1) a theoretical model and conceptual framework, 2) a literature review, and 3) a detailed description of the RAP. The theoretical model used by this investigation is based on the "Health Belief Model" (Janz et al, 2002), due to its emphasis on the roles of perceived susceptibility and severity with regards to individuals' health behaviors. The conceptual framework provides a visual representation of the various background and mediating factors that can impact the effect of the RAP on students' calling and alcohol consumption behaviors. The literature review provides a summary of critical research findings which are relevant to the implementation and evaluation of Medical Amnesty or Good Samaritan policies on college campuses. Lastly, the description of the "Responsible Action Protocol" provides detailed information regarding the protocol's components and procedures, in an effort to provide a better understanding of the investigation's purpose.

Theoretical Model

Because of its intention to reduce the negative impact of alcohol poisoning by removing a potential barrier to calling for help, the Responsible Action Protocol, and other similar policies, have a basis in harm reduction and its relevance to the Health Belief Model. The concept of harm reduction has often been applied to the use of illegal substances, however its implications for underage alcohol consumption are considerable. Harm reduction strategies include "policies, programs, and practices that aim primarily to reduce the adverse health, social, and economic consequences of the use of legal and illegal psychoactive drugs" (IHRA Website, 2009). As a result, harm reduction practices can prove useful in light of the punitive nature of many colleges' alcohol policies. The Responsible Action Protocol applies harm reduction theory by reducing the perceived risk of judicial sanctions associated with obtaining assistance in medical emergencies. By eliminating this perceived risk, the RAP and other similar policies remove a crucial barrier to calling for assistance, and thus can prevent serious consequences of alcohol poisoning. Although a reduction in underage alcohol use is the desirable outcome of many schools' alcohol policies, harm reduction practices recognize that radical changes in consumption may not be a feasible first step in altering behaviors (IHRA Website, 2009). Instead, harm reduction theory recognizes that individuals who are not motivated to make dramatic behavior changes can still be assisted by using methods that can reduce the harm caused by their current behaviors.

Harm reduction practices fit soundly with the Health Belief Model, which recognizes that an individuals' decision to pursue health behaviors can be influenced by numerous factors, such as perceived severity, perceived barriers, and perceived benefits (Janz et al,

2002). The Health Belief Model, or HBM, includes six key components that can influence an individual's decision to pursue certain health behaviors: perceived susceptibility and severity, perceived benefits and barriers, cues to action, and self-efficacy (Janz et al, 2002). All six of these concepts can be directly applied to the RAP and its related alcohol education campaign. Perceived susceptibility and severity relate to students' belief regarding the likelihood that they will experience alcohol poisoning, and the seriousness of its consequences. Perceived benefits and barriers refer to students' perceptions of the positive and negative consequences of altering their calling behavior. Cues to action are those campaign or protocol elements that motivate students to call for medical assistance, and self-efficacy refers to students' beliefs that they are capable of pursuing a change in calling behavior.

The Responsible Action Protocol in particular primarily addresses students' perceived barriers to calling for medical assistance in alcohol-related emergencies, through its utilization of a harm reduction approach. By reducing the risk of facing judicial consequences in an alcohol-related medical emergency, the RAP also removes this risk as a barrier to calling for medical assistance. As a result, students may be more inclined to call for assistance for a case of alcohol poisoning because the barriers to calling no longer outweigh the benefits. The RAP also has a secondary effect on students' perceptions of the severity of alcohol poisoning, as its mere existence emphasizes the necessity to call for assistance if symptoms are present. With regards to the alcohol education campaign to which the RAP is attached, its components are mainly informative, providing information about the risks and symptoms of alcohol poisoning, and the ways in which students can prevent or address them. When combined with the

RAP, this campaign relates to all six concepts of the HBM, by providing students with the tools to assess, prevent, and address alcohol poisoning.

Conceptual Framework.

The Responsible Action Protocol at the University of Maryland was designed to encourage students to call for medical assistance in alcohol emergencies. It was implemented as part of a larger educational campaign promoting safer drinking behaviors, including reduced alcohol consumption and recognition of the signs of alcohol poisoning. The combination of the new protocol and educational campaign was intended to reduce students' risks of experiencing the negative consequences of unsafe alcohol consumption. However, these components do not occur in a vacuum- other individual, environmental, and social factors that contribute to students' alcohol consumption behaviors must be considered. In an effort to better understand the intended effects of the RAP and its accompanying alcohol education campaign, a conceptual framework has been developed, which includes the primary background and mediating factors that impact students' risk of experiencing alcohol poisoning (See Appendix A).

The background factors that are most likely to impact students' alcohol consumption patterns and their risk of experiencing alcohol poisoning include their age, year in school, religion, previous alcohol consumption, and whether or not they live on campus.

Mediating factors, those which can impact how students' background characteristics affect their risk of experiencing alcohol poisoning, can be environmental, social, and program specific. Characteristics of the campus environment, including size, public/private status, and alcohol policies, can impact students' alcohol-related behaviors. The social environment can also have an impact, and includes characteristics such as

perceived alcohol consumption and staff support for behavioral change. The RAP and its related campaign also include several components that are designed to influence students' alcohol consumption and their risk of experiencing alcohol poisoning.

The RAP and its accompanying alcohol education programs are designed to have an immediate impact on students' calling behaviors and negative alcohol-related experiences. The program is designed to increase students' knowledge of the dangers of alcohol poisoning, which will hopefully motivate them to adopt more protective behaviors. The goal is that students maintain these behaviors, which include reducing their level of binge drinking and increasing their calling behavior in alcohol emergencies. Through the maintenance of these behaviors, it is anticipated that students will reduce their risk of experiencing any negative consequences of alcohol consumption, particularly alcohol poisoning.

Literature Review

College Student Alcohol Consumption

Consumption Levels. Although only 50% of all adults 18 years and older identify as current regular drinkers (NHIS, 2009a), approximately 80% of college students indicate they have recently consumed alcohol (Broadwater et al, 2006). Many of these students are under the legal drinking age of 21, and often engage in unsafe drinking behaviors. Furthermore, the practice of binge drinking, typically defined as the consumption of five or more alcoholic beverages on one occasion (Hingson et al, 2005), is more common among college students than their similarly aged peers. When asked if they had consumed at least five drinks on one occasion in the past year, 36% of adults 18 to 24 years old

responded yes (NHIS, 2009b), compared to 44% of college students (Hingson et al, 2005).

Reasons for Alcohol Consumption. Several investigations examining students' motivations for consuming alcohol have found that both social and environmental factors can have an impact. Common social motivations are the desire for tension reduction, mood enhancement, and social camaraderie (LaBrie et al, 2007) and the desire to "fit in" (Wechsler & Nelson, 2008). Moreover, the desire for social camaraderie is positively correlated with the number of beverages consumed and binge drinking episodes (LaBrie et al, 2007), and those who consume more alcohol during a single occasion are more likely to expect such positive results from their drinking (Jones et al, 2001). However, the simplest of all motivations expressed by underage students who binge drink is the desire to get drunk, which has increased in past years (Wechsler et al, 2001).

Environmental influences on students' alcohol consumption can be divided into perceived and actual characteristics. Research has shown that perceive norms can vary depending on students' own consumption behaviors, with non-to-moderate drinking students assuming their peers consume more than they do, and heavy-drinking students assuming their peers consume the same amount (Lewis & Thombs, 2005). In terms of actual campus environment, students who live in less-controlled locations, such as fraternity houses, are more likely to engage in underage and binge drinking than their controlled-environment peers (Wechsler et al, 2002). Research has also shown that half of underage students and binge drinkers believe alcohol is easy to obtain (Wechsler et al, 2002). However, the presence of multiple alcohol deterrence laws is related to lower levels of underage alcohol consumption, on and off-campus (Wechsler et al, 2002).

Effects of Alcohol Consumption. The pursuit of moderate and heavy alcohol consumption can have an impact on the consumers, their peers, and the academic institution itself. Individuals who consume alcohol may experience negative consequences to their health, academics, and legal standing. Approximately 1,700 college students die from alcohol-related causes each year (Hingson et al, 2005); others report experiencing unintentional injuries and engaging in unprotected sex (Kapner, 2008). Alcohol poisoning is also a serious consequence, and has contributed to both injuries and death among binge drinkers (Oster-Aaland et al, 2009). With regards to their academic and legal standing, students have reported a variety of consequences, including missed classes, official warnings, confiscated licenses, university dismissals, community service, and fines. (Lewis & Thombs, 2005; Wechsler et al, 2002).

Institutional Level. The consequences of heavy alcohol use go beyond the individual who has consumed the alcohol. Students who may witness heavy drinking episodes face interruptions in their academic and social lives, and can sometimes feel threatened by their binge-drinking peers. Abstainers and moderate drinkers report experiencing interruptions in their sleep or study, and even being assaulted by their inebriated peers (Kapner, 2008; Newman et al, 2006). Colleges and universities as a whole can also face negative consequences as a result of underage and binge drinking. They can incur property damage as a result of vandalism committed by drunk students, and can develop a party school reputation that impacts recruitment and retention (Kapner, 2008).

Alcohol Poisoning and College Students

Description and Symptoms. As with most other drugs, alcohol has the potential to cause severe, acute illness if consumed in large quantities. Alcohol poisoning occurs

when an individual consumes so much alcohol in a limited amount of time that it is actually toxic and impairs numerous bodily functions (Oster-Aaland et al, 2009; College Drinking Prevention, 2005). These impairments include the combination of significantly slower breathing and an inactive gag reflex, which could result in choking, and even death, if an unconscious individual were to vomit as a result of heavy alcohol consumption (College Drinking Prevention, 2005). Other symptoms include lower body temperature, bluish or pale skin color, seizures, passing out, and even confusion (Oster-Aaland et al, 2009). If unaddressed, alcohol poisoning can cause brain damage, seizures, hypothermia, and death (College Drinking Prevention, 2005).

Recognition among College Students. Perhaps the most dangerous trait of alcohol poisoning is college students' inability to distinguish it from "nonfatal" alcohol-induced conditions. Even when students experience symptoms such as unconsciousness and vomiting, their peers often ignore or have them "sleep it off." (College Drinking Prevention, 2005). Although students correctly identify many of the major symptoms, they still express uncertainty with other non-symptoms, such as headaches and memory loss (Oster-Aaland et al, 2009). Thus, students may erroneously see the absence of these non-symptoms as an indication that alcohol poisoning has not occurred. The likelihood of making such a decision is potentially increased by the fact that students surrounding an individual with alcohol poisoning are often under the influence of alcohol themselves, and may have impaired judgment (Oster-Aaland et al, 2009).

Perceptions of Peer Assistance. Students' perceptions of normative alcohol consequences also contribute to their belief that alcohol poisoning may not be present.

Research indicates that students' pursuit of helping behaviors may be influenced by the

behaviors of those around them. Situations in which multiple students observe an inebriated individual with symptoms of alcohol poisoning can be susceptible to the phenomenon of "diffusion of responsibility" (Oster-Aaland & Eighmy, 2007). In such circumstances, numerous individuals may witness an alcohol-related medical emergency, yet there is no single individual responsible for addressing the problem, and thus nobody makes an effort to assist the potentially ill student. This scenario is not uncommon in the college drinking environment, and thus the experience of witnessing someone showing signs of alcohol poisoning is perceived as the norm, and does not elicit others' assistance. *Alcohol Deterrence Policies*

Off-Campus Laws and Regulations. Although policies adopted by colleges and universities to reduce underage and binge drinking are important, the laws of the broader community play a significant role in curtailing these behaviors. Perhaps the most effective of these has been the change in the legal drinking age to 21 years in the 1980s (Hingson et al, 2005). Additional laws have increased the price of alcohol, prohibited the sale of alcohol to individuals under 21, required strict age verification procedures, and implemented zero-tolerance policies for underage individuals who drive under the influence (Hingson et al, 2005; Mitchell et al, 2005). Several investigations have found that colleges in areas with multiple alcohol control laws experience lower levels of underage and binge drinking (Lavigne et al, 2008; Wechsler et al, 2002).

On-Campus Policies. In an effort to prevent underage and binge drinking on campus, most institutions have alcohol control policies in place. Some policies take a more punitive approach to encouraging students to discontinue their underage and heavy episodic drinking, while others rely on counseling to determine what is at the root of

students' drinking. Some colleges attempt to prevent campus alcohol use altogether by implementing a campus-wide ban of alcohol (Mitchell et al, 2005), however most institutions apply less-restrictive bans on campus alcohol, such as the prohibition of beer kegs on campus or of alcohol at sporting events (Mitchell et al, 2005). Some colleges offer students the option to reside in substance-free housing on-campus, while others prohibit alcohol advertisements on campus (Mitchell et al, 2005).

Sanctions. When students violate their institutions' alcohol policies, they can face sanctions that are punitive or educational. Among the most common punitive sanctions are monetary fines, written warnings, citations, probation, and suspension (Cohen & Rogers, 2001). Educational sanctions are another popular means through which colleges attempt to prevent future alcohol violations. These sanctions are designed to alter students' perceptions of the risks associated with alcohol use and their own consumption patterns. One of the most common educational sanctions issued to students in violation of the alcohol policy is the mandatory participation in an alcohol education course, such as AlcoholEdu.com. This course is an online educational program about the effects of alcohol use and abuse (AlcoholEdu, 2008) that can be completed within the space of a few hours, and is sometimes a requirement for incoming students (University of Maryland, 2009b). Other institutions may require students to write a paper, attend an inperson educational workshop (Cohen & Rogers, 2001), or assist in university alcohol education programming.

Policy Effectiveness. Although not commonly reported in the literature, some schools have evaluated the effectiveness of their on-campus alcohol policies, while others have also evaluated the combined impact of their individual and broader environmental

policies. The University of Rhode Island, following significant changes to its alcohol policy, evaluated the effectiveness of its new stepped-sanctioning policy by analyzing citation data and staff perceptions (Cohen & Rogers, 2001). The university observed a significant drop in the number of "complex violations" (those in which other violations occurred in addition to alcohol consumption) following the adoption of the new policy (Cohen & Rogers, 2001, p. 79). The drop in complex violations was interpreted as a sign of the policy's success, and although staff perception of the policy was not as entirely positive, the researchers argued the new policy was more effective than the original.

The University of Nebraska conducted an evaluation of its NU Directions program, which combined individual and environmental approaches to reduce binge drinking among its students (Newman et al, 2006). The program used a coalition between the school and greater community, and relied on three major components- environmental policy, enforcement, and education- to reduce alcohol consumption. The researchers monitored the effects of the policy for five years, and observed a significant decrease in the number of students who engaged in binge drinking, as well as a reduction in the number of students who reported negative personal consequences of alcohol consumption (Newman et al, 2006). These findings indicate that the policy was a success, due to the use of individual and environmental approaches (Newman et al, 2006).

Alcohol-Related Counseling

Punitive and educational sanctions are only part of many institutions' alcohol control policies. Many schools also include a third strategy-type in their attempts to reduce underage and binge drinking, namely counseling. Numerous forms of counseling have been applied by different schools, some of which rely on individual feedback, others

which use a group approach. While punitive and educational sanctions aim to alter students' consumption behaviors and their perceived susceptibility to any negative consequences, counseling strategies aim to address some of the underlying causes for students' alcohol use.

Types of Referred Students. Students will have different alcohol consumption behaviors, experience different problems related to their drinking, and accept different levels of personal responsibility (Barnett et al, 2008). An analysis of students referred to alcohol education at multiple universities determined that there were three "groups" of students that could be identified among those who violated alcohol policies- a "Why Me?" group, a "So What?" group, and a "Bad Incident" group (Barnett et al, 2008, p. 688). Each of these groups exhibits different levels of personal responsibility and aversiveness regarding their alcohol experiences, suggesting that students must be evaluated based on their individual attitudes (Barnett et al, 2008).

Brief Personal Feedback Interventions. Targeted interventions have shown high success rates, as they address individuals' perceptions, motivations, and expectancies (White, 2006). Brief personal feedback interventions (PFIs) have been used to help students who abuse alcohol and other substances, but are not necessarily dependent, and have not demonstrated a motivation to change (White, 2006). PFIs are more successful in reducing the number of heavy drinking episodes than general assessment strategies, and have helped students reassess their perceptions of campus alcohol norms (White, 2006). Research also shows that changes in drinking behaviors, perceived norms, and intentions are not different between PFI formats (White, 2006).

Group Counseling. Some counseling strategies use group formats in which multiple college students participate in single sessions. One university implemented group counseling sessions as part of its mandated sanction for alcohol violations (Freeman, 2001). The sessions were designed to help students identify their personal counseling goals, accept greater responsibility for their choices, and revaluate their personal values so that they can make better decisions in the future. These counseling methods were successful at reducing the recidivism rate for alcohol violations, and those who participated in the program thought it was effective and useful (Freeman, 2001). Student Perceptions.

One of the major concerns facing the creation and enforcement of college alcohol policies is the way in which they are perceived by students. While it is a common belief that students do not favor stricter alcohol policies and enforcement, research has shown this to be a misconception. Multiple investigations have found support for hypothetical and actual campus alcohol policies across different factions of the student population. In reality, students are in favor of stricter policies regarding alcohol-related violence, repeat offenders, and the use of false identification for alcohol-related purposes (DeJong et al, 2007). They also endorse the prohibition of kegs on campus, and limitations on advertisements promoting alcohol use at on-campus events (DeJong et al, 2007).

Additional investigations have examined student perceptions of their peers' support for alcohol control policies. Students often underestimate the amount of support for various alcohol control and enforcement policies, including the enforcement of drinking and driving laws, and "cracking down on heavy drinking" (Lavigne et al, 2008, p. 752). Other policies for which actual approval is higher than perceived approval include the

enforcing the drinking age on-campus, requiring proof of age at parties, and citing drunks on campus (Saltz, 2007). Research also indicates that individual characteristics correlate with students' approval of alcohol policies, including their perceptions of policy effectiveness, personal drinking behaviors, and even gender (Saltz, 2007; Wechsler et a, 2001).

Medical Amnesty and Good Samaritan Policies

The campus environment not only impacts underage and binge drinking motivations, but it can also impact the pursuit of assistance in alcohol-related emergencies. Alcohol poisoning is a relevant problem on most college campuses, and while students are able to recognize its main symptoms, they express hesitancy in obtaining outside help when they or their peers show signs of alcohol toxicity (Oster-Aaland et al, 2009). Some of this hesitancy is due to perceived norms regarding what symptoms require assistance, and what symptoms can be ignored (Oster-Aaland et al, 2009). These misconceptions can be addressed by educational and social norms campaigns targeting the consequences of alcohol use. However, some schools believe that the knowledge of alcohol poisoning symptoms is only a part of the solution. In recent years, there has been a greater focus on the issue of students intentionally refusing to call for assistance if they believe they will face sanctions for their underage or binge drinking (Oster-Aaland & Eighmy, 2007). In an effort to encourage students to obtain medical assistance, some colleges adopted new policies, often called "Medical Amnesty" or "Good Samaritan" policies. These policies are designed to provide some level of immunity from alcohol violations and their sanctions in situations where students call for medical assistance in alcohol-related emergencies. While such policies do not necessarily lower the prevalence of underage

and binge drinking, they do have the potential to reduce the harmful consequences of alcohol poisoning.

Justifying the Need for Policies. Although the fear of receiving punitive sanctions for underage and binge drinking is cited as justification for Medical Amnesty/Good Samaritan policies, there is limited empirical research supporting these claims. While some investigations have found that students do not obtain assistance for alcohol poisoning because they are afraid of judicial consequences (Oster-Aaland et al, 2009), support for these policies mainly comes from "human interest" stories, in which students have died or experienced severe consequences as a result of their peers' hesitancy to obtain medical assistance (Oster-Aaland & Eighmy, 2007). These cases often receive national attention, and can result in significant legal implications. (Oster-Aaland & Eighmy, 2007). While colleges are not necessarily held liable for students' alcoholrelated injuries, they are perceived as being responsible for protecting student safety in risky situations (Oster-Aaland & Eighmy, 2007). Thus, while there is little data supporting the allegation that a fear of sanctions acts as a deterrent in situations where medical assistance is necessary, these highly-publicized incidents and student anecdotes provided enough justification for institutions to implement Medical Amnesty and Good Samaritan policies in recent years.

Cornell University Policy Study. In an effort to address students' hesitation to call for assistance in medical emergencies, Cornell University implemented its own Medical Amnesty Protocol in 2002 (Lewis & Marchell, 2006). In justifying the protocol's implementation, the university cited that while 19% of students reported considering calling for help in a possible alcohol poisoning scenario only 4% actually sought out

medical assistance (Lewis & Matchell, 2006). As a result, Cornell University created a medical amnesty protocol intended to encourage students to seek medical assistance in alcohol-related emergencies (Lewis & Matchell, 2006). The protocol provided protection to three entities- the caller, the individual in need of assistance, and student organizations whose members call on behalf of alcohol poisoning victims (Lewis & Matchell, 2006). The university evaluated the protocol's success by assessing student awareness, local emergency room data, and Cornell EMS data. The results indicated that students became more aware of the protocol's stipulations overtime, and that more calls for medical assistance were made following the protocol's implementation, which were not related to any increase in alcohol consumption (Lewis & Matchell, 2006).

Suggestions for Future Research.

Samaritan policies is fairly limited, with little empirical evidence supporting their harm reduction potential. In order to better understand the impact of these policies, institutions need to conduct data-driven research that examines the impact on their individual campuses (Oster-Aaland & Eighmy, 2007). A national study evaluating students' reasons for choosing to request or avoid medical assistance in alcohol emergencies will help determine if there is a widespread need for such policies (Oster-Aaland & Eighmy, 2007). Institutions considering an adoption of these policies should conduct thorough needs assessments to determine students' reasons for not seeking medical attention, and

should be prepared to collect thorough pre-policy information on student alcohol

consumption, so as to provide an adequate baseline comparison measure.

The current literature surrounding the effects of Medical Amnesty and Good

Focus Groups in Qualitative Research

Focus groups are common source of qualitative data and information among researchers in health and policy research (Sim, 1998; Kahan, 2001). They are often used as a means of determining individuals' opinions on certain topics, both to obtain a greater understanding of the opinions themselves, and to corroborate other findings (Bender & Ewbank, 1994). Focus groups are perceived as a cost-effective and natural way of obtaining valuable qualitative data in less time, compared to other qualitative methods (Seal et al, 1998). Unfortunately, the nature of the focus group does present limitations with regards to determining a "quantitative frequency" of opinions mentioned within group discussions, and are not as easily controlled as other methods (Seal et al, 1998, p.254). In addition, while individual interviews can sometimes provide a greater depth of information, comparisons between the two methods have demonstrated that both reach similar thematic conclusions (Seal et al, 1998).

In selecting appropriate focus groups, researchers often elect to use homogenous groups, in which participants are placed in separate groups based on a particular trait or characteristic (Bender & Ewbank, 1994). An important element of focus group research is the use of an effective moderator, who must be skilled at facilitating the discussion, without necessarily directing it (Sim, 1998). Focus group data is often collected through the use of two key methods- 1) an audio recording and 2) a note taker to record nonverbal interactions (Sim et al, 1998). When analyzing focus group data, many researchers opt to use a "content-analysis" approach, through which they attempt to identify common and repeated themes found in participant responses (Bender & Ewbank, 1994). Multiple tools can be used to identify these themes, one of which is the use of spreadsheets (Stockdale,

2002). Such spreadsheets often include a means of denoting the comments' content, the context in which it was said, and short descriptors that serve as predecessors for the final themes (Stockdale, 2002). Using this method, researchers enter focus group responses verbatim, assign each of them a short description. Once this initial process is completed, the next step is to refine their coding, by consolidating multiple descriptors into broader themes (Stockdale, 2002). The same process can be conducted in developing subthemes, if they are needed (Stockdale, 2002). Once these themes and subthemes are refined, one method of analysis is to summarize their content in relation to the established research questions (Stockdale, 2002). However, such summaries should consider whether there is general consensus or forms of dissent within and between groups (Sim, 1998). Thus, while a content analysis relying on the general summary of themes can be an effective method of analyzing general opinions, it is also necessary to note whether dissent exists, and who is more likely to express it.

University of Maryland Responsible Action Protocol

Information pertaining to the formation of the "Promoting Responsible Action in Medical Emergencies" Protocol was available through two principal sources: 1) a Senate Conduct Committee Report from April 2009, and 2) personal interviews with relevant staff members. The professional staff members who provided the most significant input regarding the protocol's history are John Zacker, Director of the Office of Student Conduct, and Steve Petkas, Associate Director in the Department of Resident Life. Additional information was also provided by Keira Martone, Manager for Resident Student Conduct in the Department of Resident Life.

History and Formation.

The University of Maryland at College Park began considering the adoption of a Medical Amnesty policy during the 2007-2008 academic year (Student Conduct Committee, 2009). During the Spring 2008 semester, a Student Government Association ballot included two questions pertaining to students' support for and anticipated use of a Good Samaritan policy. The overwhelming majority of responding students, over 90 percent, indicated that they both supported and would be more likely to call for help in an alcohol-related medical emergency if such a policy existed (Student Conduct Committee, 2009). Although the issue was pursued by the University Senate's Student Conduct Committee, this poll was not enough to justify the adoption of a Good Samaritan policy. However, the Senate Executive Committee did find these results merited further investigation, and requested that more information regarding the need for such a policy be collected before any future action could be taken (Student Conduct Committee, 2009).

To obtain the necessary information, the committee created a working group in 2009 that was comprised of UMCP students, faculty, and staff (Student Conduct Committee, 2009). For several months, this group collected information related to students' fear of university sanctions during alcohol-related medical emergencies, and the possible impact of a Good Samaritan policy. The working group collected survey data from members of the student judiciary and hosted an open forum in which students could voice their opinions regarding a possible Good Samaritan policy (Student Conduct Committee, 2009). These findings were utilized to create an initial draft of a protocol, which was passed by the Senate Executive Committee in the spring 2009 semester.

Working Group Findings.

In order to justify the adoption of a Good Samaritan policy by the University of Maryland, the working group relied on two main sources of information: 1) survey results from student judiciary (USJ) members and 2) student input at an open forum (Student Conduct Committee, 2009). The USJ survey results indicated that USJ members expressed a concern regarding the judicial consequences of calling for assistance in an alcohol-related emergency (Student Conduct Committee, 2009). The top concerns among USJ members were for permanent records, police involvement, and university sanctions (Student Conduct Committee, 2009). Furthermore, the majority of USJ members indicated that they supported the proposed Good Samaritan policy, many citing that student safety should not be impacted by future consequences (Student Conduct Committee, 2009). In addition to the USJ survey, the working group also held an open forum, during which students were invited to anonymously describe their experiences with alcohol-related medical emergencies and the role future consequences played in obtaining assistance (Student Conduct Committee, 2009). Sixteen students spoke at this forum, most offering anecdotes in which the possibility of university sanctions for underage alcohol consumption factored into their decisions to request, or avoid, medical attention (Student Conduct Committee, 2009). Their statements, coupled with the USJ survey and SGA ballot results, provided the evidence needed by the working group to justify the adoption of a Good Samaritan policy.

Protocol Components.

At the end of the Spring 2009 semester, the University approved the adoption of the "Promoting Responsible Action in Medical Emergencies" protocol for a probationary

one-year period. During this time, the effects of the protocol would be monitored to determine whether or not it should be continued in the future. The protocol extends limited immunity, or "relief," from judicial charges and sanctions for certain parties to an alcohol-related medical emergency. When assistance for such an alcohol-related emergency is requested, the student who calls for help will not face charges or sanctions for the possession or use of alcohol (OSC, 2009). Similarly, the student requiring medical attention will also not face charges or sanctions for the possession or use of alcohol (OSC, 2009). This protocol also extends limited protection to of-age students, by providing immunity from charges related to the disruption of the sleep/study environment when an ambulance is called (K. Martone, personal communication, September 2009).

Following an alcohol-related emergency for which medical assistance is requested, the case is referred to either the Office of Student Conduct (if it occurred outside of the residence halls) or Rights and Responsibilities (if it occurred inside the residence halls). If the incident involves the consumption or possession of alcohol by an underage individual, those involved are asked to meet with a representative of the Office of Student Conduct or Rights and Responsibilities. Those who may be called include the student who experienced alcohol poisoning and the student who called for medical assistance, particularly if they are underage. This meeting is a mandatory step in the RAP process, as it is used to evaluate whether or not the student(s) qualify for relief from alcohol-related judicial violations and sanctions. The professional staff member holding the meeting may rely on multiple factors to determine whether or not the student is eligible for the RAP, including the nature of the incident, the student's reaction to the incident, and the

student's university judicial record. Students who are deemed eligible for judicial relief are required to participate in counseling at the University Health Center, in which their alcohol consumption behaviors will be the focus. In order to avoid the future addition of charges, referred individuals must complete this counseling program in a manner that is deemed satisfactory by Ronnie Brown, the Coordinator of Substance Abuse Programs (OSC, 2009; J. Zacker, personal communication, August 2009). It is important to note that because the RAP is considered a protocol, and not a policy, it can be selectively implemented (J. Zacker, personal communication, August 2009), and therefore relief from university charges is not guaranteed. To better illustrate the potential outcomes following an alcohol-related medical emergency, a chart outlining the RAP process has been included for clarification purposes (Appendix B).

Lastly, the RAP is intentionally limited with regards to who and what behavior it covers. While individuals involved in alcohol-related violations may receive judicial relief, student organizations, such as clubs and fraternities, are not protected by the RAP, and are still subject to charges and sanctions following an alcohol-related medical emergency. Furthermore, the RAP covers only those violations that directly pertain to underage alcohol consumption or possession in the *Code of Student Conduct* and the *Community Living Handbook*. The RAP does not protect students from other violations committed at the same time as the alcohol violation, such as drug use, vandalism, or assault (OSC, 2009). Lastly, individuals with previous judicial records will only be considered for judicial relief on a case-by-case basis under the RAP (OSC, 2009).

Related Educational Campaign.

Although the Responsible Action Protocol is the main focus of this investigation, it is important to understand the larger educational campaign with which it was implemented. At the start of the 2009-2010 academic year, the Department of Resident Life implemented a campaign titled "Know-Call-Care," which was designed to educate students in the residence halls about the signs of alcohol poisoning (K. Martone, personal communication, September 2009). Flyers and posters were distributed throughout the residence halls in an effort to provide students with the basic information regarding how to recognize the symptoms of alcohol poisoning, and how they can obtain medical assistance if they observe or experience them. In addition, the University Health Center distributed small, palm-sized cards which included a description of the signs of alcohol poisoning and how to call for help. All of these materials also mentioned the recent adoption of the Responsible Action Protocol, in an effort to both inform students of its presence and encourage them to call for assistance in alcohol-related medical emergencies. Lastly, the campaign relied on a "word-of-mouth" strategy, by having Resident Assistants inform students of the "Know-Call-Care" initiative and the RAP at their initial hall, suite, or apartment meetings.

Need for Evaluation.

The University of Maryland Responsible Action Protocol has only received approval for one year, pending any findings of its impact on the university community. Thus, it is essential that its effects are examined, so that the university can make an informed decision with regards to its renewal. The purpose of this investigation was to determine what impact the University of Maryland "Promoting Responsible Action in

Medical Emergencies" protocol has had on students' calling behaviors in alcohol-related medical emergencies. This investigation also examined whether students were aware of the protocol's provisions, and utilized qualitative measures to obtain both student and staff opinions regarding the protocol's content and effects. Lastly, this investigation attempted to discern whether or not students' alcohol consumption had changed since the implementation of the RAP, and whether these changes had an impact on the protocol's perceived effectiveness. Based on Cornell's study of its own protocol, it was expected that the number of student calls for medical assistance increased following the adoption of the University of Maryland RAP. It was also expected that the majority of students were aware of the protocol's existence, but fewer were familiar with its specific provisions.

CHAPTER III: Methods

Study Population

Sampling Procedure

Instrumentation and Materials

Procedures

Proposed Data Analysis Plan

Analysis

Study Population

Resident Students.

The Responsible Action Protocol is designed to provide relief from university charges and sanctions for University of Maryland College Park students involved in alcohol-related medical emergencies. Although the university's student body includes both undergraduate and graduate students, the protocol's target population is undergraduate students, principally those under the legal drinking age of 21 years. In light of the protocol's intentions, the population that was the focus of the current investigation was undergraduate students at the University of Maryland College Park. The population was further limited to students who reside in on-campus housing. The investigation focused on this particular population because students residing on-campus are more likely to be underage, and may engage in more dangerous alcohol-related activity on campus than their non-resident and of-age peers.

Although there is no readily available demographic data specific to students living in the residence halls, information describing the general undergraduate student population is available. At the start of the Fall 2009 semester, 26,542 undergraduate students were registered, 10,918 of whom lived in the residence halls (Institutional Research Planning and Assessment, 2009). In terms of the entire undergraduate population, 19,996 were returning students; 4,202 were new first time students; and 2,344 were new transfer students (IRPA, 2009). Of those students living in the residents halls, 3,917 were new, first time students; 6,920 were returning students; and 81 were new transfer students (IRPA, 2009). With regards to the entire undergraduate population, males slightly outnumber females, 52.3% to 47.4% (IRPA, 2009). The majority of students, 57.9%,

identify as white, while 15.2, 12.4, and 6.2% identify as Asian, Black, and Hispanic, respectively (IRPA, 2009). Academically, the departments with the highest undergraduate student enrollment are the College of Behavioral and Social Sciences, the College of Undergraduate Studies, the College of Arts and Humanities, the School of Engineering, the College of Chemical and Life Sciences, and the School of Business (IRPA, 2009).

Students who reside in campus housing have a variety of living options available, ranging from traditional dormitories to full suites and apartments. The campus residence facilities are divided into two main regions- North Campus and South Campus. The North Campus residence halls are mainly comprised of traditional dormitories, and are filled primarily by first-year students and sophomores. In addition, some of these dormitories are known as "living-learning centers," and serve as housing for students in the university's scholars and honors programs. On the other hand, the South Campus residences are mainly comprised of suites and apartments, and house students of all years, with greater proportions of juniors and seniors.

It is important to note that students residing in fraternity or sorority housing were not included in the study sample. Although students in these housing environments may be more likely to participate in underage or binge alcohol consumption, they are subject to additional alcohol regulations through the Office of Fraternity and Sorority Life, and may experience an entirely different set of judicial procedures. While students living in "Greek" housing may still be eligible for the RAP, the judicial relief they are granted only covers those violations that pertain to the *Code of Student Conduct*, and does not extend to the expectations set forth by the Office of Fraternity and Sorority Life. Thus,

only those students residing in the two "residential regions"- North Campus and South Campus- were invited to participate in the current study.

Resident Assistants.

In an effort to evaluate the implementation and effect of the RAP, another segment of the undergraduate resident population was selected for specific consideration-Resident Assistants. These individuals have the unique perspective of being students who are impacted by the university's alcohol policies, while simultaneously working to enforce them. They have the opportunity to observe their peers' actions in the residence halls, and can describe whether or not there have been any changes in their drinking or calling behaviors since the implementation of the RAP. These students tend to be in at least their second year at the University of Maryland, and are thoroughly trained in university policies. Resident Assistants (RAs) serve as mentors to students living in the residence halls, addressing their academic and personal needs in an effort to foster a stronger sense of community (DRL, 2009). Resident Assistants also work to enforce the guidelines set out in the resident handbook, and are responsible for reporting and addressing any violations they observe. With regards to the RAP, Resident Assistants were specifically trained in the protocol's components, and were responsible for passing along the information to their residents.

Sampling Procedure

Resident Students.

In an effort to evaluate the implementation and effects of the RAP, the resident student sample population was divided into two groups- those who claimed to be aware of the protocol's existence, and those who claimed they do not know about the protocol.

The investigation relied on the use of four resident student focus groups, two "aware student" groups and two "unaware student" groups. Similar methods were used to recruit and classify an adequate number of resident students for each segment of the sample. In order to obtain the necessary sample size, two different methods were used, which relied on both electronic and more "traditional" notification strategies.

The first method that was employed to recruit resident students was the distribution and posting of flyers throughout the residence halls and academic buildings. Most of the residence halls have bulletin boards on which announcements and advertisements are typically posted. Flyers were provided to the Office of Resident Life to be posted on these resident hall bulletin boards, however office policy limited the number of posted flyers to one per building. Academic buildings also served as key locations for resident student flyers, particularly those with the highest numbers of undergraduate student enrollment. Flyers were placed on public bulletin boards in several academic buildings, including the Biology/Psychology building, the Benjamin Building, the School of Public Health, the Chemistry Building, and McKeldin Library. All of these flyers were posted once during the week prior to the university's spring break. With regards to content, all of the information posted in the various residential and academic facilities remained the same, so that they were appropriate for both RAP "aware" and "unaware" students (See Appendix C). Flyers targeting resident students included a statement relaying the purpose of the investigation- to determine students' reactions to the university's alcohol policies. All of the flyers included a brief description of the expected activity- to engage in a confidential discussion of the protocol (or university policies) with other students. The days on which the focus groups were held was also included on the flyers, so that

students could make an immediate decision about whether they were able to participate. All of the flyers included the primary researcher's e-mail contact information, and instructed interested students to contact her if they wished to sign-up for one of the available focus group times. Lastly, the flyers listed the compensation all students could expect to receive for their participation- a \$25 gift card to a local retailer, as well as food and refreshments during the actual discussion.

The second recruitment method that was used was an e-mail announcement sent to students via various student listservs, including those circulated by the Honors program, the Chemistry department, the Department of Special Education, and the Department of Public and Community Health. These e-mail announcements included the same information presented in the paper flyers targeting unaware students. The e-mail described the purpose of the investigation, the expected activity, the commitment requirements, the focus group meeting dates, the primary researcher's contact information, and the compensation provided. Prior to being distributed to students, the announcement was first approved by the staff or faculty member who was responsible for organizing and distributing the e-mails. Once approval was obtained, the e-mail announcement was circulated by these listservs twice over the course of the investigation, once prior to the university's spring break, and once again a few days prior to the first focus group meeting date.

Resident Assistants.

In order to obtain observational information regarding students' alcohol consumption behaviors, the implementation, and the use of the RAP, it was important to use a sample of Resident Life staff that is diverse and experienced. As with the resident

designed to evaluate their observations and reactions to the RAP. A total of two resident assistant focus groups were held for the purposes of this investigation. Two methods were used to recruit Resident Assistants for these focus groups: 1) flyers in staff offices/mailboxes, and 2) an e-mail announcement on the RA staff listsery. The content of these e-mails and flyers (See Appendix D) were very similar to those distributed to the resident student sample, the only difference being an additional emphasis on the need for a student staff perspective. The flyers were delivered to the Office of Resident Life in separate envelopes for each building, in an effort to simplify the distribution process. As with the resident student listsery e-mails, the e-mail announcement sent to resident assistants as also distributed twice- once before spring break, and once again prior to the first focus group.

Instrumentation and Materials

The data collected in this investigation did not rely on any testing devices that required significant validity or reliability measures. The quantitative data that was used to evaluate drinking and calling behaviors on campus was obtained by using the Department of Resident Life's judicial records (as maintained by its Office of Rights and Responsibilities). resident student and resident assistant focus group responses were collected and analyzed as qualitative data. Moderator guides were followed in an effort to encourage discussion among the study participants, with prompts that were developed to address the investigation's research questions.

Resident Student Demographic Surveys.

In an effort to determine whether a diverse and representative student sample criteria was obtained, an initial demographic survey was distributed to participants prior to the start of the resident student and resident assistant focus group discussions (Appendix E). The surveys were kept anonymous, and included basic descriptive questions such as age, major of study, and year in school. Additional questions asking participants to describe their and their peers' alcohol consumption behaviors were included, in the hopes of eliciting honest responses that remained unknown to their fellow participants. The demographic questions on the survey were selected based on both their relevance to the protocol in question, as well as their demonstrated relationship to underage alcohol consumption found in the literature. (Jones et al, 2001).

Resident Student Focus Group Guides.

The purpose of the resident student focus groups was threefold: to collect information about: 1) students' knowledge and opinions regarding alcohol poisoning, 2) the influences on students' decisions to call for medical assistance, and 3) students' knowledge and opinions regarding the RAP. The prompts included in the focus group guides were intended to initiate discussion, however the aim was to have students elaborate on these topics without significant provocation. The guides for both the aware and unaware students were virtually identical, the only difference being the explicit referral to the RAP in the final portion of the guide (See Appendices F & G).

The resident student focus group guides included an introduction by the moderator, who explained the rules and expectations for the discussion. The next portion of the guide was an icebreaker, intended to make students feel more comfortable with each other. The

final portion of the guide initiated the actual discussion of the RAP and students' calling behaviors, with the presentation of a recent fatal alcohol emergency. The focus group guide included prompts related to students' perceptions regarding the influences on calling behavior and the effect of the RAP. Portions of the guide attempted to elicit anecdotal accounts that would help determine whether or not the RAP can have and has had an impact in the campus residential facilities.

Resident Life Student Staff Focus Group Guides.

The purpose of the Resident Life staff student focus groups was threefold: 1) to collect information about staff members' observations of student alcohol consumption over time, 2) to determine how resident assistants were trained in and implemented the RAP, and 3) to determine resident assistants' reactions to the RAP. Again, the prompts included in the focus group guides were intended to initiate discussion among the attendees, with the goal that the staff members present would elaborate on these topics without significant provocation. As with the student focus group guides, these prompts were based on the current investigation's research questions, but from the perspective of those whose job it is to enforce policies, and who are less likely to be involved in underage alcohol consumption. This focus group guide attempted to elicit anecdotal accounts from the both the year preceding and the year following the adoption of the RAP, in an effort to determine if the RAP was effective at increasing students' calling behaviors.

The resident assistant focus group guides included an introduction by the moderator, who explained the rules and expectations for the discussion. The next portion of the guide consisted of an icebreaker, intended to make students feel more comfortable with each

other. The actual discussion of the RAP and students' calling behaviors was then opened by a prompted that asked about staff members' observations regarding on-campus alcohol consumption. The focus group guide included prompts related to resident assistants' perceptions regarding the methods used to advertise and implement the RAP, and their observations of its use by resident students. Portions of the focus group guide attempted to elicit anecdotal accounts that could be used to determine whether or not the RAP was effectively implemented and if it has had an impact in the campus residential facilities (See Appendix H).

Procedures

The current investigation ran from early-March 2010 through the mid-April 2010, to allow for the largest set of post-RAP judicial data and ample focus group recruitment. The investigation began with the recruitment of participants in the residence halls and academic buildings in the second week of March 2010, for focus groups that were eventually conducted later in the month and in early-April. The second portion of the investigation included the collection of the latest alcohol-incident data from the Department of Resident Life, and the completion of the appropriate statistical analyses to determine what potential effect the RAP has had on students' alcohol consumption and calling behaviors. The final set of judicial records was obtained on March 31st, via an email from Keira Martone, Manager for Resident Student Conduct. Analyses of both the judicial records data and focus group responses began in early-April. A chart outlining the timeline of these and other components is included (See Appendix I).

Focus Group Recruitment.

IRB approval for the current investigation was obtained in late-February (See Appendix J), thus recruiting for focus groups began in early-March. Flyers for both the aware and unaware resident student groups were finalized and posted in all of the residence halls, as well as several of the academic buildings. These flyers were posted once prior to the start of the university's spring break, and no replacement flyers were required for the rest of the recruitment process. The second resident student recruitment method, the use of multiple student e-mail listerys, was implemented at the same time the flyers were posted, and announcements were sent out twice in March before the student focus groups. The recruitment methods for the resident assistant focus groups began at the same time as the resident student focus group recruitment process. The predesigned flyers were placed in the staff offices shortly after IRB approval was received, and the staff e-mail announcement was sent out twice during the month of March.

For resident students, the recruitment process included a second step to determine if those interested were eligible to participate in the "aware" or "unaware" student focus groups. When students contacted the researcher, they were asked if they "knew what the Responsible Action Protocol was" and if they were "familiar at all with its provisions." Based on the students' responses, they were assigned to either an "aware" group, if they had enough knowledge of the protocol and were familiar with its provisions, or were assigned to an "unaware" group if they were unfamiliar with the RAP. Once student eligibility was determined, they were provided with the option of participating in one of the appropriate groups, and instructed to provide an e-mail confirmation to ensure their participation. A maximum of twelve participants was recruited for each group, with the

expectation that some students would likely drop out of each group. For all of the six focus groups conducted, students received an e-mail reminder no less than two days before the group was to convene, which provided directions to the meeting room.

Focus Group Execution.

The four resident student and two resident assistant focus groups began in late-March and ran through early-April. "Aware" student focus groups were held on Tuesday, March 23rd and Thursday, April 1st, from 5:30pm to 7:00pm. "Unaware" student focus groups were held on Thursday, March 25th and Tuesday, April 6th, from 5:30pm to 7:00pm. Resident assistant (staff) focus groups were held on Tuesday, March 30th and Thursday, April 8th, from 5:30pm to 7:00pm. All of the focus groups were held at the same time in the early evening, in an effort to avoid any conflicts with class schedules. All of the focus groups took place in the Department of Public and Community Health Conference Room, in the School of Public Health. On the evening of each group, signs were placed throughout the School of Public Health academic building to direct students to the appropriate meeting location.

Upon arrival to the focus group location, all participants were asked if they were there for the "alcohol policy study." Once confirmation was received, participants were invited to help themselves to refreshments provided by the researcher. Once all of the participants had arrived, they were greeted as a whole and learned the procedures for the evening. The participants then received copies of the informed consent to read and sign (See Appendix K). After the forms were returned, participants received and completed the student demographic survey, and were notified that all of the information they provided would remain anonymous. Once the surveys were completed, the participants

were informed of the discussion rules and requested to provide their permission to 1) have an associate take notes on the group discussion, and 2) tape record the discussion. Once permission was granted, the discussion began, with the use of the appropriate focus group moderator's guide. In most cases, the entire process took no longer than 70 minutes, and all groups were completed within 90 minutes of their arrival. Once the discussion was completed, the participants received cards with the researcher's contact information in case they had any questions about the investigation in the future. Lastly, the participants received their compensation (\$25 gift cards to Target®), as they left the room. The same procedures were followed for all three group types ("aware," "unaware," and "staff).

Judicial Data Collection.

The second portion of the investigation was the collection of alcohol-related judicial data from the Department of Resident Life. Data was obtained for the three academic years prior to the implementation of the RAP (beginning in September 2006), up through March 2010. The judicial records regarding alcohol-related incidents included the following information: 1) the incident date, time, and location; 2) the student's age and gender; 3) if medical assistance or transport was requested; 4) who requested the medical assistance; 5) if the student was eligible for the RAP; 6) if the student was charged with conduct violations; 7) the specific violations the student was charged with, 8) if the student was responsible for those violations, and 9) what, if any, sanctions the student received. No names or specific incident details beyond the above characteristics were included in an effort to maintain anonymity. These records were received at the end of March 2010, and subsequently recorded by the researcher for statistical analysis.

Data Analysis Plan

Quantitative Data Analysis.

The data collected from the judicial records obtained from the Department of Resident Life were analyzed using quantitative methods. Incident data was sent in the form of a Microsoft Excel spreadsheet, with each documented student entered into the spreadsheet individually (one student per row). The incident characteristics in the data made it possible to determine if multiple students (rows) were documented during a single event, such as a party. However, for the purposes of this investigation each student was coded into SPSS as a separate incident, in an effort to accurately capture the number of students engaging in alcohol-related violations in on-campus housing. Although the data was de-identified to the point that it was impossible to determine if one students was involved in multiple incidents overtime, this potential repetition was not a major concern, as the data only served to provide a basic picture of on-campus alcohol consumption.

The quantitative analysis consisted primarily of descriptive summaries, however nonparametric tests and correlations were also conducted to answer the research questions. Descriptive summaries were used to illustrate the prevalence of alcohol incidents on campus and the prevalence of medical transports on campus. Descriptives were also used to present what violations were the most common, and who was committing them. The level of RAP use since its enactment was also examined using descriptive summaries, in an effort to determine if it has been successfully implemented. Nonparametric tests were used to determine if the number of medical transports increased following the enactment of the RAP, and if this increase was significantly different from

fluctuations in the past three years. These quantitative analyses were used to answer the first research question of this investigation:

1) Is the Responsible Action Protocol effective at increasing the number of calls made by underage students to obtain medical attention in alcohol-related medical emergencies? Is this increase independent of any increase in alcohol consumption?

Qualitative Data Analysis.

The responses of participants provided during the focus group discussion were analyzed using a thematic content analysis of individual comments. Although a series of themes and subthemes had been created prior to the investigation, upon listening to the recordings, a new strategy was developed. After listening to the first three focus groups, the primary researcher developed a new series of themes and subthemes, framed around both the content of participants' comments and the research questions of interest. This initial list of coded comments was then sent to a second individual, Dr. Pamela Clark, to determine if the coding scheme used was appropriate for the investigation and provided comments. As additional groups were conducted and coded, new themes and subthemes were added, each relating to at least one of the current investigation's research questions. A total of eleven themes were generated, each with at least two subthemes, and in a few instances, one theme also acted as another's subtheme. The final list of themes and subthemes were sent to the second coder, to determine if they were appropriately selected and assigned.

To code individual comments, each was entered into a Microsoft Excel spreadsheet, with one comment per row. In the next column was the group in which the

statement was said ("aware," "unaware," and "staff"). In the third and fourth columns were the theme and subtheme under which the comment was coded, respectively. Once all comments were entered and coded, they were sorted by theme and then subtheme, so that similarly coded comments were grouped together. Once the comments were all organized by theme and subtheme, the researcher went through each theme-subtheme pairing and selected generated summaries that best represented the nature of the included comments. These summaries were then consolidated into six new themes, each with two or three subthemes, which are further explored in the results. The final set of themes and subthemes was again sent to a second coder to confirm their accuracy and fit. These six themes are:

- 1) Opinions of the university's alcohol policies
- 2) Awareness of alcohol poisoning
- 3) Perceptions of student alcohol consumption
- 4) Influences on calling behavior
- 5) Criticisms of the "Responsible Action Protocol"
- 6) Suggestions regarding the "Responsible Action Protocol"

The results of the qualitative analysis were used to answer the following four questions of this research investigation:

2) Among those residents who are aware of the Responsible Action Protocol, how did they learn about the Responsible Action Protocol? What is their knowledge of its provisions? What, if any, misconceptions do resident students have regarding its provisions?

- 3) What, if any, impact has or would the Responsible Action Protocol have on resident students' decision to call for medical assistance in alcohol-related emergencies? What other factors might contribute to resident students' calling behavior?
- 4) What training did Resident Life student staff members receive regarding the Responsible Action Protocol? How did Resident Life student staff members explain and implement the protocol? From their perspective, or that of the resident students for whom they are responsible, do Resident Life student staff members perceive any barriers to implementing the protocol?
- 5) What suggestions do resident students have for altering the Responsible

 Action Protocol? What suggestions do Resident Life student staff members
 have for altering the Responsible Action Protocol?

Software Programs.

The entirety of the current investigation's quantitative analyses were conducted using the Statistical Package for the Social Sciences (SPSS), version 15. Figures and tables were created using Microsoft Excel and Word 2007, respectively. Qualitative data analyses were conducted without the use of professional software- responses were initially categorized into themes and subthemes through manual entry into a Microsoft Excel 2007 spreadsheet. The consolidation of these themes and subthemes into the final six themes was conducted using Microsoft Word 2007.

CHAPTER IV: Results

Study Sample Demographics

Quantitative Results

Qualitative Results

Quantitative Results

Study Sample

Sample Demographics. A total of 53 students participated in the focus groups conducted for this investigation. Sixteen were classified as "unaware students," nineteen were classified as "aware students," and eighteen were classified as resident assistants, also referred to as "staff" (See Figure 1). The 53 participants demonstrated a significant level of diversity across several demographic characteristics, as demonstrated in Table 1.

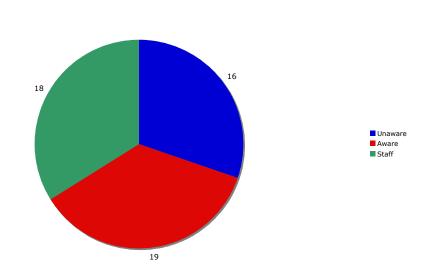


Figure 1- Focus Group Participants

Demographic characteristics of study sample based on participant questionnaire

Table 1

Demographic characteristics of study sample based on participant questionnaire		
Characteristic	Number (N)	Percent (%)
Focus Group		
Unaware Students	16	30.2
Aware Students	19	35.8
Staff	18	34
Race/Ethnicity		
White/Caucasian	28	52.8
Black/African American	13	24.5
Asian	11	20.7
Hispanic/Latino	1	1.9
Gender		
Male	21	39.6
Female	32	60.4
Age (years)		
Under 21	37	69.8
21 or older	16	30.2
Year in School		
First	10	18.9
Second	15	28.3
Third	18	33.9
Fourth or beyond	10	18.9
Major of Study		
Biology/Chemistry	8	15.1
Physical Science	4	7.5
Social Sciences	7	13.2
Health Science	12	22.6
Politics/Government	11	20.8
Business/Economices	11	20.8

The distribution of participant demographics between the three study groups, "aware," "unaware," and "staff," were also examined to determine what patterns existed. With regards to participant age, the majority of participants of or over the age of 21, 75%, were from the "staff groups." By contrast, approximately 83.8% of students under the age of 21 were in the "aware" and "unaware" student groups, many of which were still under the age of 20. With regards to race/ethnicity, the percent of participants who identified as "White/Caucasian" ranged from 50% to 56.2% for the three student group types. Thus,

no less than 43% of each of the three group types was comprised of ethnic/racial minorities.

Alcohol Consumption Patterns. Participants were asked to respond to questions regarding their personal alcohol consumption, as well as the alcohol consumption of their peers. When asked to report the number of days in the past two weeks that participants had consumed more than five alcoholic beverages on one occasion, the majority of participants, 67.9%, said "0 Days." 26.4% responded "1-2 Days," while only 3.8%, or two individuals, said "3-4 Days." Only one individual in the study sample reported binge drinking "5 or More Days" in the past two weeks. Participants were also asked to estimate the number of their underage peers that had consumed alcoholic beverages in the past two weeks. 9.4% and 11.3% reported that "None/Few" and "Under Half" of their underage peers had consumed alcohol, respectively. 22.6% of participants estimated that half of their underage peers consumed alcohol, while the remaining 56.6% responded that "Over Half" or "Most/All" of their underage peers consumed alcohol in the past two weeks (See Figure 2).

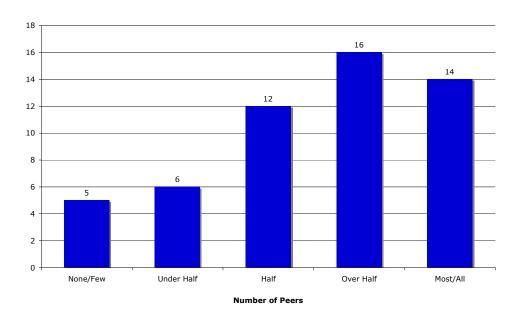


Figure 2- Perceived Number of Underage Peers Who Consume Alcohol

All Alcohol Violations

Resident Life Judicial data provided information on all alcohol violations from the start of September 2006, through March 2010. During this period, a total of 3097 alcohol violations were documented, 1905 (61.5%) of which included multiple violations during a single incident. Table 2 provides a breakdown of the violations per semester, including the current Spring 2010 semester, which is not yet complete. Excluding this incomplete semester, the number of violations per semester does demonstrate a positive linear increase in alcohol violations over time (B=21.877, F=1336.321, p<.001) (See Figure 3). An analysis of the Fall semesters only demonstrates a significant linear trend as well (B=26.533, F=19814.869, p<.001), as demonstrated in Figure 4. When examining the breakdown of alcohol violations, approximately 69.8% were committed by male students, and nearly all were committed by a student under the age of 21 year (96.5%). Table 3 provides a breakdown of the gender and age distribution for all alcohol violations, while Table 4 lists the primary charges and sanctions associated with alcohol

violations. Most violations were associated with the charge "Possession of Alcohol by a Minor" (84.2%), while over one-third of students (39.7%) received some sort of educational intervention or assessment as part of their sanction.

Table 2
Number of alcohol incidents per semester

Trained of widons including per semigration			
Semester		Number (N)	Percent (%)
	Fall 2006	353	11.4
;	Spring 2007	359	11.6
	Fall 2007	449	14.5
;	Spring 2008	278	9.0
	Fall 2008	458	14.8
;	Spring 2009	360	11.6
	Fall 2009	530	17.1
	Spring 2010	310	10.0

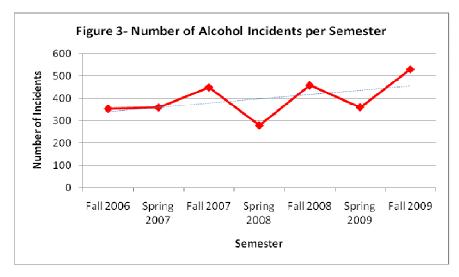




Table 3

Demographic characteristics of students involved in alcohol incidents

Characteristic	Number (N)	Percent (%)
Agee		
Under 18 years	114	3.7
18 to 20 years	2875	92.8
21 or older	108	3.5
Gender		
Male	2162	69.8
Female	923	29.8
Unreported	12	.4

Table 4

Frequency of charges and sanctions associate with alcohol violations		
	Number (N)	Percent (%)
Charge		
Possession by a Minor	2609	84.2
Disorderly Behavior	330	10.7
Failure to Monitor Guests	28	.9
Noncompliance/False ID	12	.4
Damage/Theft	11	.4
Harm/Security/Object	8	.3
Provision to a Minor	8	.3
Other	8	.3
Student Conduct	26	.8
None Listed	58	1.9
Sanction		
Assessment	840	27.1
Education	390	12.6
Minor Administrative	350	11.3
Major Administrative	27	.9
Minor Housing	682	22
Major Housing	1	0
Other	25	.8
None Listed	351	11.3
Not Responsible	431	13.9

All Medical Transports

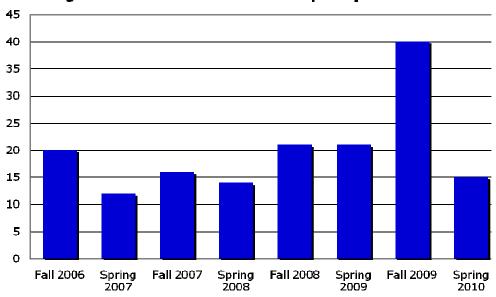
Of the 3097 alcohol incidents since September 2006, 159 involved the request for a medical transport (for an alcohol-related medical emergency). Of these 159 incidents, 104 occurred prior to the enactment of the Responsible Action Protocol (See Figure 5). A chi-square analysis was conducted to determine if the number of medical transports per Pre-RAP semester (See Table 5) was statistically different from a uniform distribution. The results demonstrated that the distribution was not significantly different from a uniform distribution, indicating that there was no significant deviation from uniformity in the number of medical transport calls per semester before the RAP was enacted (χ^2 = 4.346, p = .501, df = 5). Similarly, when only the Fall semesters preceding the RAP were evaluated, no significant deviation from uniformity was found ($\chi^2 = .737$, p = .692, df = 2). However, when the Fall 2009 semester is added to a distribution inclining all six pre-RAP semester, the results show that is significantly different from a uniform distribution, suggesting that there was a significant increase in the number of calls made following the RAP ($\chi^2 = 25.069$, p < .001, df = 6). Similarly, when the Fall 2009 semester is included in a distribution of the number of medical transports per Fall semester, the results show that it is also significantly different from a uniform distribution ($\chi^2=14.216,\,p=.003,\,df$ = 3). These results indicate that there was a significant increase in the number of medical transports per Fall semester following the enactment of the RAP. The previous analyses did not include Spring 2010 data because the semester was not yet complete at the time the data was analyzed, and thus may not have included a complete listing of medical transports for that semester.

Table 5

Number of medical transports per semester			
Semester	Number (N)		
	Fall 2006	20	
	Spring 2007	12	
	Fall 2007	16	
	Spring 2008	14	
	Fall 2008	21	
	Spring 2009	21	
	Fall 2009 ^a	40	
	Spring 2010 a	15	

^a= indicates a post-RAP enactment semester

Figure 5- Number of Medical Transports per Semester



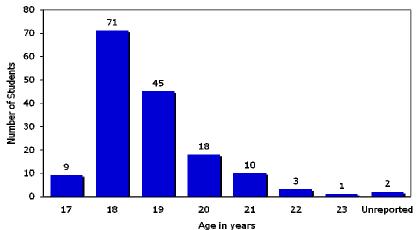
Descriptive summaries of the age and gender of students involved in alcohol transports were also conducted to determine what patterns existed (See Table 6). Nearly 90% of all medical transports since September 2006 were for students who were under the legal drinking age, which corresponds to the percent of documented students who are underage (96.5%) (See Figure 6). While males still outnumber females with regards to medical transports, the difference between the genders is smaller than it was for alcohol violations (56.0% male, 43.3% female).

 Table 6

 Demographic characteristics of students requiring medical transport

Characteristic	Number (N)	Percent (%)
Age		
17	9	5.7
18	71	44.7
19	45	28.3
20	18	11.3
21	10	6.3
22	3	1.9
23	1	.6
Unreported	2	1.2
Gender		
Male	89	56.0
Female	69	43.4
Unreported	1	.6

Figure 6- Age Distribution of Medical Transports



Frequency data between semesters was also collected for those medical transports that were requested by a student (not requested by a staff member or unknown individual).

The number of student-requested medical transports per semester can be found in Table

7. Chi square analyses were also conducted to determine if the distribution of student-requested medical transports per semester approximated a uniform distribution. Similar to the analyses done on the total number of medical transports, the first analysis examined only those student-requested medical transports that occurred before the RAP, while the

second examined all student-requested transports. The results showed that the distribution of all pre-RAP student-requested transports per semester was significantly different from a uniform distribution (χ^2 =15.304, p = .009, df = 5), as was the distribution of those which occurred during the Fall pre-RAP semesters (χ^2 =6.32, p = .042, df = 2). When the Fall 2009 semester was added to the six pre-RAP semesters, the distribution of student-requested transports was also significantly different from a uniform distribution (χ^2 = 34.6, p < .001, df = 6), as was the distribution of only those calls made in the Fall semesters (χ^2 = 19.327, p < .001, df = 3). These results indicate that there was significant variation in the number of student-requested medical transports, as evidenced by a spike in calls in both the Fall 2008 and Fall 2009 semesters (See Figure 7). Again, Spring 2010 data was not included in this analysis, as the semester was not yet completed. However, it is important to note that of all student-request medical transports, 59.25% were made in the two semesters following the enactment of the RAP, while 44.23% were made in the six semesters preceding it.

 Table 7

 Number of student-requested medical transports per semester

Semester		Total Medical Transports	Student-Requested
			Transports
	Fall 2006	20	4
	Spring 2007	12	1
	Fall 2007	16	7
	Spring 2008	14	8
	Fall 2008	21	14
	Spring 2009	21	12
	Fall 2009	40	24
	Spring 2010	15	10

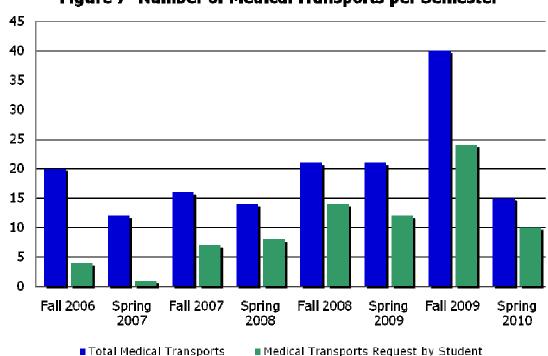


Figure 7- Number of Medical Transports per Semester

Post-Responsible Action Protocol Medical Transports

Descriptive summaries focusing on only those medical transports that occurred after the enactment of the RAP were generated, in an effort to better understand the impact of the protocol on students' calling behaviors. The number of medical transports was divided by both semester and month, with the Fall 2009 semester showing over twice as many calls than the Spring 2010 semester (See Table 8). An examination of the individual months shows that September and October 2009 had the highest number of transports, at 16 and 12, respectively (See Figure 8). Further descriptive summaries indicate that the percent of medical transports involving underage students (92.7%) corresponded to the percent of alcohol violations involving underage students, and that males again outnumbered females. Lastly, over half of the medical transport calls during this period were deemed eligible for coverage under RAP (See Table 8).

 Table 8

 Medical transports Post-RAP Enactment

	Number (N)	Percent (%)
Semester	` /	` ,
Fall 2009	40	72.7
Spring 2010	15	27.3
Month/Year		
Aug/2009	2	3.6
Sep/2009	16	29.1
Oct/2009	12	21.8
Nov/2009	7	12.7
Dec/2009	2	3.6
Jan/2010	7	12.7
Feb/2010	8	14.5
Mar/2010	1	1.8
Gender		
Male	35	63.6
Female	20	36.4
Age (years)		
17	5	9.1
18	27	49.1
19	11	20.0
20	8	14.5
21	4	7.3
RAP Status		
Not Eligible	23	41.8
Eligible	28	50.9
Not Reported	4	7.3

Figure 8- Number of Medical Transports per Month Post-RAP

18
16
14
12
8
6
4
2
Aug-09 Sep-09 Oct-09 Nov-09 Dec-09 Jan-10 Feb-10 Mar-10

Month

Responsible Action Protocol Eligible Medical Transports

Descriptive summaries on all RAP-eligible medical transports were generated to determine who was using the protocol. A total 38 cases were deemed "eligible" for coverage under the RAP, 28 of which were for student requiring medical transport and 10 of which were for students requesting medical transport. The number of RAP-eligible cases was examined by month, and again September and October had the highest numbers, at 11 and 9 cases, respectively (See Figure 9). Gender descriptives indicated that 60.5% of RAP cases concerned males, and 92.1% concerned underage individuals (See Table 9). The majority of RAP-eligible cases resulted in some sort of alcohol assessment, while approximately 13% received some form of judicial sanction (See Figure 10).

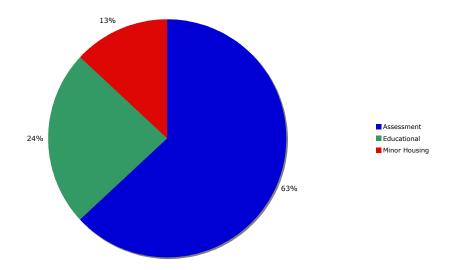
Table 9RAP Eligible Cases

	Number (N)	Percent (%)
Month/Year		
Aug/2009	3	7.9
Sep/2009	11	28.9
Oct/2009	9	23.7
Nov/2009	2	5.3
Dec/2009	2	5.3
Jan/2010	4	10.5
Feb/2010	6	15.8
Mar/2010	1	2.6
Gender		
Male	23	60.5
Female	15	39.5
Age (years)		
17	4	10.5
18	16	42.1
19	7	18.4
20	8	21.0
21	3	7.9
RAP Nature		
Transport Required	28	73.7
Transport Requested	10	26.3

Figure 9- Number of RAP Cases per Month Post-RAP 12 10 8 6 2 0 -Nov-09 Dec-09 Aug-09 Sep-09 Oct-09 Jan-10 Feb-10 Mar-10

Figure 10- Distribution of Primary Sanctions for RAP-Eligible Cases

Month



Qualitative Results

The topic of the focus group discussion stimulated significant conversation among the participants in each of the groups. Students felt comfortable sharing personal stories and opinions, and often did not need prompts from the focus group moderator to maintain the conversation. Participants were vocal about their criticisms and suggestions regarding the current alcohol policies, and healthy debates were held in many of the groups. Across all groups, participants shared similar opinions on the university's alcohol education programming, the current alcohol policies, and the RAP. However, those participants in the "unaware" group were more vocal in expressing their dissatisfaction with the RAP, once they were informed of its provisions, than those in the "aware" and "staff" groups. On the other hand, participants in the "aware" groups offered more criticisms of the alcohol education they received than those in the "unaware" or "staff" groups. With regards to the alcohol consumption patterns on campus, most of the statements describing alcohol consumption as "expected" were mentioned by individuals in the "staff" groups. The results of the final analysis of focus group responses led to the creation of six themes with two to three subthemes each (See Table 10). The quotes included in the following section have been labeled to indicate the group in which they were mentioned (U=unaware, A=aware, S=staff).

Table 10

Qualitative Analysis Th	emes and Subthemes
Theme	Subtheme
Opinions of the University's Alcohol Policies	Participants generally agreed that the
	alcohol education provided by the
	university could be improved
	Participants described the current alcohol
	policies as being ineffective at curbing
	underage alcohol consumption

Awareness of Alcohol Poisoning	Participants correctly identified several symptoms of alcohol poisoning, but expressed hesitation in determining the difference between drunk and sick
	Participants indicated that most students do not think they are likely to get alcohol poisoning
Perceptions of Student Alcohol Consumption	Most participants indicated that heavy alcohol consumption was an accepted part of the college environment Participants in the staff groups indicated that underage students are more irresponsible in their alcohol consumption patterns
Influences on Calling Behavior	Participants indicated that they were not sure when it was necessary to call for medical assistance Participants agreed that the possibility of facing sanctions does impact whether or not they call for medical assistance
Criticisms of RAP	Participants agreed that the RAP was not well publicized, and that the student body does not know much about its contents Participants criticized the language of the RAP, describing it as vague and difficult to understand Participants believed that the university could do more to endorse the protocol
Suggestions Regarding RAP	Participants unanimously agreed that the RAP is a step in the right direction and should be kept, however many suggested it be revised Participants believed that the RAP should allow people to obtain relief from sanctions on multiple occasions Participants recommended that a variety of methods be used to educate students about the RAP

Opinions of the University's Alcohol Policies

Participants generally agreed that the alcohol education provided by the university could be improved. The large majority of participants stated that they did not

feel the alcohol education required by the university was useful or informative. Most stated that the only education they received was an online course, "Alcohol.edu," which was required of all students at the start of the year. Participants were quick to criticize the simplicity of the course ["Everyone breezes through Alcohol.edu"(A); "Alcohol.edu didn't teach you anything"(A)] and its naïve approach to educating students ["The suggestions on Alcohol.edu aren't realistic"(A); "They need to get real to make an impact"(A)]. Participants further elaborated that little was done to educate them about alcohol poisoning specifically ["Alcohol.edu left out trying to identify alcohol poisoning"(A); "I don't think enough is done to inform students of the symptoms of alcohol poisoning"(A); "I don't think Alcohol.Edu spoke to alcohol poisoning" (U)].

Participants described the current alcohol policies as being ineffective at curbing underage alcohol consumption. Many participants indicated that the sanctions in particular did little to prevent students from consuming alcohol. They indicate that students do not view the sanctions seriously or as a likely consequence of their alcohol consumption ["The students are going to keep doing it because OSC doesn't do anything"(S); "Frankly this university is horribly lax with its policy enforcement"(S); "It's only after the first time that the consequences are noticeable or important to students"(A); "Students think they are invincible and think sanctions won't happen to them"(U)]. However, some participants argued that students were fearful of the consequences, and there was some division regarding the severity of the sanctions students received for alcohol violations. Some participants believed the sanctions were too weak ["Housing probation doesn't affect you much"(A); "I think people think the punishment system is a joke"(A)], while others felt the sanctions were severe enough

["When students first go to OSC, it is very intimidating and a long process"(S); "There are unforeseen consequences of write-ups...employers take note of citations"(A)]. Regardless of their view of the sanctions, most participants felt that the campus alcohol policies do not have student safety as a top priority ["They don't care about people's safety, they just care about writing them up"(A); "I feel like the emphasis is not on people's health"(A); "The rules aren't clear to us, and so we're afraid and don't want anyone's help"(A)].

Awareness of Alcohol Poisoning.

Participants correctly identified several symptoms of alcohol poisoning, but expressed hesitation in determining the difference between drunk and sick. When asked to list the causes and symptoms of alcohol poisoning, participants were able to identify many of the primary symptoms ["You're passed out"(A/U); "Shallow breathing"(A/U); "Excessive vomiting"(A/U); "Nonresponsiveness"(A/U)]. However, while they were able to list these symptoms, the majority of participants stated they were common and also exhibited by students whom they did not think had alcohol poisoning. Many participants agreed that students did not know when alcohol poisoning has occurred ["A lot of students aren't aware of alcohol poisoning's symptoms"(A); "I don't know the separation between binge drinking and alcohol poisoning"(U); "People think you won't have alcohol poisoning if you are throwing up"(U); "People just don't know where the line is between alcohol poisoning...and where the person could just sleep it off"(A)].

Participants indicated that most students do not think they are likely to get alcohol poisoning. Participants suggest that much of this perception is due to the fact that the primary symptoms of alcohol poisoning occur so often on campus ["People pass out

so much in college that nobody takes it seriously"(U); "People take alcohol poisoning more lightly than it should be taken because passing out happens all the time and nobody cares enough"(A)]. Participants also suggested that students convince themselves that the odds of them contracting alcohol poisoning are lower than their peers ["They think it's not going to happen to me, it's not going to happen to my friends"(U); "Students have a sense of invulnerability- they haven't seen death face-to-face"(A)].

Perceptions of Student Alcohol Consumption

Most participants indicated that heavy alcohol consumption was an accepted part of the college environment. During the discussions, participants indicated that alcohol consumption on campus was not only accepted, but sometimes expected among the student body. ["A good majority of students drink on campus" (S); "Alcohol use is part of the game'(S)]. Many comments that described alcohol use as being accepted on the university campus came from those in the staff group (Resident Assistants), who suggested that residents viewed alcohol consumption in a positive light ["Handles are displayed prestigiously on the shelves"(S); "I think they are becoming a little bit more bold with drinking actually"(S); "If you don't drink, you're a social outcast in some ways"(S)]. The perception among participants was that students viewed alcohol consumption as part of the "college experience," and felt obligated to participate in it ["A lot of my residents, especially freshmen, say they need their college experience"(S); "College makes you think you have to drink"(S); "It's popular culture that you drink in college"(S)]. Again, while participants in all groups indicated that there was an association between alcohol consumption and the college experience, it was the staff groups that were the most vocal about this perception, and who seemed the most resigned to its presence. Participants in all of the groups went on to elaborate that many students view underage alcohol consumption as worth the risk of judicial consequences ["They...take more precautions to cover their tracks"(A); "What makes alcohol consumption so exciting is the consequences and having to sneak around"(U)].

Participants in the staff groups indicated that underage students are more irresponsible in their alcohol consumption patterns. Resident assistants stated that while alcohol consumption was prevalent in all parts of campus, those that were consuming alcohol illegally tended to be louder and less careful with their behaviors ["Upperclassmen are a little more mature about drinking alcohol"(S); "Don't necessarily see belligerent behavior or excessive consumption in older students"(S); "I think freshmen are more likely to not know what they can handle"(S)]. Resident assistants also felt that any increase in alcohol violations this year was due in part to the increase in the freshman class, as well as recent weather patterns ["The 'snowmaggedon' had a pretty big impact on alcohol consumption"(S)].

Influences on Calling Behavior

Participants indicated that they were not sure when it was necessary to call for medical assistance. A majority of participants stated that students hesitate to call for medical assistance in alcohol-related emergencies because they don't really know if they should. The reason for this confusion stems from students' inability to recognize the symptoms of alcohol poisoning ["Some people might not know the beginning signs of alcohol poisoning, so that might have an effect"(U); "A lot of students don't recognize the signs that separate 'drunk' from 'close to death"(U); "I think some people think they

can handle the situation, but they don't really know"(A)]. As a result, students don't call for help because they do not really recognize the severity of the situation.

Participants agreed that the possibility of facing sanctions does impact whether or not they call for medical assistance. Although they were divided with regards to the severity of the sanctions, participants agree that most individuals do consider the potential for judicial action when evaluating whether to call for assistance or not ["Judicial sanctions are a big factor because that's your whole career in college, it can impact so many things"(A); "Facing judicial sanctions has a huge impact on students' decisions to call"(U); "Residents are always concerned about getting in trouble or paying for something"(S)]. However, all participants agreed that there were other factors that might cause a student to hesitate in calling for help, beyond university action ["Fear of what parents would do"(U); "People who have heard of RAP still won't call because they are afraid of hospital costs"(A); "Backlash from your friend"(A)]. Other participants suggest that if multiple people are present, additional factors may be considered ["There's probably incriminating evidence around them"(A); "If someone is really adamant about saying don't call, then people won't call"(U)].

Participants in the aware/unaware student groups indicated that the RA could act as a valuable resource in determining whether or not to call for medical assistance.

Participants in these groups cited that they would feel more comfortable calling an RA first in a medical emergency, particularly if they knew they would not face university charges as a result ["I would tell the RA if my friend came back sick"(U); "I know the RA had training in figuring out stuff like that"(U);]. Participants in the aware and unaware student groups were under the impression that the RAs had more knowledge

regarding alcohol poisoning, and could decide who needs to go to the hospital. However, participants in the staff (Resident Assistant) groups express concern regarding the liability of making such decisions. They argue that they are ill-prepared for making decisions like that, and do not want that responsibility. ["Having an RA make that decision puts a lot of liability on the RA, and we're not trained for that"(S); "It's a hard position for RAs because you don't want to not call, but you don't want to waste other people's time"(S)].

Criticisms of the Responsible Action Protocol

Participants agreed that the RAP was not well publicized, and that the student body does not know much about its contents. The majority of participants in the aware and staff groups, as well as several in the unaware group, recall that some attempt was made to inform students of the protocol at the start of the year. However, most agreed that the student body did not know even the general idea of the protocol, let alone its finer details ["I think a lot of people don't know about it"(A); "We all know what it is, but don't know what is in it"(A); "I think the policy needs to be more publicized... I didn't know any of the details in it"(A)]. Among participants in the staff group in particular, there was significant doubt regarding the general student body's awareness of the protocol ["Pretty much the only time my residents heard about it was at the first floor meeting, and then they forgot about it"(S); "In (a resident hall), we've had a ridiculous increase in the number of transports this year, and I don't think we've had one student use it yet"(S)]. Participants in the staff group also expressed concern with the materials used to inform students of the RAP ["Within the first 6 weeks of school, we got a printout about promoting RAP that we were supposed to distribute, and that was it"(S); "I

remember there were little cards...but they still brushed over a lot of the details"(S); "Nobody reads e-mails"(A)]. Participants in the staff group expressed further concern that they themselves were not well-trained in the contents of the RAP, and thought that their training could have been a lot stronger ["There's nothing we really got trained in for RAP"(S); "When we say it was an hour, it was more like 15 minutes of them explaining it to us"(S); "Understanding the entire policy itself, that was brushed over"(S); "Training was not really about 'what is it,' but more 'how can we promote it"(S)].

Participants criticized the language of the RAP, describing it as vague and difficult to understand. Participants in the aware and unaware student groups expressed concern that the wording of the protocol left them confused and unsure of what the protocol actually covered ["I think it is unclear because it is so individualistic"(A); "I think that we're all unsure about the wording right in front of us says something" (A); "Anyone should be able to read the RAP and understand it, but this isn't understandable"(A)]. Participants in all three groups also thought that the wording of the protocol allowed for several loopholes in coverage, and doesn't guarantee relief from sanctions ["I feel like it doesn't explicitly say you're not going to get in trouble, it just says it will take into consideration the situation"(S); "When I read the RAP, it sounded like a list of rules and loopholes where they could get you in trouble anyways"(A); "The way the policy is written, they may experience some leniency but it leaves it open to loopholes"(S); "The protocol is strictly procedural"(S)]. Participants in all three groups further elaborated that they felt the language in the RAP made it difficult for students to trust, and therefore use it. Participants indicated that the language made students believe coverage was not guaranteed and created doubt about its power ["I think the RAP is a

great idea, but I still don't fully understand it and I don't fully trust it"(A); "RAP is not an actual policy, it's kind of a pinky promise"(U); "By saying it is not an actual rule or policy, it takes away from it's substance"(A); "...that's what they are finicky about- they aren't sure if they won't get in trouble or it they will"(S)]. However, even with these concerns, most students in the staff groups agreed that the RAP's vague language may be due to the fact that it is in its first year, and needed to be tested.

Participants believed that the university could do more to endorse the protocol. The majority of students in all three group types indicated that there was a feeling of reluctance associated with the university's implementation of the protocol, which detracted from its effect ["The policy was sort of forced upon OSC by the Senate, and that plays a big role"(S); "If they want to make a policy like this, it needs to be something real"(U); "They might not want to enforce the policy too much, because then they won't get the case"(S); "It only hurts the university if they try to take on something that has this much impact with a lackluster attitude towards developing it"(S)]. Participants in the staff group further elaborated that there was a sense of uncertainty among the professional staff members who are in charge of the protocol ["They are unsure of what's happening"(S)].

Suggestions Regarding the Responsible Action Protocol

Participants unanimously agreed that the RAP is a step in the right direction and should be kept, however many suggested it be revised. All participants felt that the concept the protocol put forth was worth keeping, but the majority felt its content should be altered if the university wanted it to be successful. Among aware and unaware students in particular, the most common suggestion for modifying the protocol was

increasing the clarity of the language, so that students could understand and trust it ["Keep it simple"(S); "I think making the protocol clear for students is important"(S); "If the policy was clear, I feel like people would be more likely to call"(A); "I know for legal purposes certain language is needed, but we also need a 'human version''(S)]. Participants in the aware and unaware student groups also suggested allowing other people and situations to be covered by the protocol ["It should cover the person who called, the person who is called for, and surrounding friends who are there"(A); "I feel like it shouldn't matter what the procedure is- if something is wrong, it shouldn't matter who finds you"(A)]. Participants also felt that the process set forth by the protocol should be clear and straightforward, so that students are not surprised by the results of a medical transport ["If the rules are really structured, people are going to trust them more"(S); "It should be turned into a policy, not a protocol"(S); "The policy should be up front, it shouldn't have small hidden deals about the classes you have to take"(A)]. Participants in the staff group were particularly vocal about their belief that the main concern of the RAP should be student health and safety ["Above all, the point of he RAP is to keep students safe"(S); "RAP is about getting students to understand 'you're sick, you need help, call someone"(S); "I think the main point should be 'RAP- Just Call.' This protocol should not be the make or break point"(S)].

Participants believed that the RAP should allow people to obtain relief from sanctions on multiple occasions. Participants in the aware and unaware groups were concerned that the RAP evaluated students on a case-by-case basis after their first incident ["It shouldn't be a one-and-done kind of thing"(S); "What if the student doesn't call the second time and dies because he is scared?"(S)]. Some participants in the aware

and unaware groups did recognize the potential for abuse of the protocol, and indicated that "repeat offenders" should be addressed differently ["Maybe repeat offenders under RAP should have to take a class, but not the first time"(U)]. Participants in the staff groups expressed greater concern over the potential for abuse, and engaged in a debate as to whether it was a real issue ["I think ResLife is scared there will be all these people abusing it, but who drinks to go to the hospital"(S); "If people rely on this to a point, then it is time for somebody to step in"(S); "If you're not learning after so many times, I agree you should be kicked out"(S); "Is abuse even the right word? It's using it"(S)]. Overall, the consensus among the groups was that students should receive relief from sanctions more than once, but there was some division as to how to address those individuals who sought repeated coverage under the protocol.

Participants recommended that a variety of methods be used to educate students about the RAP. In all three group types, participants suggested that the university make sure that all students are made aware of the RAP, by using strategies beyond those practiced this year. Many participants listed in-class or in-person options that would allow for more in-depth discussions of the protocol ["UNIV100"(A/U/S); "Put something in our freshman seminar;"(U); "HONR100"(A/U); "Orientation is another way of putting it out there"(S)]. Others indicated that print methods could be valuable if placed in the appropriate locations ["Signs up in the dorms to remind you of the signs (of alcohol poisoning), maybe in the bathroom"(U); "Put something in the Diamondback"(A); "Flyers"(A/U)]. Other suggestions included the used of electronic methods ["E-mails"(A); "Put something on your ELMS homepage"(A)]. Among those in the staff groups, there was general agreement that an important method is the use of

resident assistants in delivering information to residents ["I agree that having RAs know what it is should be step one"(S); "More emphasis in the hall meetings"(S)].

Chapter V: Discussion

Summary of Central Findings

Implications of Findings

Limitations

Directions for Future Research and Intervention

Conclusions

Summary of Central Findings

The results of the analysis were used to address the research questions posed in the introduction.

1) Was the RAP effective at increasing the number of calls made by underage students to obtain medical attention in alcohol-related medical emergencies? Was this increase independent of any increase in alcohol consumption?

The descriptive summaries and chi square analyses can be utilized to determine whether or not the RAP had an impact on students' calling behaviors. Simple descriptive summaries indicate that the number of calls for medical assistance increased dramatically in the semester following the enactment of the protocol. Prior to the protocol, the number of calls for medical assistance per semester was at a maximum of 21 calls. However, in the first semester after the RAP, that amount was nearly doubled, to 40 calls in one semester. Analyses of the total number of medical transports indicate that 44.23% of all calls were made in the first six semesters, while the remaining 59.25% were made in onethird that amount of time after the RAP was enacted. Thus, looking solely at this descriptive data, it does appear that the number of calls did increase in the Fall 2009 semester, which may be due in part to the enactment of the RAP. Furthermore, the chisquare analyses which compared the distribution of calls to a uniform distribution demonstrated that while the number of calls remained consistent in the six semesters preceding the RAP, the addition of the two post-RAP semesters introduced a significant amount of fluctuation in calls. Thus, something did occur between the pre and post-RAP semesters to increase student calls for assistance in alcohol-related medical emergencies.

Additional descriptive summaries of student RAP use rates demonstrated trends that could be expected from the general alcohol incident data. The large majority of RAP incidents, 92.1%, involved underage individuals, a number which is reflective of the number of underage students who were documented for alcohol violations, 96.5%. Furthermore, the majority of cases in which the RAP was implemented involved male students, which reflected the higher proportion of alcohol violations conducted by males. These findings indicate that the RAP has had a uniform effect across the population typically documented for alcohol violations.

Determining whether the effect of the RAP on student calling was independent of an increase in student alcohol violations is more difficult to determine, given the nature of the data. The gradual increase in alcohol incidents overtime suggests that any increase in alcohol violations experienced during the RAP may not be anything beyond what is expected. Thus, while the number of alcohol violations did increase in the semester following the RAP, the fact that this increase was also accompanied by an unprecedented jump in calls for medical transport suggests that the increase in calls was not simply due to an increase in alcohol violations. However, the two are inevitably related, as those individuals who do call under the RAP are documented as "alcohol violations," and may not have called had the RAP not been put in place.

2) Among those residents who were aware of the RAP, how did they learn about the protocol? What is their knowledge of its provisions? What, if any, misconceptions do resident students have regarding its provisions?

Of the students that participated in the investigation's focus groups, 19 were classified as "aware" students, who had some knowledge of the protocol's provisions. An

additional 18 students were classified as "staff," and were employed by the Department of Resident Life as Resident Assistants. Among these two groups of participants, two methods were repeatedly mentioned as having been used to educate the general student body of the RAP. Both groups indicated that students were introduced to the RAP in their first hall meetings with their RAs, however, the consensus was that this introduction was fairly limited and easily forgettable. The second method mentioned was the use of flyers and posters, although several students in the aware student group indicated they had never seen posters advertising the protocol. Thus, while these two methods were repeatedly mentioned by both groups, it does not appear as though they were successfully carried out, nor effective. Participants in the staff group were informed of the RAP in a third manner, through an hour-long training session at the start of the year. Unfortunately, participants consistently criticized the way in which the training was delivered, and indicated that they did not learn about the protocol in great detail. Thus, this method also seemed ineffective at educating the student body with regards to the protocol's content.

With regards to their knowledge of the protocol, many aware students recognized some of the limitations to the protocol's coverage, although they were often critical. Participants did correctly identify which individuals were covered by the RAP (the caller and the person in need of medical assistance), and the way in which RAs might negate the potential for relief from sanctions. Participants also demonstrated knowledge of the protocol's restrictions on which violations were covered by the protocol, consistently stating that only minor alcohol violations were covered. However, there was significant confusion regarding the provision of relief from sanctions for individuals who had already been covered once before under the RAP. Both aware and unaware students, even

when presented with the text of the protocol, expressed uncertainty about the likelihood of "repeat offenders" being covered. Some aware students did demonstrate a greater understanding of the protocol, citing that such situations would be examined on a case-by-case basis, however their opinion of this provision was more negative. Students demonstrated several misconceptions of the protocol's contents, with the majority stating that the RAP was unclear and difficult to understand. Thus, while students demonstrated some knowledge of the RAP's provisions, they were still unsure about what specifically was covered and when.

3) What, if any, impact would the RAP have on resident students' decision to call for medical assistance in alcohol-related emergencies? What other factors contribute to resident students' calling behaviors?

When asked about the potential for judicial sanctions to impact students' calling behaviors, the majority of participants indicated that they play a significant role in the decision process. Participants in all groups indicated that students do not want to face sanctions for their peer's irresponsible behavior, and therefore might avoid calling for medical assistance. However, there was an interesting contradiction in participant opinion regarding the role of judicial sanctions. While participants stated the judicial sanctions factored into the decision making process during an alcohol-related emergency, a sizable portion of participant comments indicated that students did not take the sanctions seriously. Furthermore, several of those participants who were already aware or learned about the education/assessment "sanctions" associated with a RAP referral suggested that these mandated interventions would only prevent student use of the protocol. Thus, while participants' suggestion that judicial sanctions impact student calling behavior lends

strong support to the notion that the RAP would have a positive influence on such behavior, their contradictory attitude towards these sanctions and the post RAP-referral interventions imply that this effect may not be as great as desired.

Participants were also quick to list and describe other factors that might contribute to resident students' decision to call for medical assistance. Participants cited fear of their parents' reaction if they were to go to the hospital, while others were concerned that a decision to call for help for their peer might generate a negative reaction. Another reason participants thought students might be hesitant to call was the presence of others who might be upset by the potential interruption. Others cited the potential for high hospital costs and police action from outside the university. However, the most significant barrier cited by participants was students' lack of knowledge of the signs and severity of alcohol poisoning. Participants consistently stated that the prevalence of vomiting and passing out following alcohol consumption was so high, that students did not view it as dangerous and were unsure when it constituted medical attention. Without proper education or input from more experienced individuals, students were more likely to ignore their sick peers, or attempt to care for them themselves. Thus, even with the RAP in place, it appears that alcohol poisoning awareness will continue to serve as a significant barrier to calling until it is addressed.

4) What training did Resident Life student staff members receive regarding the RAP?

How did Resident Life student staff members explain and implement the protocol?

From their perspective, or that of the resident students for whom they are responsible, do Resident Life student staff members perceive any barriers to implementing the protocol?

Participants in the staff focus groups were quick to criticize the training they had received on the RAP and its implementation. Most resident assistants stated that they received a one-hour training session on the protocol during their two-week long summer training at the start of the academic year. They described this session as an overview of the protocol, and complained that they were not taught the details of its provisions. One student went so far as to say the session only included a 15-minute explanation of the protocol and 20-minute question and answer portion. The majority of staff members also indicated that the questions they asked about the protocol were typically met with vague responses, and even confusion by the presenters. They stated that they were essentially told the RAP was like any other policy and its implementation depended on the situation at hand. As a result, it appears that the only training resident assistants received was a one-hour session during the summer, which most felt was inadequate and easily forgotten. One staff member even stated that they had completely forgotten about the protocol itself until advertisements for this investigation went out. Many staff members felt that this lack of training made it difficult for them to explain the protocol to their residents during their first floor meetings.

Resident Assistants did view some significant barriers to implementing the protocol during an alcohol-related medical emergency. The most commonly cited one was residents' lack of trust of their RAs, whom they viewed as being only there to get students in trouble. Staff members stated that this lack of trust made it difficult for them in their attempts to encourage students to call in medical emergencies, even when they emphasized its protective nature. This lack of trust also extended to the policy itself, which RAs suggested stemmed from both the lack of clarity in the protocol and their own

inability to explain the details of the RAP to students. Additional barriers cited by staff members matched those factors mentioned by students as a whole when describing what influenced them to call, or avoid calling, in a medical emergency. Hospital costs was mentioned several times by staff members as a barrier to the protocol, and one RA even cited specific post-RAP instances when students chose not to call for that reason. Staff members also described general student awareness of the protocol as a potential barrier, and argued that because students do not know it exists, they do not believe their RAs when they are told calling for help will not result in university sanctions.

5) What suggestions do residents have for altering the RAP? What suggestions do Resident Life student staff members have for altering the RAP?

The majority of most of the discussions centered around student complaints regarding the RAP, and what suggestions they had for improving it. With regards to general implementation, most students, resident and staff members alike, felt that the university did not appear to fully endorse the protocol, and made only the minimal effort to raise student awareness. They felt that the university was unsure of what direction to take the protocol in, and left it vague and open to interpretation as a result. The majority of students stated that this approach would not suffice in the future, and that attempts should be made to create a structured policy that the university approaches with a serious commitment. Participants in both the "aware" and "unaware" student groups indicated that one necessary step to achieving this change would be the implementation of a policy, and not a protocol, so that the university was bound to provide relief from sanctions. By implementing the RAP as a policy, students believed the university would gain more trust

from students, who would be able to know for certain that they would not face university judicial sanctions in alcohol-related medical emergencies.

Residents and student staff members also felt that the language of the RAP should be altered to make it "clear" and "simple" to students. The stated that the language sounded like "legalese," and even took on a negative tone. It was suggested that the language of the RAP be translated into a version that made it easier for students to understand its provisions. Some residents took issue with what they believed was the "fine print" in the protocol, which stated that students would be required to enroll in an alcohol course or intervention before they could obtain relief from judicial sanctions. They suggested that the RAP be more honest and clear about what, if anything, students are expected to do in order to receive such relief.

Participants in the all three group types also had suggestions for the specific provisions of the protocol. Among "aware" and "unaware" students was a belief that the RAP should not only cover the individual who was sick and the individual who called for medical assistance, but also any surrounding individuals. Their justification for this modification was two-fold. First, students cited that when an individual gets alcohol poisoning, there are often multiple people involved in his/her care. Second, students stated that in many instances, there are other people around that may not have been directly involved with the individual's alcohol consumption, yet the fact that they were present at the time, and thus may face charges, might prevent students from obtaining medical assistance. Among the "aware" and "staff" groups, there was the suggestion that the RAP provide relief from sanctions for those students for whom assistance was called by an RA. Participants in both groups felt that the RAP was too procedural, and by

limiting coverage only to those students who initiate the request for medical assistance, it creates further distrust of the RA. Resident assistants were particularly vocal about this concern, stating that the point of the RAP is to ensure student safety, and that its main goal should be to encourage students to call for help, regardless of the consequences.

One provision that instigated debate among all participants was that which addressed the coverage of students who had already been covered by the RAP at least once before. Although participants in the "aware" and "unaware" student groups were unified in their belief that such "repeat offenders" should be covered every time, participants in the "staff" group were a little more cautious about recommending such a change. The debate in these groups centered around the potential for abuse of the RAP by students who might call for medical assistance in an effort to avoid sanctions. Most agreed that the protocol should provide relief from sanctions multiple times, and while some indicated that when a problem of abuse becomes evident, professional staff should use an alternative method for addressing the situation. Thus, there was some division between the groups with regards to how to best handle "repeat offenders." While "aware" and "unaware" students believed that such individuals should always be covered, resident assistants thought that repeated use of the protocol should be addressed, though not necessarily punished.

Implication of Findings

The findings of this research investigation have significant implications for not only the Responsible Action Protocol, but also for the university's general alcohol policies and education procedures. With regards to the RAP, these findings indicate that both its contents and the way it was implemented will need to be altered in order to obtain stronger endorsements by the student body. These findings indicate that more

effort should be made to educate both students and resident assistants about the RAP's existence and content. The use of flyers and RA descriptions at the beginning of the year do not seem to have reached a large majority of students. In addition, the decline in calls between the Fall 2009 and Spring 2010 semesters may in part be due to students' distrust or lack of awareness of the protocol, which suggests that efforts to publicize the RAP should be carried out throughout the year. Interestingly, in recent weeks the student-run newspaper, *The Diamondback*, has included multiple articles discussing the RAP. While the majority of the content in these articles presents an accurate description of the protocol, each article refers to it as the "Good Samaritan Protocol," before presenting the real name. While this titling may be an attempt to catch student interest, it may only add to the confusion experienced by students already. Regardless, greater efforts should be made by university professional staff to remind students about the protocol's existence, to encourage them to call for medical assistance throughout the entire academic year. Furthermore, because of the significant reliance on RAs to encourage student use of the protocol, their training on the protocol's provisions should go into greater detail with regards to what can and cannot be covered. Participants in the staff group felt that this protocol was more important than some other components of their training, and would rather spend more discussing the protocol in detail.

The content of the protocol may also need to be reevaluated based on the aforementioned findings. The language of the protocol left many students confused and upset, and participants suggested that a simpler version be made available to students.

The mention of "loopholes" in all three group types also indicates that students do not necessarily trust the protocol to cover them in every situation. These findings suggest that

unless the phrasing of the protocol is made simpler and more specific regarding the behaviors it covers, its impact on students' decisions to call will be limited. Participants were also vocal with their belief that students should be covered by the RAP on multiple occasions. While some did acknowledge that such a provision might lead to abuse, they contended that as long as students are calling for help when it is required, it cannot be abused. Without some form of a guarantee that students will receive coverage under the RAP on multiple occasions, the protocol leaves open the possibility that a student might not call for medical assistance for fear of receiving judicial sanctions. Lastly, the very nature of the RAP as a "protocol" and not "policy" may be impacted by these findings. The majority of students in all groups suggested that the uncertainty of coverage leads to distrust among individuals who may be in need of medical assistance. Thus, those in charge of implementing the RAP may need to alter it, so that it is universal and guarantees relief from sanctions, if only in certain situations.

Even with the implementation of the Responsible Action Protocol, the findings of this investigation have serious implications for the university's general alcohol policy and education. While the RAP attempts to remove the barrier to calling that is presented by judicial sanctions, the responses by participants in this investigation indicate a potentially larger barrier- students' lack of alcohol poisoning awareness and knowledge. The fact that the majority of participants were uncertain what level of post-alcohol consumption illness constituted alcohol poisoning was alarming, particularly when many said this uncertainty would likely prevent them from calling. In all groups, participants indicated that many of the signs of alcohol poisoning, such as vomiting or unconsciousness, occurred so frequently on the campus, that they would often ignore them. These findings

have serious implications for the alcohol education students receive upon entering the university, which many participants described as ineffective and irrelevant. Thus, without an alcohol education process that better informs students of the nature of alcohol poisoning, it is likely that its symptoms will continue to go ignored. Furthermore, because participants felt the alcohol education provided was not realistic or relevant to the college environment, it is possible that it does not have the desired effect of promoting responsible drinking behaviors. Lastly, the university's general alcohol policies were also discussed among participants, whose opinions indicated that the lax enforcement by university officials has weakened the potential effect of the RAP among students, who may not view the alcohol-related sanctions they receive seriously.

Theoretical Implications

The findings of this investigation have numerous implications regarding the theoretical model in which the RAP has its foundation. The protocol, with its basis in Harm Reduction Theory and the Health Belief Model, and relies on heavily on addressing students' perceptions of alcohol poisoning and the consequences of calling for medical assistance. As previously mentioned, the RAP attempts to reduce students' perception of the risk of facing judicial sanctions in an alcohol-related medical emergency, in an effort to encourage more students to call for assistance. However, the findings of this investigation suggest that while the risk of facing judicial sanctions can impact students' calling behavior, it is not the only factor they consider, and sometimes not as important as other concerns. Thus, the attempted application of harm reduction theory may not be as successful as expected, as students do not necessarily view judicial sanctions as severe or likely. The findings further suggest that harm reduction theory may be better applied by

the application of a stricter general alcohol policy or by addressing other those factors mentioned by students in the focus groups.

With regards to the Health Belief Model, the findings of this investigation have strong implications for the concepts of perceived susceptibility and severity, perceived benefits and barriers, and cues to action. The results of the qualitative analysis suggest that students do not feel they are particularly susceptible to alcohol poisoning, nor do they believe that the symptoms are severe enough to warrant medical attention. Thus, the RAP's effect on student calling behaviors may be limited because of its dependence on students' perceptions of the likelihood and severity of alcohol poisoning. These findings also suggest that alcohol education programming does not emphasize the symptoms and gravity of alcohol poisoning, as indicated by students' focus group discussions. In terms of the perceived benefits and barriers to calling for medical assistance, students indicated that they believed there were more barriers, mainly in the form of negative consequences, than there were benefits. While students recognized that the benefit to calling for medical assistance included the potential to save their peers' lives, they felt that the student body's lack of knowledge of alcohol poisoning presented a major barrier. Furthermore, the results indicated that the potential for high hospital costs and negative reactions from others could prevent students from calling for help. Lastly, the investigation's results are relevant with regards to the HBM construct of cues to action. The RAP was combined with an educational campaign designed to raise student awareness of alcohol poisoning, which would serve as a cue to call for medical assistance. However, students repeatedly mentioned that they were not certain about when to call for medical assistance, and thus no clear cue to action arose as a result of the protocol and educational campaign.

Limitations

There are several limitations to this study that should be considered in conjunction with its results. The study sample of focus group participants was only a small subsection of the University of Maryland resident student population- 53 out of a possible 10,918. Furthermore, the sample was a self-selected one, with participants volunteering by responding to e-mail and flyer-based advertisements. As a result, it is possible that the individuals who participated in the focus group discussions were not representative of the general student body, and may have been more vested in the protocol than their peers. Although racially/ethnically diverse, the sample was comprised of more females than males, and the majority of male participants were from the staff groups. With regards to age, the sample did provided a diverse range, from 18 years to 22, although again the majority of of-age students (21 or older) were from the staff group. Thus, while the number of of-age resident students is significantly smaller than that of underage, it is difficult to determine if the opinions presented were representative of the of-age and nonstaff, resident population. Furthermore, the division of resident students into "aware" and "unaware" groups was not necessarily uniform, and relied on the primary researcher's judgment to determine who should be in which group. Thus, there were different levels of "awareness" within each group type, and in some cases "unaware" students had familiarized themselves with the protocol prior to their participation. Lastly, though the reasons for not utilizing fraternity/sorority residents were explained earlier, the fact remains that these groups are typically associated with heavy alcohol consumption, and may have had different opinions of the protocol from their "on-campus" resident peers.

With regards to the data collected and analyzed in this investigation, some limitations do exists. The judicial data set obtained from the Department of Resident Life was not complete, with several incidents from January 2009 missing critical data descriptors (i.e.- student age, gender, etc). Furthermore, the data provided by Resident Life included multiple sanctions and charges for each violation, and the primary researcher was forced to determine which was the "primary" sanction/violation for each. The quantitative data also did not run through the entire month of March 2010, and only included those incidents for which sanctions had already been issued (through March 13, 2010). Thus, while the preceding seven semesters were provided in their entirety, the final semester was missing over two months worth of incidents, which may have skewed the findings. Also important to note is the potential for external variables to impact the results- an examination of the Spring 2010 semester data indicates that there was a spike in alcohol consumption that occurred in February 2010, during the week a major snowstorm caused the campus to cancel classes. Furthermore, it is possible that the number of medical transports requested may be higher than what is included in the Resident Life data, as students may have called for help using their cell phones or from on-campus locations outside of the residence halls. Thus, not all calls for medical assistance may have been documented, or even noticed, by the Department of Resident Life. The quantitative survey data collected may also be limited, as it relied on participants' own accounts of personal and peer alcohol consumption, and may have been subject to self-report bias. Lastly, regarding to the qualitative data, focus group comments were only coded by one individual at several different periods in time. Thus, it is possible

that a single coder may have introduced personal biases in the coding process, and interpreted student comments a certain way.

The timing of the investigation also presents certain limitations. Because the investigation occurred after both the February 2010 snowstorm and spring break, participant opinions and perceptions of alcohol consumption may have been altered from these experiences. Furthermore, one of the focus groups overlapped with an open forum on the topic of the protocol, which may have led to a smaller group of interested participants on that evening. The fact that the groups were held so late in the year also presents both strengths and limitations. While discussions so much later after the initial enactment of the RAP allows for a greater sense of participant experience, it also meant that more students forgot about the protocol's existence and could not recall their initial reactions to its passage. The timing of this investigation with relation to the RAP's enactment is also important, as it may not be possible to determine the protocol's effects after only one year. Furthermore, because the investigation was only organized after the RAP was enacted makes it difficult to determine students' knowledge and perceptions of similar policies and on-campus alcohol consumption before such a protocol was in place. Lastly, this investigation may be limited by the increase in the size of the freshman class, which may have contributed to the increase in alcohol violations and medical transports, independent of the RAP's possible effects.

Directions for Future Research and Intervention

The results of this investigation lend themselves to several suggestions for future research and intervention. The findings indicate that more research is needed to determine the prolonged effect of the RAP. Because the protocol is only in its first year, it

is difficult to determine what sort of impact it will have on calling as more time passes and new classes enroll. Enough judicial data should be collected after the implementation of the RAP to match the data available from pre-RAP years, to determine the long-term effect. Focus groups similar to the ones used in this investigation should be conducted to determine what suggestions students have for improvement, and whether there are any consistent recommendations across the years. Based on the participant responses, it may even be necessary to implement the RAP as a policy in the next year, to determine if the guarantee of coverage significantly impacts student opinion and use of the RAP. Although perhaps not possible in the next few years, it is also important that those responsible for implementing the RAP consider issuing different "consequences" for those who are covered, to address student concerns that they still receive some level of sanction after they call.

Future implementation of the RAP should also be accompanied by better campaigns that advertise its existence, so that more students are aware of its presence. Posters and flyers that describe the RAP should be provided to all residents, as well as placed in prominent locations throughout the residence halls. Greater in-person education regarding the RAP and its provisions should also be executed, such as a discussion of the protocol in UNIV100 (or similar) classes, or a detailed presentation during orientation. The use of RAs as key sources of information about the RAP should be maintained, however their training in its provisions should be strengthened in order for them to describe it to students in a detailed and trustworthy manner. Lastly, because participants described that they might fear their parents' reactions to an alcohol-related medical

emergency, it may be valuable for those that are responsible for the RAP to reach out to parents and determine what concerns or reactions they might have.

Regardless of the proposals above, the most crucial future intervention should be the development of a stronger alcohol education program. The majority of participants indicated that they did not feel they learned anything from Alcohol.Edu, and described its shortcomings in the areas of safe alcohol consumption and alcohol poisoning. Most participants agreed that an in-person class, perhaps during UNIV100, might be more valuable. Thus, a future investigation should consider implementing an alcohol-education lesson within some sections of the UNIV100 curriculum, to determine if the students that receive it are more responsible with their alcohol consumption, as well as more aware of alcohol poisoning. This lesson should include a more "realistic" approach to discussing student alcohol consumption, and include demonstrations and interactive components that educate students about safe drinking and alcohol poisoning.

Conclusions

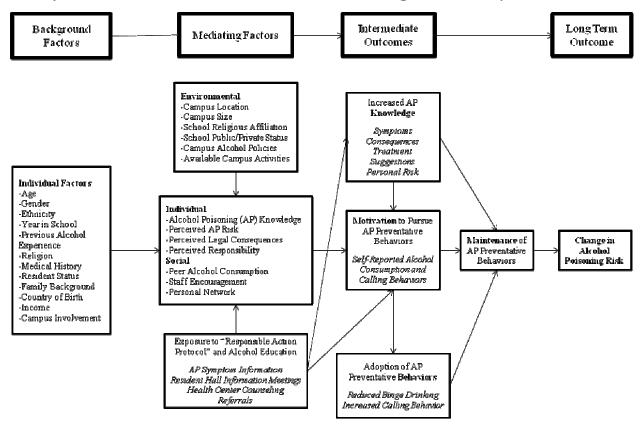
Overall, this investigation has shown that the Responsible Action Protocol, although a source of controversy, is a step in the right direction. Most participants in the focus groups stated that they believed its intentions were good, and that it is better than the alternative of having no such policy in place. However, its unclear language and variable application has left many students discontented and requesting that it be altered to guarantee coverage for more students. As a new protocol, the RAP does appear to have had some sort of impact on student calling behaviors, as evidence by the dramatic increase in calls for medical assistance between the Spring 2009 and Fall 2009 semesters. The reactions to those who have been covered under the RAP has been mixed, with some

indicating that they felt tricked into completing the requisite alcohol intervention, and others simply glad they did not receive sanctions for obtaining medical attention. While this investigation does capture the initial student reaction to and use of the RAP, more time is needed to determine the long-term impact of the protocol, and what adjustments will be needed. However, if this investigation is any indication, adjustments to the language and provisions of the protocol will be necessary to increase student trust and encourage them to call for medical assistance. Lastly, this investigation happened across an unexpected issue with the university's alcohol education- its lack of relevance to the student population. Thus, while discovered inadvertently, this shortcoming is perhaps the most crucial and easily remedied one presented in this investigation. Without addressing students' knowledge and perceptions of alcohol poisoning, it will be difficult for the university to encourage them to call for assistance in medical emergencies, whether or not the RAP is maintained.

Appendix A

Conceptual Framework

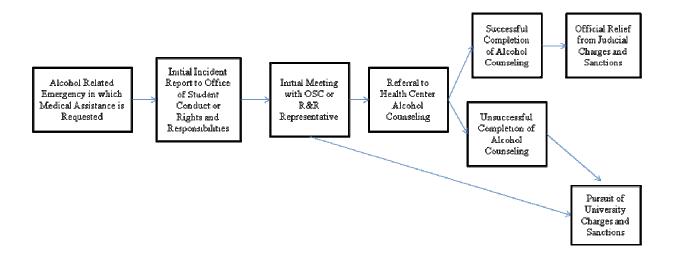
Responsible Action Protocol and Alcohol-Related Emergencies: Conceptual Framework



Appendix B

Responsible Action Protocol Procedures

Promoting Responsible Action in Medical Emergencies Protocol: Procedural Outline



Appendix C

Focus Group Flyer for "Aware" and "Unaware" Resident Students

Volunteers Needed!



Is our "Good Samaritan" policy working?



We need your help to find out if the university **§** alcohol control policies are working.

Students living on campus are invited to take part in a focus group to discuss their thoughts on the university alcohol control policies.

Available dates:

Tuesday, March 23, 5:30pm – 7:00pm Thursday, March 25, 5:30pm – 7:00pm Thursday, April 1, 5:30pm – 7:00pm Tuesday, April 6, 5:30pm – 7:00pm

Refreshments will be provided.

All participants will receive a \$25 gift card.

To sign up for a focus group, contact Ranwa Hammamy.

Ranwa Hammamy rhammamy@und.edu Ranwa Hammamy rhammamy@und.edu	a a
Ranwa Hammamy rhammamy@umd .edu	! _
Ranwa Hammamy rhammamy@umd.edu	ļ <u>_</u>
Ranwa Hammamy rhammamy@umd .edu	<u> </u>
Ranwa Hammamy rhammamy@umd .edu	
Ranwa Hammamy rhammamy@umd .edu	٦.
Ranwa Hammamy rhammamy@umd .edu	3.
Ranwa Hammamy rhammamy@umd .edu	
Ranwa Hammamy rhammamy@umd .edu	٦.
Ranwa Hammamy rhammamy@umd .edu	_

Appendix D

Focus Group Flyer for Resident Assistants

Volunteers Needed!



Is our "Good Samaritan" policy working?

We need your help to find out if the university **@ \Responsible Action Protocol O** is working.

Resident Assistants are invited to take part in a focus group to discuss their thoughts on the Responsible Action Protocol.

Available dates:

Tuesday, March 30, 5:30pm – 7:00pm Thursday, April 8, 5:30pm – 7:00pm

Refreshments will be provided.

All participants will receive a \$25 gift card.

To sign up for a focus group, contact Ranwa Hammamy.

rhammamy@umd.edu

Appendix E

Resident Student Demographic Survey

Resident Student Questionnaire

Please answer the following questions honestly and to the best of your ability. The information you provide will not be used for any purpose beyond this investigation. All of your responses will remain anonymous, however you may choose skip questions if you are uncomfortable answering. When you have completed the questionnaire please turn it over so that the blank side of the sheet is facing the ceiling. Thank you.

1.	Age in years:					
2.	Gender (circl	e one):	Female / Male			
3.	Race Ethnicit	ty (check all that app	White/Caucasian Black/African Ameri Asian Hispanic/Latino International Other	can		
4.	Major/Depar	tment(s) of Study:				
5.	Year in schoo	ol (circle one):	1st / 2nd / 3rd / 4th o	or beyond		
			information about your on-campus co vide will remain confidential and anon			
6.	In the past two weeks, how many days did you consume five or more alcoholic beverage on a single occasion? An alcoholic beverage is defined as 12-ounces of beer, 5-ounces wine, or 1 ounce of hard liquor. (Check one)					
	_ 0 days	1-2 days	3-4 days5 or mo	re days		
7.	In the past 6 months, approximately how many days per week did you consume five more alcoholic beverages on a single occasion? (Check one)					
	_0 days	1 day	2 days3 days			
8.			s (younger than 21 years) who live on car amed alcoholic beverages in the past two			
	_None/few	Under half	HalfOver half	_Most/all		

Appendix F

Focus Group Moderator Guide for "Aware" Resident Students <u>Focus Group Moderator Guide</u>

Resident Student Focus Groups

I. Introduction Estimated Time: 10 minutes

- Good evening and welcome. I would like to take this opportunity to thank you very much for volunteering to join our discussion about the University of Maryland's Responsible Action Protocol. My name is Ranwa Hammamy, and I am a second-year Master's student with the Department of Public and Community Health. I will be moderating and my assistant will be taking notes on tonight's discussion.
- We are here today to discuss the impact of the University's recently enacted "Promoting Responsible Action in Medical Emergencies" Protocol, which is often referred to as the R.A.P. Another term that was used to describe the R.A.P. in the past was the "Good Samaritan" policy; you may use both terms interchangeably.
- Your opinions and experiences as they relate to the alcohol poisoning and the R.A.P. are
 essential to understanding the effect of the protocol. The information you provide will be
 helpful in determining whether or not the R.A.P. was successful in its intentions, and if it
 should be continued in future years. I am here to listen to your thoughts and opinions, and
 invite you to be honest and candid in your responses.
- Please know that I am interested in all comments regarding the presence of alcohol poisoning and the effect of the R.A.P., so please feel free to provide negative reactions as well as positive ones. This is intended to be an informal discussion of the Responsible Action Protocol, and there are no right or wrong answers. Every opinion is important, so if you disagree with something that is said, feel free to speak up. However, please be respectful of the others in this group, and allow them to finish speaking before providing your thoughts.
- I want to emphasize that I am not here as a representative of the Office of Student Conduct or the Department of Resident Life. I am not an expert in the application of the R.A.P., and am not here to answer questions regarding its use.
- During tonight's focus group, we will be on a first name basis. If you are uncomfortable using your real name, you may use a fake one during this discussion. Everything you say tonight will remain confidential, and no names or identifying information will appear in any written report of this discussion. While specific comments will be used for reporting purposes, the comments you provide will not be connected to your name in any way. Also, if there are any questions you would prefer not to answer, feel free to remain silent.
- In order to make sure I do not miss any of your comments, I will audio tape this discussion. Nobody except me will have access to these recordings, and they will remain under lock and key. You have all signed a consent form allowing me to record the session, but I would like to confirm that there are no objections. Does anybody object to me audio taping the discussion?

- o Since we have agreement that we can audiotape the session, we will turn on the tape recorder and I will ask that question again.
- o If we could now go around the room and have each person say the word "yes" to indicate that it is ok to audio tape the discussion.
- We will now continue onto the topic of tonight's discussion.

TURN ON TAPE

• Could we please go around the room and have each person indicate that it is ok to tape record the discussion by saying "yes."

II. Icebreaker

Estimated Time: 5 minutes

• Before we discuss your opinions of the Responsible Action Protocol, I would like to give us an opportunity to get to know each other. If we could go around the room and have each person say a little bit about why they decided to attend this discussion.

III. Introduction Scenario

Estimated Time: 5 minutes

- To begin our discussion, I would like to first tell you a story about an event that happened on this campus. In February 2002, Daniel Reardon passed out in a UMD fraternity house after drinking heavily during a party. He lost consciousness at around 11:30pm, and was placed in a room where he was supervised by several of his companions. Although Daniel exhibited signs of alcohol poisoning, nobody called for help until 3:30am. By the time the paramedics arrived, Daniel was already brain dead. He died on February 14, 2002.
 - o Why do you think situations like this one occur?

IV. Knowledge and Perceptions of Alcohol Poisoning

Estimated Time: 10 minutes

- What do you know about the causes and symptoms of alcohol poisoning?
- How likely do you think it is for someone to experience alcohol poisoning following significant alcohol consumption?
- If you or one of your friends were to get alcohol poisoning, how severe do you think the consequences would be?

V. Influences on Calling Behavior in Alcohol-Related Medical Emergencies *Estimated Time: 15 minutes*

• Imagine your underage friend just came back from a party with his/her sports team. Your friend is so drunk that he/she has to be helped into bed by teammates. A few hours later, you look over at your friend and notice he/she looks extremely pale and is shivering. What would you do in this situation?

- Now imagine you and your underage friend are at a party together. Most of the people at the party have been drinking alcohol, and many of them are under 21 years old. A couple of hours into the party you go to the bathroom and see someone vomiting. They seem disoriented and are not sure where they are. How would you react to the situation?
- When an underage student is showing symptoms of alcohol poisoning, what factors do you think would lead others to call for medical assistance?
- What are some of the reasons students might use in deciding against calling for help?
- What impact would the possibility of facing university charges or sanctions have on students' decisions to call for help when another student is experiencing alcohol poisoning?
 - o What are the typical sanctions students receive for violating the alcohol policy?
 - o How do students generally view these sanctions?

VI. Knowledge and Opinions Regarding the R.A.P.

Estimated Time: 10 minutes

- What individuals and behaviors do you think are covered by the R.A.P?
- Are there any other people or behaviors that you think should be covered by the R.A.P.?
- How would you describe the student body's awareness of the R.A.P.?
- What methods do you think would be effective in raising students' awareness of the R.A.P.?

VII. Closing

Estimated Time: 5 minutes

We are now at the end of our discussion this evening. Is there anything we have not talked about that you would like to add?

I want to thank each of you for your participation and insightful comments. The information you have provided will be very useful in determining the effects of the Responsible Action Protocol. Your opinions and observations will be drawn upon to make suggestions for improving the impact of the R.A.P. If you would like to know more about the specific provisions of the protocol, I have copies available. If you are interested in learning about the results of this research investigation, please feel free to contact me at the end of the semester. Thank you again for your participation.

Appendix G

Focus Group Moderator Guide for "Unaware" Resident Students <u>Focus Group Moderator Guide</u>

Resident Student Focus Groups

I. Introduction Estimated Time: 10 minutes

- Good evening and welcome. I would like to take this opportunity to thank you very much for volunteering to join our discussion about the University of Maryland's Responsible Action Protocol. My name is Ranwa Hammamy, and I am a second-year Master's student with the Department of Public and Community Health. I will be moderating and my assistant will be taking notes on tonight's discussion.
- We are here today to discuss the impact of the University's recently enacted "Promoting Responsible Action in Medical Emergencies" Protocol, which is often referred to as the R.A.P. Another term that was used to describe the R.A.P. in the past was the "Good Samaritan" policy; you may use both terms interchangeably.
- Your opinions and experiences as they relate to the alcohol poisoning and the R.A.P. are essential to understanding the effect of the protocol. The information you provide will be helpful in determining whether or not the R.A.P. was successful in its intentions, and if it should be continued in future years. I am here to listen to your thoughts and opinions, and invite you to be honest and candid in your responses.
- Please know that I am interested in all comments regarding the presence of alcohol poisoning and the effect of the R.A.P., so please feel free to provide negative reactions as well as positive ones. This is intended to be an informal discussion of the Responsible Action Protocol, and there are no right or wrong answers. Every opinion is important, so if you disagree with something that is said, feel free to speak up. However, please be respectful of the others in this group, and allow them to finish speaking before providing your thoughts.
- I want to emphasize that I am not here as a representative of the Office of Student Conduct or the Department of Resident Life. I am not an expert in the application of the R.A.P., and am not here to answer questions regarding its use.
- During tonight's focus group, we will be on a first name basis. If you are uncomfortable using your real name, you may use a fake one during this discussion. Everything you say tonight will remain confidential, and no names or identifying information will appear in any written report of this discussion. While specific comments will be used for reporting purposes, the comments you provide will not be connected to your name in any way. Also, if there are any questions you would prefer not to answer, feel free to remain silent.
- In order to make sure I do not miss any of your comments, I will audio tape this discussion. Nobody except me will have access to these recordings, and they will remain under lock and key. You have all signed a consent form allowing me to record the session, but I would like to confirm that there are no objections. Does anybody object to me audio taping the discussion?

- o Since we have agreement that we can audiotape the session, we will turn on the tape recorder and I will ask that question again.
- o If we could now go around the room and have each person say the word "yes" to indicate that it is ok to audio tape the discussion.
- We will now continue onto the topic of tonight's discussion.

TURN ON TAPE

• Could we please go around the room and have each person state indicate that it is ok to tape record the discussion by saying "yes."

II. Icebreaker

Estimated Time: 5 minutes

• Before we discuss your opinions of the Responsible Action Protocol, I would like to give us an opportunity to get to know each other. If we could go around the room and have each person say a little bit about why they decided to attend this discussion.

III. Introduction Scenario

Estimated Time: 5 minutes

- To begin our discussion, I would like to first tell you a story about an event that happened on this campus. In February 2002, Daniel Reardon passed out in a UMD fraternity house after drinking heavily during a party. He lost consciousness at around 11:30pm, and was placed in a room where he was supervised by several of his companions. Although Daniel exhibited signs of alcohol poisoning, nobody called for help until 3:30am. By the time the paramedics arrived, Daniel was already brain dead. He died on February 14, 2002.
 - o Why do you think situations like this one occur?

IV. Knowledge and Perceptions of Alcohol Poisoning

Estimated Time: 10 minutes

- What do you know about the causes and symptoms of alcohol poisoning?
- How likely do you think it is for someone to experience alcohol poisoning following significant alcohol consumption?
- If you or one of your friends were to get alcohol poisoning, how severe do you think the consequences would be?

V. Influences on Calling Behavior in Alcohol-Related Medical Emergencies *Estimated Time: 15 minutes*

• Imagine your underage friend just came back from a party with his/her sports team. Your friend is so drunk that he/she has to be helped into bed by teammates. A few hours later, you look over at your friend and notice he/she looks extremely pale and is shivering. What would you do in this situation?

- Now imagine you and your underage friend are at a party together. Most of the people at the party have been drinking alcohol, and many of them are under 21 years old. A couple of hours into the party you go to the bathroom and see someone vomiting. They seem disoriented and are not sure where they are. How would you react to the situation?
- When an underage student is showing symptoms of alcohol poisoning, what factors do you think would lead others to call for medical assistance?
- What are some of the reasons students might use in deciding against calling for help?
- What impact would the possibility of facing university charges or sanctions have on students' decisions to call for help when another student is experiencing alcohol poisoning?
 - o What are the typical sanctions students receive for violating the alcohol policy?
 - o How do students generally view these sanctions?

VI. Opinions Regarding the Medical Amnesty Policies

Estimated Time: 10 minutes

- What individuals and behaviors do you think should be covered by Medical Amnesty policies?
- How do you think a Medical Amnesty Policy would influences students' decisions to help others in an alcohol-related medical emergency?
- What methods do you think would be effective in raising students' awareness of a Medical Amnesty policy?

VII. Closing

Estimated Time: 5 minutes

We are now at the end of our discussion this evening. Is there anything we have not talked about that you would like to add?

I want to thank each of you for your participation and insightful comments. The information you have provided will be very useful in determining the effects of the Responsible Action Protocol. Your opinions and observations will be drawn upon to make suggestions for improving the impact of the R.A.P. If you would like to know more about the specific provisions of the protocol, I have copies available. If you are interested in learning about the results of this research investigation, please feel free to contact me at the end of the semester. Thank you again for your participation.

Appendix H

Focus Group Moderator's Guide for Resident Assistants

Focus Group Moderator Guide Student Staff Focus Groups

I. Introduction

Estimated Time: 10 minutes

- Good evening and welcome. I would like to take this opportunity to thank you very much for volunteering to join our discussion about the University of Maryland's Responsible Action Protocol. My name is Ranwa Hammamy, and I am a second-year Master's student with the Department of Public and Community Health. I will be moderating and my assistant will be taking notes on tonight's discussion.
- We are here today to discuss the University's recently enacted "Promoting Responsible Action in Medical Emergencies" Protocol, which is often referred to as the R.A.P. Another term that was used to describe the R.A.P. in the past was the "Good Samaritan" policy; you may use both terms interchangeably.
- Your opinions and experiences as they relate to the R.A.P. are essential to understanding the student body's reaction to the protocol. The information you provide will be helpful in determining whether or not the R.A.P. was successful in its intentions, and if it should be continued in future years. I am here to listen to your thoughts and opinions, and invite you to be honest and candid in your responses.
- Please know that I am interested in all comments regarding the R.A.P., so please feel free to
 provide negative reactions as well as positive ones. This is intended to be an informal
 discussion of the Responsible Action Protocol, and there are no right or wrong answers.
 Every opinion is important, so if you disagree with something that is said, feel free to speak
 up. However, please be respectful of the others in this group, and allow them to finish
 speaking before providing your thoughts.
- I want to emphasize that I am not here as a representative of the Office of Student Conduct or the Department of Resident Life. I am not an expert in the application of the R.A.P., and am not here to answer questions regarding its use.
- During tonight's focus group, we will be on a first name basis. If you are uncomfortable using your real name, you may use a fake one during this discussion. Everything you say tonight will remain confidential, and no names or identifying information will appear in any written report of this discussion. While specific comments will be used for reporting purposes, the comments you provide will not be connected to your name in any way. Also, if there are any questions you would prefer not to answer, feel free to remain silent.
- In order to make sure I do not miss any of your comments, I will audio tape this discussion. Nobody except me will have access to these recordings, and they will remain under lock and key. You have all signed a consent form allowing me to record the session, but I would like to confirm that there are no objections. Does anybody object to me audio taping the discussion?

- o Since we have agreement that we can audiotape the session, we will turn on the tape recorder and I will ask that question again.
- o If we could now go around the room and have each person state the word "yes" to indicate that it is ok to audio tape the discussion.
- We will now continue onto the topic of tonight's discussion.

TURN ON TAPE

• Could we please go around the room and have each person indicate that it is ok to tape record the discussion by saying "yes."

II. Icebreaker

Estimated Time: 5 minutes

• Before we discuss your opinions of the Responsible Action Protocol, I would like to give us an opportunity to get to know each other. If we could go around the room and have each person say a little bit about why they decided to attend this discussion.

III. Alcohol Perceptions and Campus Use

Estimated Time: 15 minutes

- Because the R.A.P. is designed to target alcohol use, it is important to first establish an understanding of the environment on campus. How would you describe the nature of student alcohol use on campus during the 2008-2009 school year?
- What changes have you observed in residents' alcohol consumption behaviors since the enactment of the R.A.P.?
- When you think about binge drinking, what situations come to mind?
- How likely do you think it is for residents to experience alcohol poisoning following significant alcohol consumption?
- If a resident was to get alcohol poisoning, how severe do you think the consequences would be?

IV. Responsible Action Protocol Education

Estimated Time: 10 minutes

- How were Resident Life Student Staff trained regarding the R.A.P.?
- What is your understanding of the R.A.P.'s contents?
- What methods did you use to inform students of the R.A.P.?
- What are some examples of situations in which you have implemented or encouraged the use of the R.A.P.?

V. Opinions and Concerns Regarding the R.A.P.

Estimated Time: 15 minutes

- What reactions have you observed among residents regarding the R.A.P.?
- How would you describe residents' use of the R.A.P.?
 - o (Prompt if specific examples are given).
- What are your thoughts on the R.A.P. covering students who have already been protected from university charges under the protocol?
- What is the likelihood that students will begin abusing the protocol in an attempt to avoid facing university charges for alcohol violations?
- What suggestions do you have for modifying the R.A.P.?
- What is your opinion of continuing the use of the R.A.P. after this year?

VI. Closing

Estimated Time: 5 minutes

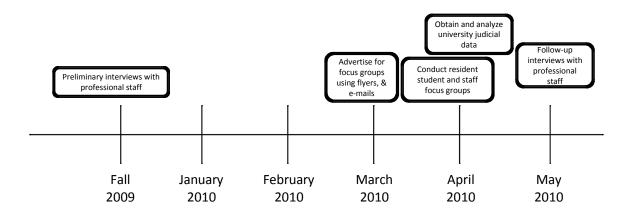
We are now at the end of our discussion this evening. Is there anything we haven't talked about that you would like to add?

I want to thank each of you for your participation and insightful comments. The information you have provided will be very useful in determining the effects of the Responsible Action Protocol. Your opinions and observations will be drawn upon to make suggestions for improving the impact of the R.A.P. If you would like to know more about the specific provisions of the protocol, I have copies available. If you are interested in learning about the results of this research investigation, please feel free to contact me at the end of the semester. Thank you again for your participation.

Appendix I

Thesis Process Timeline

Investigation Timeline



Appendix J

IRB Approval Letter



0101 Lee Brilding Gailege Park, Maryland 20742 5135 201, 103, 1212 YEL 301 2, 1,1 175 1 5X Irlegidens turnd, ed. www.umrese.arch.umd, edu/IRB

		February 23, 2010
MEMORANDUM		
Application Approval Notification		
То:	Dr. Pamelo I. Clark Ranwa Hammenty Public and Community Health	
From:	Inseph M. Smith, MA, CIMMS	
	University of Maryland, College Park	
Re;	IRB Application Number: (0-0093	
	Project Titlet "Promoting Responsible Behavior Determining the Impact of a New University of	
Approval Date:	February 25, 2010	
Expiration Date:	February 25, 2011	
Type of Application:	Initial	
Type of Research:	Non-Exempt .	
Type of Review for Application	n: Expedited	

The University of Maryland, College Park Institutional Review Board (IRB) approved your ORB application. The research was approved in accordance with the University IRB policies and procedures and 45 CFR 46, the Voderal Policy for the Protection of Human Subjects. Please include the above-cited IRB application number to any feature

Appendix K

Informed Consent Form

Page 1 of 3

Initials	Date
munas	Duie

CONSENT FORM

Project Title	Promoting Responsible Behaviors in Medical Emergencies:
	Determining the Impact of a New University of Maryland
	Protocol
Why is this	This is a research project being conducted by Ranwa
research being	Hammamy, a MPH student at the University of Maryland,
done?	College Park. We are inviting you to participate because you are an undergraduate student at the university who may be impacted by the recently enacted of the Responsible Action Protocol. The protocol was designed to encourage underage students to call for medical assistance in alcohol-related emergencies, by offering relief from certain university charges. The purpose of this project is to determine whether or not the Responsible Action Protocol has actually led to an increase in the number of students who have called for help in alcohol-related medical emergencies. This research will attempt to determine if any increase in calls for medical assistance is related to any increase in alcohol consumption. This project also seeks to find out how students have responded to the protocol, in an effort to determine if it should be renewed, altered, or discontinued in future years.
What will I be	The procedures involve both the completion of a short
asked to do?	survey and participation in a group discussion. The survey
	and discussion will occur together on the same day. The
	survey will be administered immediately before the group
	discussion, and should take no longer than ten (10) minutes
	to complete. The survey requires you to provide basic
	personal information, including your age, gender, and
	race/ethnicity. The survey also asks a short series of
	sensitive questions regarding your experiences with
	underage alcohol consumption. Immediately after the
	survey, a small group discussion related to the Responsible
	Action Protocol will take place. This group discussion
	should take no longer than sixty (60) minutes. During the
	group discussion, you will be asked to provide your
	thoughts on underage alcohol consumption and the effects
	of the Responsible Action Protocol. Both the surveys and
	group discussion will occur in the Public and Community
	Health Department's staff conference room in the School of
	Public Health. Total participation time for this research is
	estimated at 90 minutes.
	estimated at 70 minutes.

What about We will do our best to keep your personal information confidentiality? confidential and separate from your responses to the survey and group discussion. To help protect your confidentiality, no identifying information will be requested on the survey or during the group discussion. While your name and contact information was collected when you initially signed up to participate, these sign-up sheets will be kept in a locked cabinet away from the surveys. Following completion of the research, these sign-up sheets will be destroyed. Similarly, while the content of the group discussions will be audio-recorded, the tapes used will be locked in a drawer by the student researcher. Following the completion of the researcher, these tapes will remain locked in a drawer until they can be destroyed. Lastly, because this research is being conducted as a master's thesis, its findings may be shared with individuals from different university offices and departments. However, the thesis will contain no personal identifying information. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law. What are the risks There are few risks associated with participating in this of this research? research study. The main risk you may face from your participation is the possible disclosure of illegal activities. You may be asked to admit to or describe your experiences with underage alcohol consumption, an act that is punishable by the university and general legal system. In an effort to protect you from any legal risks of participation, all of your comments made in the focus group discussion will be kept confidential, and will not be connected to any identifying information from your consent form. The same protection will be provided regarding your responses to the demographic survey. What are the There are no direct benefits to you except for the benefits of this opportunity to learn more about the Responsible Action Protocol, and receive clarifying information regarding its research? provisions. In the future, you and other students might benefit from this study through the continued and improved use of the Responsible Action Protocol. This study also serves as a significant addition to the current research on "Good Samaritan" and "Medical Amnesty" policies. Do I have to be in Your participation in this research is completely voluntary. this research? You may choose not to take part at all. If you decide to May I stop participate in this research, you may stop participating at participating at any time. If you decide not to participate in this study or if

any time?	you stop participating at any time, you will not be penalized		
	or lose any benefits to which you otherwise qualify.		
What if I have	This research is being conducted by Ranwa Hammamy, a		
questions?	MPH student in the Department of Public and Community		
	Health at the University of Maryland, under the supervision		
	of Dr. Pamela Clark, Research Professor in the Department		
	of Public and Community Health. If you have any questions		
	about the research study itself, please contact Dr. Pamela		
	Clark at: 2387 HHP Building, Valley Drive, College Park,		
	MD 2072; 301-405-8624; or <u>clarkp@umd.edu</u> . If you have		
	questions about your rights as a research subject or wish to		
	report a research-related injury, please contact: Institutional		
	Review Board Office, University of Maryland, College		
	Park, Maryland, 20742; (e-mail) irb@umd.edu ; (telephone)		
	301-405-0678		
	This research has been reviewed according to the University		
	of Maryland, College Park IRB procedures for research		
	involving human subjects.		
Statement of Age	Your signature indicates that:		
of Subject and	1) You are at least 18 years of age;		
Consent	2) The research has been explained to you;		
	3) Your questions have been fully answered; and		
	4) You freely and voluntarily choose to participate in this		
	research project.		
Signature and	NAME OF PARTICIPANT		
Date			
	SIGNATURE OF		
	PARTICIPANT		
	DATE		

References

- AlcoholEdu (2008). *AlcoholEdu FAQs*. Retrieved 12/30/2009 from http://college.alcoholedu.com/faq.html.
- Barnett, N.P., Borsari, B., Hustad, J.T., Tevyaw, T.O., Colby, S.M., Kahler, C.W. (2008).

 Profiles of college students mandated to alcohol intervention. *Journal of Studies*on Alcohol and Drugs, 69, 684-694.
- Bender, D.E. & Ewbank, D. (1994). The focus group as a tool for health research: issues in design and analysis. *Health Transition Review*, 4(1), 63-79.
- Broadwater, K., Curtin, L., Martz, D.M., Zull, M.C. (2006). College student drinking:

 Perception of the norm and behavioral intentions. *Addictive Behaviors*, 31, 632-640.
- Cohen, F. & Rogers, D. (1997). Effects of alcohol policy change. *Journal of Alcohol and Drug Education*, 42(2), 69-82.
- College Drinking Prevention (2007). Facts about alcohol poisoning. Retrieved

 12/30/2009 from

 http://www.collegedrinkingprevention.gov/OtherAlcoholInformation/FactsAbout

 AlcoholPoisoning.pdf.
- Dejong, W., Towvim, L.G., Schneider, S.K. et al (2007). Support for alcohol-control policies and enforcement strategies among US college students at 4-year institutions. *Journal of American College Health*, 56(3), 231-236.
- Department of Resident Life (2009). *Employment Opportunities*. Retrieved 12/30/2009 from http://www.resnet.umd.edu/employment/.

- Freeman, M.S. (2001). Innovative alcohol education program for college and university judivial sanctions. *Journal of College Counseling*, 4, 179-185.
- Hingson, R., Heeren, T., Winter, M., Wechsler, H. (2005). Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18-24: Changes from 1998 to 2001. *Annual Reviews of Public Health*, 26, 259-279.
- Institutional Research Planning and Assessment (2009). *Institutional Research Reports*.

 Retrieved 12/30/2009 from

 https://www.irpa.umd.edu/menus.cfm?action=irreports
- International Harm Reduction Association (2009). *What is Harm Reduction*. Retrieved 12/30/2009 from http://www.ihra.net/Whatisharmreduction.
- Janz, N.K., Champion, V.L., & Strecher, V.J. (2002). The Health Belief Model. In K. Glanz, Rimer, B.K., Lewis, F.M. (Eds.), *Health Behavior and Health Education* (45 66). San Francisco, CA: Jossey-Bass
- Jones, B.T., Corbin, W., Fromme, K. (2001). A review of expectancy theory and alcohol consumption. *Addiction*, 96, 57-72.
- Kahan, J.P. (2001). Focus groups as a tool for policy analysis. *Analysis of Social Issues* and *Public Policy*, 129-146.
- Kapner, D.A. (2008). Alcohol and other drugs on campus: The scope of the problem.

 Retrieved 12/30/2009, from

 http://www.higheredcenter.org/services/publications/alcohol-and-other-drugs-campus-scope-problem.

- LaBrie, J.W., Hummer, J.F., Pedersen, E.R. (2007). Reasons for drinking in the college student context: The differential role and risk of the social motivator. *Journal of Studies on Alcohol and Drugs*, 68, 393-398.
- Lavigne, A.M., Witt, C.F., Wood, M.D., Laforge, R., DeJong, W.(2008). Predictors of college student support for alcohol control policies and stricter enforcement strategies. *The American Journal of Drug and Alcohol Abuse*, 34, 749-759.
- Lewis, D.K. & Matchell, T.C. (2006). Safety first: A medical amnesty approach to alcohol poisoning at a U.S. university. *International Journal of Drug Policy*, 17(4), 329-338.
- Lewis, T.F. & Thombs, D.L. (2005). Perceived risks and normative beliefs as explanatory models for college student alcohol involvement: An assessment of a campus with conventional alcohol control policies and enforcement practices. *NASPA Journal*, 42(2), 202-222.
- Marlatt, G.A. & Witkiewitz, K. (2002). Harm reduction approaches to alcohol use:

 Health promotion, prevention, and treatment. *Addictive Behaviors*, 27, 867-886.
- Mitchell, R.J., Toomey, T.L., Erickson, D. (2005). Alcohol policies on college campuses. *Journal of American College Health*, 53(4), 149-157.
- National Health Interview Survey (2009a). Summary Health Statistics for US Adults:

 National Health Interview Survey, 2008. Retrieved 12/30/2009 from

 http://www.cdc.gov/nchs/data/series/sr_10/sr10_242.pdf.
- National Health Interview Survey (2009b). Early Release of Selected Estimates Based on Data from the January-June 2009 National Health Interview Survey. Retrieved 12/30/2009 from http://www.cdc.gov/nchs/nhis/released200912.htm#9.

- Newman, I.M., Shell, D.F., Major, L.J., Workman, T.A. (2006). Use of policy, education, and enforcement to reduce binge drinking among university students: The NU Directions project. *International Journal of Drug Policy*, 17, 339-349.
- Office of Student Conduct (2009). Promoting Responsible Action in Medical

 Emergencies. Retrieved 9/1/2009 from

 http://www.jpo.umd.edu/docs/Promoting%20Responsible%20Action.pdf
- Oster-Aaland, L., Lewis, M.A., Neighbors, C., Vangsness, J., Larimer, M.E. (2009).

 Alcohol poisoning among college students turning 21: Do they recognize the symptoms and how do they help? *Journal of Studies on Alcohol and Drugs*, 16, 122-130.
- Oster-Aaland, L. & Eighmy, M.A. (2007). Medical amnesty policies: Research is needed.

 NASPA Journal, 44(4), 715-727.
- Saltz, R.F. (2007). How do college students view alcohol prevention policies? *Journal of Substance Abuse*, 12(6). 447-460.
- Seal, D.W., Bogart, L.M., Ehrhardt, A. (1998). Small group dynamics: The utility of focus group discussions as a research method. *Group Dynamics: Theory*, *Research, and Practice*, 2(4), 253-266
- Sim, J. (1998). Collecting and analyzing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing*, 28(2), 345-352.
- Stockdale, M.S. (2002). Analyzing focus group data with spreadsheets. *American Journal of Health Studies*, 18(1), 55-60.

- Student Conduct Committee (2009). *Senate Good Samaritan Policy Report*. Retrieved 12/30/2009 from
 - http://www.senate.umd.edu/senateBills/viewBill.cfm?billId=84&source=c.
- University of Maryland (2009a). Department of Public and Community Health: MPH

 Program Competencies. Retrieved 2/3/2010 from

 http://www.sph.umd.edu/dpch/index.htm.
- University of Maryland (2009b). *Office of Extended Studies: Freshman Connection Orientation*. Retrieved 12/30/2009 from

 http://www.fc.umd.edu/index.php?slab=fc-orientation.
- Wechsler, H., Lee, J.E., Gledhill-Hoyt, J. Nelson, T.F. (2001). Alcohol use and problems at colleges banning alcohol: Results of a national survey. *Journal of Studies on Alcohol and Drugs*, 62, 133-141.
- Wechsler, H., Lee, J.E., Nelson, T.F., Kuo, M. (2002). Underage college students' drinking behavior, access to alcohol, and the influence of deterrence policies.

 **Journal of American College Health*, 50(5), 223-236.
- Wechsler, H. & Nelson, T.F. (2008). What we have learned from the Harvard School of Public Health college alcohol study: Focusing attention on college student alcohol consumption and the environmental conditions that promote it, *Journal of Studies on Alcohol and Drugs*, 69 (481-490).
- White, H.R. (2006). Reduction of alcohol-related harm on United States college campuses: The use of personal feedback interventions. *International Journal of Drug Policy*, 17, 310-319.