



Performance Triad Leader's Guide for West Africa

Protect and Hydrate

Exercise

Rest

Food and Re-fuel

Observe

Recover

Mental edge



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Performance Triad Leader's Guide for West Africa

Protect & Hydrate

Safety is everyone's priority! Ensure your team's protective equipment fits properly. If not, trade or exchange immediately. Practice working in the gear - it's a requirement. Don't take chances - do the right thing!

ABC: Avoid Body Contact!! Wash hands frequently with warm, soapy water or hand sanitizer. Time and friction matter the most - rub hands together vigorously for at least 20 seconds!

HYDRATE--BLUF: Drink at least 64oz of water a day (24-32oz of water/hour in biohazard suit)

Leaders have the responsibility to enforce work/rest cycles so teams do not become heat casualties. Having cool, potable water available is essential to the mission. Understand that drinking too much water can be equally bad in hot or cool conditions. The condition for drinking too much water is called hyponatremia. Have Oral Rehydration Salts available (NSN: 6505-01-197-8809). These are easily added to 1 liter of water to combat dehydration and hyponatremia. Adding flavor packets can improve the taste of water so Soldiers will drink enough.

The #1 reason personnel get heat injuries or stroke is because of the inability to regulate their internal temperature (thermoregulate). There are many contributing factors of why thermoregulation is affected, but dehydration is a major cause. Safety first - follow the Army published Work/Rest and Water Consumption guidelines. They will prevent unnecessary heat casualties. One heat injury is too many.

Work/Rest and Water Consumption Table

Applies to average sized, heat-acclimated Soldier wearing ACU, hot weather. (See TB MED 507 for further guidance.)

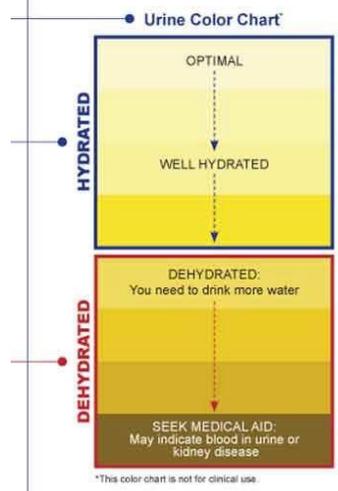
Easy Work		Moderate Work		Hard Work			
<ul style="list-style-type: none"> Weapon Maintenance Walking Hard Surface at 2.5 mph, < 30 lb Load Marksmanship Training Drill and Ceremony Manual of Arms 		<ul style="list-style-type: none"> Walking Loose Sand at 2.5 mph, No Load Walking Hard Surface at 3.5 mph, < 40 lb Load Calisthenics Patrolling Individual Movement Techniques, i.e., Low Crawl or High Crawl Defensive Position Construction 		<ul style="list-style-type: none"> Walking Hard Surface at 3.5 mph, ≥ 40 lb Load Walking Loose Sand at 2.5 mph with Load Field Assaults 			
Heat Category	WBGT Index, F°	Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)
1	78° - 81.9°	NL	½	NL	½	40/20 min	¾
2 (green)	82° - 84.9°	NL	¾	50/10 min	¾	30/30 min	1
3 (yellow)	85° - 87.9°	NL	¾	40/20 min	¾	30/30 min	1
4 (red)	88° - 89.9°	NL	¾	30/30 min	¾	20/40 min	1
5 (black)	> 90°	50/10 min	1	20/40 min	1	10/50 min	1

For additional copies, contact: U.S. Army Public Health Command Health Information Operations Division at (800) 222-9699 or USAPHC - Health Information Operations@apghc.army.mil. For electronic versions, see <http://rlpghm-www.apghc.army.mil/rlfrest>. Distribution unlimited. Local reproduction is authorized. CP 133-0911

- The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hrs of work in the specified heat category. Fluid needs can vary based on individual differences (± ¼ qt/hr) and exposure to full sun or full shade (± ¼ qt/hr).
- NL = no limit to work time per hr.
- Rest = minimal physical activity (sitting or standing) accomplished in shade if possible.
- CAUTION: Hourly fluid intake should not exceed 1½ qts. Daily fluid intake should not exceed 12 qts.
- If wearing body armor, add 5°F to WBGT index in humid climates.
- If doing Easy Work and wearing NBC (MOPP 4) clothing, add 10°F to WBGT index.
- If doing Moderate or Hard Work and wearing NBC (MOPP 4) clothing, add 20°F to WBGT index.



Are You Hydrated? Take the Urine Color Test



Exercise

Staying physically fit while deployed to West Africa has a number of benefits. It will offset some of the stress that naturally comes with being deployed and working long, hard hours in an austere environment. Wearing universal personal protective equipment is also added stress - physically and mentally.

Plan accordingly prior to deployment. Aim for the following exercise goals:

- 150 min per week moderate to vigorous exercise**
- 2 or more days of resistance training per week**
- 10,000 steps per day.** Walking 10min = about 1000 steps and 1 mile = about 2,000 steps

Accomplishing regular work-outs while deployed supports the individual and the mission!

- Plan fitness into the daily routine: times, locations, equipment if available
- Prioritize personal fitness to improve performance, make better decisions, and decrease stress and anxiety
- Army PRT FM 7-22 describes a variety of low-equipment and no equipment workouts

Make fitness a priority!

- Design a short workout for your team to do on a break to help boost focus, judgment, or memory
- Have 3 or 4 different short workout options that last 10-15 minutes
- Incorporate activity into their weekly routine to help keep them sharp

Rest

Sleep gives us the decisive edge needed for sustained or continuous operations. Anything less than 7-8 hours of sleep every 24 hours impairs mental performance such as thinking, situational awareness, sound planning, and judgment. Leaders are responsible for ensuring deliberate sleep management strategies.

To ensure optimal performance, individuals need 7-8 hours of sleep nightly. Tactical sleep conditions to maximize healthy sleep.

1. For those sleeping during the day – locate the sleep zone away from noise and traffic. Shift work personnel need more time allotted for sleep.
2. Have a transition time to wind down 30-60 minutes before bedtime
3. Sleep areas should be quiet, cool, dark, and safe. Enforce lights out and quiet hours.
4. Separate sleep areas based on shifts to minimize disruptions
5. Have a consistent sleep and wake time
6. Remove, turn off, or cover electronics that emit light

Other hints to help optimize performance

- **Sleep Recovery:** Personnel who traveled several time zones or have limited sleep should have 8+ hours per night over the course of several days for recovery sleep
- **Tactical naps** involve getting as much sleep as possible when time and security allows.
 - Quick tactical naps can help reduced sleepiness and improve cognitive performance (10-20 minutes)
 - Longer naps are important for paying off sleep debt; but naps longer than 30 minutes may result in sleep inertia (feeling groggy when you wake up).
- **Caffeine** may **temporarily** improve alertness when getting adequate sleep is not possible. Caffeine does not replace sleep. Use the caffeine dosing schedule to the right

Sustained Ops (no sleep):	<ul style="list-style-type: none"> • 200 mg @ ~ 0000 • 200 mg again @ 0400 and 0800 h, if needed • Use during daytime (1200, 1600) only if needed
Night Ops with Daytime Sleep:	<ul style="list-style-type: none"> • 200 mg @ start of night shift • 200 mg again 4 hours later • Last dose: at least 6 hrs away from sleep period
TEMPORARILY RESTRICTED SLEEP (6 or fewer hrs of sleep)	<ul style="list-style-type: none"> • 200 mg upon awakening • 200 mg again 4 hours later • Last dose: at least 6 hrs away from sleep period

			
1.7 gm = 44 mg	12 oz = 50 mg	1 squirt = 60mg	1 pkg (10 mints) = 70 mg
			
1 piece = 100 mg	2 oz = 200 mg	16 oz = 330 mg	16 oz = 160 mg

Food and Re-fuel

Deployments and field operations demand a properly fueled body and this can mean the difference between top performance and mission failure. Poor nutrition in extreme conditions can also lead to fatigue, rapid weight loss, injury, illness, and dehydration. Use nutrient timing for peak performance - this is key to fueling the body with the right nutrients at the right time for maximum results.

Mission Prep

The first fuel your body uses during strenuous activity is carbohydrates. Carbohydrates improve your performance. *Eat a large enough meal to sustain you through the first 3 hours of your mission.*

Sustain

After one hour of sustained strenuous activity, energy stores are depleted. To maintain your edge, **eat a snack every 45 minutes during sustained operations** (dried fruit, nuts, trail mix, sports bar, banana).

Mission Complete

Refueling your body for the next mission is critical. The best way to **refuel is 30-60 minutes after a strenuous mission**, eat a blend of protein and carbohydrates.

Fuel in the Field

- Make time to fuel. Refuel every 4–5 hours. Avoid going more than 5 waking hours without eating.
- Smart caffeine use: dose with no more than 200 milligrams every 4 hours with **last dose of caffeine at least 6 hours before rest/sleep period**
- Snack when you can. Choose carbohydrate- and energy-rich choices such as dried fruits, nuts, and trail mixes and unopened snack items from rations to eat on the run.
- Eat calorie-dense and nutrient-rich foods such as MRE main entrees and crackers with peanut butter or cheese spread. Chocolate milk and a banana, sports bar, or an MRE dairy shake.



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Observe

Observe how your team is feeling and performing. Encourage the buddy system and ensure the team is watching out for their buddies and that those buddies are watching out for them.

Check daily on mental status, morale, mission stressors and mitigate as needed

Ensure everyone knows where to go and how to seek help before it becomes an emergency.

Don't forget to check in with yourself. You can get so busy and work so hard over days or weeks that you forget about yourself. Do you know how to seek help if you need it?

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Daily Health Checklist for Leaders West Africa

Has any Soldier felt sick in the past 24 hours?
If yes, refer to sick call, especially if they have:

<input type="checkbox"/> Fever	<input type="checkbox"/> Vomiting
<input type="checkbox"/> Chills or shakes	<input type="checkbox"/> Diarrhea
<input type="checkbox"/> Severe headache	<input type="checkbox"/> Stomach pain
<input type="checkbox"/> Muscle, joint, or body aches different from after heavy exercise	<input type="checkbox"/> Unexplained bruising or bleeding
	<input type="checkbox"/> New skin rash

Daily Staying Healthy Tasks For Soldiers and Leaders

- Take malaria pill
- Apply insect repellent to exposed skin
- Stay hydrated
- Use eye protection
- Wash hands frequently
- Use hand sanitizer when no sink available
- Eat and drink only from approved sources

- **Sleep** - Get 7-8 hours when possible or take naps when the mission permits
- **Activity** – Get at least 150 minutes of exercise per week even while deployed
- **Nutrition** – Energy needs typically increase while deployed. Do not skip meals.

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Recovery and Mental Edge

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There is no doubt everyone is committed to the mission and is probably spending extended hours, working hard. The work is stressful, the food may not be the best, and rest is likely not easy. However, it is critical to set goals and routines in the austere environment.

It is important for everyone to find ways to unwind and relax. It may be difficult, but it's far from impossible.

- Read a book, relax with quiet music
- Use earplugs and maybe a sleep mask when trying to sleep
- Help establish a routine as best as you can.
 - Whenever and wherever possible, encourage your team to eat each meal at the same time of day
 - Routine sleep schedule is important
 - Try to schedule regular shifts so your team can get to sleep at the same time of day and wake up at the same time of day
 - Those on night shift usually find that sleeping in the afternoon and evening is best
 - Encourage your team to exercise at the same time daily too

Sleep, activity, and nutrition will help your team keep and maintain their mental edge.

Here are some questions to ask:

- Are you hydrated?
- When was the last time you ate?
- Are you sleeping well?
- Is something bothering you?
- Talk to someone. It's okay to ask for help.

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Resources

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- US Army Public Health Command website with multiple heat injury prevention cards and posters. Including Urine color test, Heat Can kill and Heat: Work/Rest and Water Consumption Table posters. These can be ordered on-line or downloaded for printing.
<https://usaphcapps.amedd.army.mil/HIOShoppingCart/searchResults.aspx?c=3&s=11&f=0&l=0&t>
- US Army Public Health Command website on Heat Injury Prevention with downloadable briefing slide deck and more detail regarding levels and signs of and treatment for heat injuries. There are also multiple helpful links on this page.
<http://phc.amedd.army.mil/topics/discond/hipss/Pages/HeatInjuryPrevention.aspx>
- TRADOC Memorandum, Heat Illness Prevention Program 2014 (Password protected - AKO). This is a 6 page document with useful information for leaders <https://www.us.army.mil/suite/doc/42304182>

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- Human Performance Resource Center: <http://hprc-online.org/physical-fitness/tools-apps-videos/videos>
- HPRC Program Guides: <http://hprc-online.org/physical-fitness/program-guides>
- HPRC Exercises: <http://hprc-online.org/physical-fitness/training-exercise/exercise/cardio-strength-and-flexibility/muscular-strength>
- ArmyFit: <https://armyfit.army.mil/programs/workouts.aspx>
- NOFFS (great resource for exercising without a lot of equipment): <http://www.navyfitness.org/fitness/noffs/>

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- Operational Stress FM 6-22.5 Combat And Operational Stress Control Manual For Leaders And Soldiers <http://bit.ly/FM6-22>
- Getting Enough Sleep While deployed <http://bit.ly/sleepindeployedsettings>
- Sleep <http://bit.ly/sleepbasicinfo>
- Blue light and impact on sleep <http://bit.ly/bluelightalert>
- Sleep Optimization and Sleep for Warfighters <http://hprc-online.org/mind-tactics/sleep-optimization-1>
- Sleep and Warfighters <http://bit.ly/sleepandwarfightergraphic>
- How much sleep does a warfighter need? <http://bit.ly/warfightersleepneeds>
- Getting Enough Sleep <http://bit.ly/Areyougettingenoughsleep>

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- Mission Nutrition For Combat Effectiveness: <http://bit.ly/soldiernutrition>
- Urine Chart Poster to hang in latrines <http://bit.ly/urinechart>
- Mission-Specific Nutrition: <http://www.armymedicine.mil>
- Human Performance Resource Center – Nutrition: <http://bit.ly/performanceresources>
- Calculate your daily energy requirements <http://bit.ly/hprcnutrition>
- ComRad: Combat Rations Database: <http://bit.ly/rations>
- Calculate your caloric burn! <http://bit.ly/calorieburncalc>; <http://bit.ly/burnperhour>

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- US Army Public Health Command Ebola Website : <http://phc.amedd.army.mil/topics/discond/diseases/Pages/EbolaVirusDisease.aspx>
- Malaria Tip Card: <https://usaphcapps.amedd.army.mil/HIOShoppingCart/searchResults.aspx?c=0&s=0&f=0&l=0&t=malaria>
- Deployment Pest Management Website at US Army Public Health Command:
<http://phc.amedd.army.mil/topics/envirohealth/epm/Pages/DeploymentPestManagementDuringDeployment.aspx>

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- Breathing exercises www.vimeo.com/hprc
- Progressive Muscle Relaxation script <http://bit.ly/ProgressiveMuscleRelaxationscript>
- Mental Skills for Optimal Performance <http://bit.ly/mentalskills>
- Deep Breathing Card <http://bit.ly/deepbreathingcard>
- Mind-Body Guided Meditations <http://bit.ly/Navyguidedmp3>

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- Stairs to relaxation <http://bit.ly/walkstairsrelax>

Resources: Smart Phone Apps

Performance Triad App



- The Performance Triad app helps you learn how to use sleep, activity, and nutrition to optimize your performance and improve your health.

Battle Buddy



- This app helps you be good Battle Buddy by giving you the tools and information needed to assist your buddy during a crisis. It also provides tips and tools to help you intervene before the situation reaches crisis proportions. This app is organized into two primary areas, "My Buddies" and "My Resources".

CBT-i Coach



- The app will guide users through the process of learning about sleep, developing positive sleep routines, and improving their sleep environments. It provides a structured program that teaches strategies proven to improve sleep and help alleviate symptoms of insomnia. CBT-i Coach is intended to augment face-to-face care with a healthcare professional. It can be used on its own, but it is not intended to replace therapy for those who need it.

Mindfulness Coach



- The Mindfulness App helps you to reduce stress and increase wellbeing. Scientific research proves that regular practice for 20 minutes a day brings desired effects

Operation Care Package (game)



- Operation Care Package is a fun, physics-based game where you use a cannon to shoot care packages at challenging obstacles. Earn gold, silver and bronze medals to unlock additional levels. Score too low to level-up? You can play any challenge again without losing points. Game play is easy to learn and can be played by all ages. Connect with family and friends by inviting them to play – or challenge them to beat your score!

Tactical Breather



- The Tactical Breather application can be used to gain control over physiological and psychological responses to stress. Through repetitive practice and training, anyone can learn to gain control of your heart rate, emotions, concentration, and other physiological and psychological responses to your body during stressful situations.

T2 Mood Tracker



- T2 Mood Tracker is a mobile application that allows users to monitor and track emotional health. Originally developed as a tool for service members to easily record and review their behavior changes, particularly after combat deployments, it has now become very popular with many civilian users around the world.

Breathe2Relax



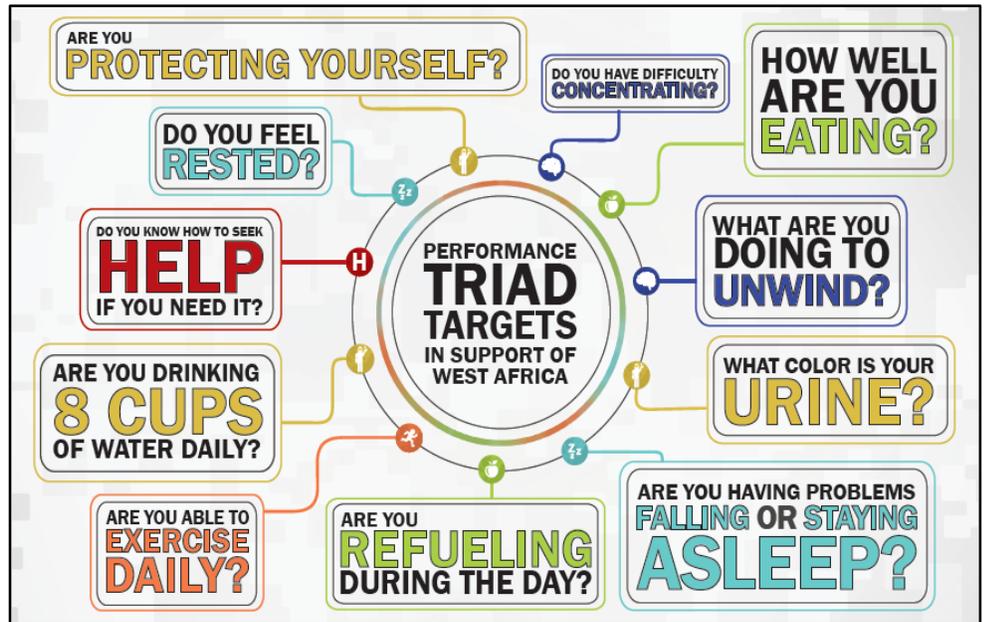
- Breathe2Relax is a portable stress management tool. Breathe2Relax is a hands-on diaphragmatic breathing exercise. Breathing exercises have been documented to decrease the body's 'fight-or-flight' (stress) response, and help with mood stabilization, anger control, and anxiety management



Performance Triad Leader's Guide for West Africa

Soldier's "PERFORM At Your Peak" Guide

Front of Card:



Back of Card:

PERFORM AT YOUR PEAK

P ROTECT & HYDRATE	<ul style="list-style-type: none"> • Safety 1st! ABC: Avoid Body Contact. Ensure protective equipment fits • Wash your hands frequently!! Create friction with your hands for 20 seconds with hand sanitizer or soap and water • Your risk for dehydration is high! Prevent heat injury and drink 32oz of water/electrolyte drinks for every hour spent in a biohazard suit • Your urine should be almost clear to indicate proper hydration
E XERCISE	<ul style="list-style-type: none"> • Routine exercise is important to maintain your strength, endurance, stamina, and mental edge • Exercise at least 150 minutes and 2 days resistance training per week • Keep moving – 10,000 steps/ day (10 min/hour while awake)
R EST	<ul style="list-style-type: none"> • 7-8 hours of sleep every 24 hours is important. If not possible, take tactical naps to get 7-8 hours of sleep • Establish a bed time routine; No caffeine 6 hours before bed; wind down with books or music; block noises and light
F OOD & RE-FUEL	<ul style="list-style-type: none"> • Food is your main source of fuel and helps you meet the demands of the mission • Try to eat 8 servings of fruits and vegetables each day • Re-fuel after exercise and work throughout the day
O BSERVE	<ul style="list-style-type: none"> • Observe how you're feeling and performing • Watch out for your battle buddy and ask your battle buddy to watch out for you • Seek help before it becomes an emergency
R ECOVER	<ul style="list-style-type: none"> • It is important to find ways to unwind and relax • Establish a routine as best as you can
M ENTAL EDGE	<ul style="list-style-type: none"> • Sleep, activity, and nutrition will help keep your mental edge • Read a book, do cross-word puzzles or other games, meditate, or relaxation techniques • Is something bothering you? Talk to someone. It's okay to ask for help



Performance Triad Leader's Guide for West Africa

Leader's "PERFORM At Your Peak" Guide

Front of Card:



Back of Card:

PERFORM AT YOUR PEAK! LEADER'S GUIDE		
P ROTECT & HYDRATE	<ul style="list-style-type: none"> Are you protecting yourself? Are you drinking at least 64oz of water a day and 24-32 oz of water per hour when in biohazard suit? What color is your urine? 	<ul style="list-style-type: none"> Ensure personnel equipment and protective gear fits well Have them practice working in their protective gear before it is required Observe good hand washing practices Assess reasons why personnel might not be drinking enough water (availability, taste, too busy, etc) Refer to urine color chart and follow up with personnel who report darker urine
E XERCISE	<ul style="list-style-type: none"> Are you able to exercise daily? 	<ul style="list-style-type: none"> Exercise is a critical component for personal and unit performance - Make time for it! 150 minutes of aerobic exercise per week 2 days of strength training per week 10,000 steps per day
R EST	<ul style="list-style-type: none"> Do you feel well rested? Are you having problems falling or staying asleep? 	<ul style="list-style-type: none"> Establish deliberate sleep plan Goal is 7-9 hours of sleep per 24 hours - enforce quiet hours and lights out Consolidate sleep areas based on shifts - Encourage tactical naps as appropriate Assess reasons why personnel are not sleeping (personal, family, or mission related)
F OOD & RE-FUEL	<ul style="list-style-type: none"> How well are you eating? Are you re-fueling during the day? 	<ul style="list-style-type: none"> Assess reasons why personnel are not eating? (no appetite, menu fatigue, too tired, etc) Provide opportunities for personnel to refuel after strenuous activities or after working in biohazard suit Encourage personnel to eat fresh vegetables and fruit (when available)
O BSERVE	<ul style="list-style-type: none"> Do you know how to seek help if you need it? 	<ul style="list-style-type: none"> Ensure all personnel have a battle buddy Create an environment that encourages personnel to speak up about concerns Review resources with personnel to ensure they know how to seek help
R ECOVER	<ul style="list-style-type: none"> What are you doing to unwind? 	<ul style="list-style-type: none"> Establish down time in the daily battle rhythm to decompress Assess how your team is holding up to the mission stressors on a daily basis (huddles, one-on-one, checking with battle buddies, etc)
M ENTAL EDGE	<ul style="list-style-type: none"> Do you have difficulty concentrating? 	<ul style="list-style-type: none"> Encourage sleep, activity, and nutrition to help team maintain their mental edge Encourage reading, cross-word puzzles, other mental games, meditation, and relaxation to help the team maintain their mental edge Assess why they are having difficulty concentrating? If appropriate, encourage/refer team members to right resource