Navy Alcohol and Drug Abuse Prevention Program

Non-evidentiary Alcohol Detection Device (ADD) Operating Guide

Reference: OPNAVINST 5350.8, Use of Hand-Held Alcohol Detection Devices (ADDs)

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References

a. OPNAVINST 5350.8, 22 January 2013, USE OF HAND-HELD ALCOHOL DETECTION DEVICES (ADD)

b. OPNAVINST 5350.4(SERIES), NAVY DRUG AND ALCOHOL ABUSE PREVENTION

Use of Alcohol Detection Devices

1. Overview. The use of ADDs is intended to promote safety and provide education and awareness that complements other unit efforts to promote responsible use of alcohol and deter alcohol abuse. The ADD is a tool that can assist with identifying Service Members who may require support before an incident occurs due to the irresponsible use of alcohol. These devices will enhance command awareness of the crew's culture of alcohol use; educate Service Members on the effects of their alcohol use decisions and self-impairment, and support unit safety. Results of ADD testing are not to be used as a basis for disciplinary measures.

a. ADDs provide immediate personal feedback to Service Members on the effects of their alcohol use. It is important to understand that several factors affect individual metabolism rates of alcohol, which vary between 0.01 to 0.025 BAC (blood alcohol concentration) per hour, are unique to the individual and include gender, age, weight, fitness, tolerance, medications, and when/how much food was consumed. One drink immediately raises BAC between 0.02 and 0.04 depending on these physiological factors.

b. ADDs can also dispel myths and inform those who have set arbitrary "limits" regarding their drinking patterns that are not based on facts.

For 0.04 BAC example, if a 180-pound male consumes 9-10 alcoholic drinks from 2000 to midnight (approximate BAC at midnight 0.12), he may have a BAC of 0.04 at 0600 the next morning. For a 140-pound female, she would only have to consume 6-7 alcoholic drinks between 2000 and midnight to get the same 0.04 result at 0600.

For 0.02 BAC example, if a 180-pound male consumes 6-8 alcoholic drinks from 2000 to midnight, his BAC at 0600 would be 0.02. A 140-pound female who consumes 3-5 alcoholic drinks in the same time period would have a 0.02 BAC at 0600.

Note: One drink is equal to 1.25 oz. of 80-proof liquor (a "shot") or a 12 oz. beer, or 4 oz. of wine.

c. Alcohol Impairment Charts are provided at TAB A for additional information regarding the effects of alcohol.

2. ADD Administration. The commanding officer (CO) designates personnel assigned to conduct testing subject to any further Echelon 2 Commander's guidance issued to supplement reference (a). Drug and Alcohol Program Advisors (DAPA), Substance Abuse Counselors, Independent Duty Corpsmen (IDC), and legal personnel are not recommended for this this collateral responsibility. All administrators shall operate each device per suggested manufacturer's instructions.

3. Test Procedures. The decision to inspect and how to organize random testing is at the discretion of the CO and subject to guidance contained in reference (a). Generally, an unpredictable testing pattern will produce a more accurate indicator of the command's alcohol use culture. Written standard operating procedures (SOP) for each command to codify unit procedures may be required by higher authority. A sample SOP is available on the NADAP Web site at www.nadap.navy.mil.

a. Commands shall randomly select Service Members to provide a breath sample. Random ADD inspections are authorized for those Service Members who are on duty and during normal working hours. It is not the intent or purpose of ADDs to test those in an authorized leave or liberty status. Sampling examples include, but are not limited to:

(1) Duty section or divisional sweeps

(2) Service Members reporting to work after a designated time (late arrival)

(3) Random sampling of Service Members in a duty status or during their assigned work day similar to the urinalysis program

(4) Special unit evolutions or training periods

(5) During reserve drill periods

b. The chart below provides additional guidance for use of alcohol detection devices and results:

Random Inspections	YES
Oncoming duty members (sweep or random)	YES

Randomly selected Service Members	YES
Members placed in a liberty risk status	NO
In conjunction with random urinalysis	YES
Command referral to competence for duty exam	YES
Self-referral	YES
Mishap or safety inspection	NO
New check-in	YES
Service Members not scheduled for duty	NO
Unauthorized absence	NO
Service Members assigned extra military instruction	NO
Probable cause search when considered along with other evidence of intoxication	YES

c. To ensure optimal accuracy of the devices, perform preventive maintenance and calibration checks as specified in the user's manual supplied with the device. When testing, commands should:

(1) Test Service Members at least 20 minutes after eating or drinking. Alcohol, including alcohol-based mouthwash, gum, breath sprays and similar products remaining in the mouth, or even excess saliva, may interfere with testing.

(2) Require Service Members to take a deep breath and then blow steadily and consistently, but not too hard, until the ADD signals them to stop, usually four to five seconds.

(3) Prevent smoke, saliva, or other contaminants from entering into the mouthpiece.

(4) Attach a new mouthpiece after each individual use.

(5) Avoid testing in high wind or spaces with restricted ventilation.

(6) Wait for the unit to warm-up before initial testing and clear/reset device after each use in accordance with ADD instructions provided with each unit. This will significantly reduce the risk of a false sample on the subsequent reading. Poor ventilation may lengthen the time required for device warm up between tests.

(7) Calibrate devices as required by the manufacturer in the associated user's manual.

(8) Wait a few moments for the device to indicate the alcohol concentration and display it on the screen.

(9) Before conducting subsequent tests (or retest for those with a positive result), wait for the screen backlight to turn off, then tap the power button to reset the unit.

(10) A "Flow" or "flo" warning display on the readout screen indicates the breath sample was not strong enough or more likely, not long enough.

(11) A "bat" warning display on the readout screen indicates that battery power is low and battery replacement is required.

d. Blood Alcohol Concentration (BAC). An ADD reading of less than 0.02 percent BAC shall be considered a negative result.

e. Retests. In cases where the ADD reading is 0.02 percent BAC or greater, the Service Member should be retested after a 20 minute waiting period to allow the effect of mouthwash, breath mints, gum, and breath sprays that may produce a detectable indicator of alcohol, to clear.

f. Action upon a detectable result.

(1) A Service Member whose ADD indicated reading is 0.04 percent BAC or greater shall be presumed to be not ready to safely perform duties, and shall be relieved of duty and retained onboard the command in a safe and secure environment until the ADD indicated reading is not detectable (less than 0.02 percent BAC). The intent is to ensure that the Service Member is safe until alcohol-free. Additional non-punitive actions focused on safety, training, counseling and education may be implemented at the discretion of the CO. Referral to the drug and alcohol program advisor (DAPA) is appropriate. Command referral to a DAPA is not an alcohol-related incident (ARI).

(2) A Service Member who has previously completed alcohol rehabilitation treatment and has an ADD indicated reading of 0.02 percent BAC or greater shall, at a minimum, be referred to the DAPA.

(3) A Service Member who is under the minimum legal drinking age and has an ADD indicated reading of 0.02 percent BAC or greater shall, at a minimum, be referred to the DAPA.

4. Ordering/Purchasing Devices and Tubing. Consumable and unit replacement ordering information is vendor specific and available on the NADAP website. Questions should be addressed to the local Alcohol and Drug Control officer (ADCO) who will have a small quantity of ADDs and related consumables on hand. If further assistance is required contact:

Non-Evidentiary Alcohol Detection Device Office
E-mail: mill add@navy.mil
Phone: (901)874-4900, DSN PREFIX: 882
Fax: (901)874-4228, DSN PREFIX: 882

a. Immediately upon receipt of the ADD shipment, complete and mail the receipt acknowledgement form included in the shipping container or email acknowledgement following the guidance included in the letter.

b. Follow manufacturer's operating instructions to prepare the device for initial use.

5. Device Calibration. See product users' manual.

6. Documenting Results. A spreadsheet is provided in the Alcohol and Drug Management Information Tracking System (ADMITS) for the use of commands to track ADD inspections if desired. In addition, sample forms are available on the NADAP Web site at http://www.nadap.navy.mil.

ALCOHOL IMPAIRMENT CHART
MALES

APPROXIMATE BLOOD ALCOHOL PERCENTAGE									
Drinks *	BODY WEIGHT IN POUNDS								EFFECT ON PERSON
	100	120	140	160	180	200	220	240	
0	.00	.00	.00	.00	.00	.00	.00	.00	ONLY SAFE DRIVING LIMIT
1	.04	.03	.03	.02	.02	.02	.02	.02	IMPAIRMENT BEGINS.
2	.08	.06	.05	.05	.04	.04	.03	.03	
3	.11	.09	.08	.07	.06	.06	.05	.05	DRIVING SKILLS SIGNIFICANTLY AFFECTED.
4	.15	.12	.11	.09	.08	.08	.07	.06	
5	.19	.16	.13	.12	.11	.09	.09	.08	LEGALLY INTOXICATED. CRIMINAL PENALTIES IN ALL STATES **
6	.23	.19	.16	.14	.13	.11	.10	.09	
7	.26	.22	.19	.16	.15	.13	.12	.11	
8	.30	.25	.21	.19	.17	.15	.14	.13	
9	.34	.28	.24	.21	.19	.17	.15	.14	
10	.38	.31	.27	.23	.21	.19	.17	.16	

ALCOHOL IMPAIRMENT CHART
FEMALES

APPROXIMATE BLOOD ALCOHOL PERCENTAGE										
Drinks *	BODY WEIGHT IN POUNDS									EFFECT ON PERSON
	90	100	120	140	160	180	200	220	240	
0	.00	.00	.00	.00	.00	.00	.00	.00	.00	ONLY SAFE DRIVING LIMIT
1	.05	.05	.04	.03	.03	.03	.02	.02	.02	IMPAIRMENT BEGINS.
2	.10	.09	.08	.07	.06	.05	.05	.04	.04	DRIVING SKILLS SIGNIFICANTLY AFFECTED.
3	.15	.14	.11	.11	.09	.08	.07	.06	.06	
4	.20	.18	.15	.13	.11	.10	.09	.08	.08	LEGALLY INTOXICATED. CRIMINAL PENALTIES IN ALL STATES **
5	.25	.23	.19	.16	.14	.13	.11	.10	.09	
6	.30	.27	.23	.19	.17	.15	.14	.12	.11	
7	.35	.32	.27	.23	.20	.18	.16	.14	.13	
8	.40	.36	.30	.26	.23	.20	.18	.17	.15	
9	.45	.41	.34	.29	.26	.23	.20	.19	.17	
10	.51	.45	.38	.32	.28	.25	.23	.21	.19	

Subtract .01% for each 40 minutes of drinking.

*** One drink is equal to 1¼ oz. of 80-proof liquor, 12 oz. of beer, or 4 oz. of table wine.**

** *ALL states have a .08 BAC per se law*

BAC (% by vol.)	Behavior	Impairment
0.010–0.029	Average individual appears normal	Subtle effects that can be detected with special tests
0.030–0.059	Mild euphoria	Concentration
	Relaxation	
	Joyousness	
	Talkativeness	
	Decreased inhibition	
0.06–0.09	Blunted feelings	Reasoning
	Disinhibition	Depth perception
	Extroversion	Peripheral vision
		Glare recovery
0.10–0.19	Over-expression	Reflexes
	Emotional swings	Reaction time
	Anger or sadness	Gross motor control
	Boisterousness	Staggering
	Decreased libido	Slurred speech
		Temporary erectile dysfunction
		Possibility of temporary alcohol poisoning
0.20–0.29	Stupor	Severe motor impairment
	Loss of understanding	Loss of consciousness
	Impaired sensations	Memory blackout
	Possibility of falling unconscious	
0.30–0.39	Severe central nervous system depression	Bladder function
	Unconsciousness	Breathing
	Death is possible	Dysequilibrium
		Heart rate
0.40–0.50	General lack of behavior	Breathing
	Unconsciousness	Heart rate
		Positional Alcohol Nystagmus
>0.50	High risk of poisoning	
	Possibility of death	