

P.O.L.

**Issue
47**

Insight

A Continuing Education Publication for the
Physician Office Laboratory

2006-C

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In This Issue:

**Paper Trail: Manuals &
Recordkeeping**

**Stress Management
ABC's**

Under the Microscope

Accreditation Statements

AAFP Physician's Proficiency Testing Program has been reviewed and is acceptable for up to 12 Prescribed credits by the American Academy of Family Physicians. AAFP accreditation begins 6/12/06. Term of approval is for one year from this date with option for yearly renewal.

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Table Of Contents

	Paper Trail: Manuals & Recordkeeping	4-7
	ABC's of Managing Stress in the Physician's Office Laboratory	8-12
	Under the Microscope: Pinworm Prep	12
	CME Questions	13-15
	CME Test Sheet	16

CME Learning Objectives

Following completion of the self-instructional material, the participant will be able to:

1. Identify required documentation, organize all documentation needed to support laboratory operations and properly store all lab records
2. Describe the nature of stress and its impact on health & performance. Understand the ABC's of stress management and describe techniques for dealing with stress.
3. Recognize the clinical signs of pinworm infection and describe the process of specimen collection and microscopic examination for the presence of pinworm.

To earn the CME, answer the questions included with this issue of the *Insight*, using the form included, or submit the test online at www.aafp.org/pt –  click on Continuing Medical Education

2006-C CME Answers

1.	A	13.	B	25.	B
2.	D	14.	B	26.	D
3.	B	15.	A	27.	D
4.	A	16.	D	28.	A
5.	A	17.	C	29.	B
6.	A	18.	B	30.	A
7.	D	19.	D	31.	D
8.	B	20.	B	32.	C
9.	C	21.	D	33.	A
10.	B	22.	A	34.	A
11.	D	23.	A	35.	A
12.	A	24.	D		

ATTENTION PHYSICIANS AND LABORATORY PERSONNEL

P.A.C.E.[®] Approved For Laboratory Personnel !

Need Documentation of CME Credits?

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P.A.C.E.[®] Due Dates and Course Codes

Event 2006-A	February 28, 2007	254-001-06
Event 2006-B	May 31, 2007	254-002-06
Event 2006-C	September 30, 2007	254-003-06

On the Paper Trail: Manuals & Recordkeeping

By Cathy J. Kenny, MS, MT(ASCP)
Clinical Laboratory Consultant

A CLIA surveyor once told me that CLIA is all about documentation. "If it isn't documented, I'll assume it wasn't done", she said as she searched my lab for written calibration procedures and records of recent calibrations. Since that time, I've been very careful in following the regulations regarding written procedures, documentation, and recordkeeping.

Written Policies and Procedures

These are a must for every lab. Most of us are familiar with the Policy and Procedure Manual, but not everyone is clear on exactly what the surveyors want to see in that big binder. The current CLIA regulations tell us that:

- A written procedures manual for all tests, assays, and examinations performed by the laboratory must be available to, and followed by, laboratory personnel. Textbooks may supplement but not replace the laboratory's written procedures for testing or examining specimens.
- Centers for Disease Control and Prevention (CDC) and Armed Forces Institute of Pathology (AFIP) manuals, manufacturer's operating instructions, and package inserts, are acceptable provided the policies and procedures are available, and the methods in use are clearly indicated. If the laboratory modifies any procedure, the modification must be documented and verified/established
- The laboratory must maintain a copy of each procedure with the dates of initial use and discontinuance
- Procedures and changes in procedures must be approved, signed, and dated by the current laboratory director before use.

- The laboratory director must ensure that personnel follow the procedures in the procedure manual
- The laboratory must have a means to ensure that changes in procedures are communicated to all laboratory personnel

Including a Table of Contents is an easy way to ensure that you have written procedures for all tests currently performed in your lab. I suggest utilizing the manufacturer's operation instructions and package inserts as much as possible, to minimize the manpower needed to maintain up-to-date procedure manuals. An "Amendments and Revisions" form may also assist in keeping current information available in your procedure manual. Consider including a small chart (Figure 1) in the header of the first page of any procedure, to ensure compliance with the 3rd, 4th and 6th bullets above:

(Name of Your Lab)			
Effective Date	_____	Approved By	_____
Revised Date	_____	Approved By	_____
Reviewed Date	_____	Initialed	_____
Discontinued Date	_____	Initialed	_____

Figure 1

To provide documentation of the 5th bullet, you may want to include a statement regarding "following written procedures" on your employee annual evaluation.

In addition, CLIA requires that laboratories have written policies for each phase of testing – the Pre-analytical, Analytical, and Post-analytical phases. These phases of testing may overlap in your lab, so keep in mind that you only need to put a policy in writing once (e.g., If you have a pre-analytical policy for specimen collection, you need not re-write it on each of the policies for specific analytes tested).

Pre-analytic Phase

Your policies for the Pre-analytic Phase of testing should include:

- Test Requisitioning – all requisitions must include:
 - Patient name and unique identifier



- Patient sex and age (or date of birth)
- Name and address of ordering physician (authorized individual submitting the specimen)
- Tests to be performed
- Source of specimen (when appropriate)
- Date and time of specimen collection
- Diagnosis
- Medications and any other clinical considerations
- Signature of ordering physician (may follow verbal orders within 30 days)
- Specimen Collection and Handling (venipuncture, capillary, urine, throat, patient instructions, and any other specimens that you handle)
- Specimen Processing and Accessioning (this should state how you maintain positive identification of a specimen throughout the testing process)
- Specimen Rejection
- Reference Lab Policies (Criteria for Referral of Specimens)
- Verification of Performance Specifications (Method Validation)
 - Accuracy
 - Precision
 - Reportable Range
 - Reference Range

Analytical Phase

The Analytical Phase is probably most familiar to laboratorians, and the CLIA regulations offer guidance regarding required content for laboratory testing policies:

- Requirements for patient preparation; specimen collection, labeling, storage, preservation, transportation, process-

ing, and referral; and criteria for specimen acceptability and rejection. [Some of these may be included in the Pre-analytic policies, if so, do not repeat them in the Analytic policies]

- Microscopic examination, including the detection of inadequately prepared slides
- Step-by-step performance of the procedure, including test calculations and interpretation of results
- Preparation of slides, solutions, calibrators, controls, reagents, stains, and other materials used in testing (including reagent tracking and inventory/supplies)
- Calibration and calibration verification procedures
- The reportable range for test results for the test system as established or verified
- Control procedures (make sure you include what material is used, how to run it, how often to run it, where to document QC results, troubleshooting "out of control results", and documenting Corrective Action)
- Action to take when calibration or control results fail to meet the laboratory's criteria for acceptability
- Limitations in the test methodology, including interfering substances
- Reference intervals (normal values)
- Imminently life-threatening test results, or panic or alert values
- Pertinent literature references
- The laboratory's system for entering results in the patient record and reporting patient results including, when appropriate, the protocol for reporting imminent life threatening results, or panic, or alert values
- Description of the course of action to take if a test system becomes inoperable (include all maintenance and troubleshooting, and what to do in the case of a power outage)



Remember, you are free to utilize the manufacturer's package inserts and other written materials. You are not required to rewrite this information in your manual, but rather, may use it as part of your procedure.

Post-analytic phase

The Post-analytical phase of testing encompasses everything that occurs after the test result is generated. It includes the following:

- Reporting Results – all reports must include:
 - Patient's name and/or unique laboratory identifier for specimen
 - Name and address of the lab performing the test
 - Personnel performing test procedure
 - Date and time of testing
 - Reason for specimen rejection (if applicable)
 - Specimen source (when appropriate)
 - Tests performed with results and Normal ranges, including units of measurement
- Turnaround times
- Supervisor review protocol
- Recognizing clinically inconsistent results and correcting erroneous results,
- Patient confidentiality
- Reference Ranges, Reportable Ranges, Alert Values (this may already be included in your Analytic phase policy, if so, you need not duplicate the information here)
- Troubleshooting potentially erroneous results (those that are suspicious or flagged by the analyzer)
- Turnaround times
- Maintenance for instruments, test systems, reagents, controls, calibrators, and ancillary equipment (e.g., centrifuge,

microscope, timers, pipettes, eyewash station)

- Communication and Complaints
- Incident Management
- Quality Assessment (This is what we used to call Quality Assurance)

Things that just don't fit

After covering the Pre-analytic, Analytic, and Post-analytic phases of testing, you may be left with a few items that just didn't seem to fit, yet still must be documented!

- Proficiency Testing – Proficiency Testing (PT) policies should include your PT provider, instructions on performing PT samples, rotating PT testing among all testing personnel, reporting out PT results, reviewing PT scores, and investigating PT failures.
- Safety – General laboratory safety issues may be included in your Policy and Procedure Manual, or you may have a separate manual for all safety issues.
- Personnel – These policies may include an Organizational Chart, job descriptions, protocol for personnel assessment and continuing education.

Remember, there is no right or wrong way to organize your Policy and Procedure Manual. Use whatever system works best for your lab, just be sure to include all of the required procedures.

The Laboratory Paper Trail

In addition to written policies and procedures, the CLIA surveyors are going to review all documentation generated by your laboratory over the past 2 years (some records need to be kept longer, but most lab documents need to be retained a minimum of 2 years). I categorize the documents that my lab generates, and store them accordingly:

Maintenance

1. Instrument Maintenance logs, Start-up print-outs, and Cleaning Logs
2. Temperature and humidity charts



3. Microscope Cleaning and Maintenance log
4. Eyewash station Cleaning and Flushing log
5. Reagent logs
6. Function checks (pipettes, thermometers, rotators, timers etc.)
7. Instruments Scheduled/Unscheduled Maintenance (service records)
8. Biohazardous waste disposal contract
9. Inventory and Supply system

Personnel files

1. COLA personnel form (if applicable)
2. Training and orientation records
3. Educational qualifications
4. Competency evaluation
5. Annual evaluation (to be performed at 6 months and yearly thereafter)
6. Continuing Education and Inservice Records
7. OSHA training records
8. Hepatitis B vaccination records
9. Current job description (signed by lab director)
10. Non-compliance Investigation Forms

Quality Control/Calibration/Verification

1. QC Log for all manual tests
2. QC log for automated tests without on-board QC data retrieval (include means to identify outliers, shifts and trends)
3. Instrument print-outs
4. Corrective Action Logs
5. Calibration and Calibration Verification records

ATTENTION PHYSICIANS!

Are you an experienced laboratorian or laboratory director? If you would be interested in assisting the AAFP-PT Program in an advisory capacity, please contact Cheryl Murray at cmurray@aafp.org to find out how.

6. Performance Verification Records (Must be retained for lifetime of test method)

General Laboratory

1. Specimen rejection log
2. Complaint Investigation forms
3. QA worksheets and reports
4. Incident Management forms
5. Regulatory file (keep all CLIA correspondence for the lifetime of the lab)

Proficiency Testing

1. Copies of all paperwork generated by PT survey
2. Signed Results form and Attestation Statement
3. PT Failure Investigation Report
4. Split sample logs for analytes with no available PT

On-going Records

1. Test requisitions
2. Instrument Print-outs
3. Accession logs
4. Worksheets - daily instrument worksheets, manual testing worksheets
5. Lab copies of patient reports
6. Reference laboratory requisitions

Once you have all of your paperwork organized, you will be ready for an inspection at any time.

Sources:

1. Clinical Laboratory Improvement Amendments of 1988: Final Rule: Part II US Department of Health and Human Services Washington, DC Feb 92 42CFR Part 493.
2. Appendix C. Survey Procedures and Interpretive Guidelines for Laboratories and Laboratory Services (State Operators Manual).
3. COLA Laboratory Accreditation Manual.
4. Quality America CLIA Compliance Manual.

Recommended websites:

- www.cms.gov
www.cola.org
www.quality-america.com

ABC's of Managing Stress in the Physician's Office Laboratory

By Julie Wood-Warner, PhD

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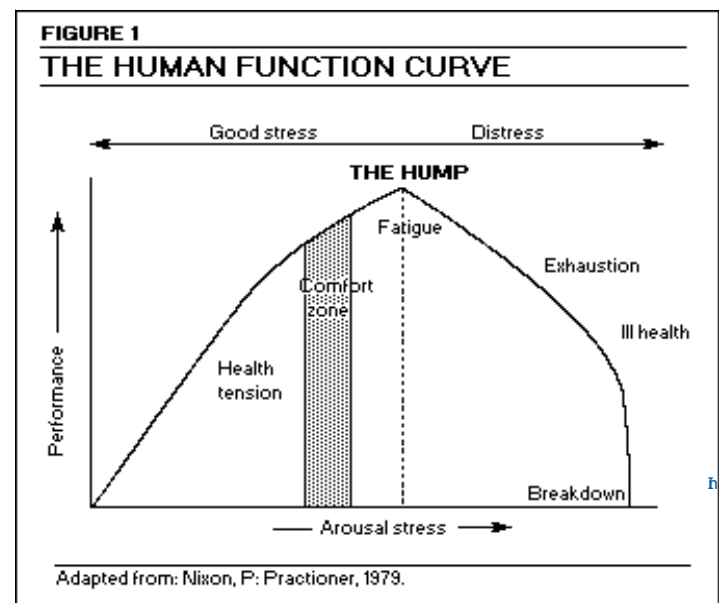
Like most jobs in healthcare, work in the physician's office lab can be stressful. A typical day can include patients piling up in the waiting room, doctors needing results *stat*, and nurses calling to add one more test that wasn't on the lab order. There are forms, forms, and more forms such that you wonder how many countless hours you'll spend keeping track of which specimen goes to what lab to be covered by which insurance company. Your feet likely ache after standing all day, but just as you're ready to call it quits, you discover a memo about the meeting that you were supposed to attend over the lunch hour that you missed to handle the patient overflow from the acute clinic that morning. The meeting, by the way, was about the new quality assurance program that your office manager wants to implement next week, so you will be required to come in an hour earlier on Monday to review procedures. And then there's the chaos that you face as you race home to let the dog out, throw dinner together, and become the family chauffeur for soccer practice, piano lessons, and miscellaneous errands. Are you feeling stressed yet? If so, keep reading. Stress can't always be changed, but by practicing the ABC's of stress management, you can learn to feel a lot less stressed.

The Nature of Stress

Although typically thought to be negative, stress is actually a necessary and inevitable part of life. Without stress, there would be no perception of danger, limits wouldn't be known, and motivation for challenging tasks would be lacking. As such, the experience of stress is nothing more than the feeling of arousal or a signal that something in the environment needs attention and coping responses. Stressful events, however, can be both good and bad. "Good" stress includes those events that are usually considered to be positive. For example, job promotions, new

pieces of equipment, and new employees to share the workload can be exciting, but communication, changes in relationships with colleagues, new work routines, and periods of learning and practicing new skills and techniques often create stress and require adjustment. "Bad" stress refers to those circumstances in which we experience negative reactions to something unwanted or threatening, such as an equipment failure or miscommunication about a test result. If not adequately managed, "bad" stress can lead to distress.

Years ago, the impact of stress was described in the Yerkes-Dodson (1908) anxiety or human function curve. As the graph in figure 1 shows, when there is little stress or anxiety, arousal is minimal, and the motivation to perform is low. As stress increases, however, performance and efficiency increase proportionately, but only to a certain point. When the level of stress becomes too high, the stress is no longer helpful. In fact, at high levels, stress can result in *distress* such that performance is impaired. Further distress can then lead to breakdown and exhaustion. The key to performing at one's best to keep stress in the optimal range. Knowing the ABC's of stress management can help.



Posen's (1995) Stress management for patient and physician, Internet mental health (www.mentalhealth.com); permission to copy and distribute is given in the article.

The ABC's of Stress Management

A Before stress can be adequately managed, it must first be identified and understood. Thus, "**A**" stands for **ASSESS** stress. Assessing stress involves knowing how you typically react under stress. Do you have physical symptoms, such as headaches, stomach cramps, muscle tension (especially in the neck or back), insomnia, fatigue, chest pain, flushing, or trembling? Do you experience frequent illnesses? Do you experience cognitive or mental symptoms, such as difficulty concentrating and remembering, racing thoughts, indecisiveness, or confusion? Emotional reactions to stress can include anxiety, irritability, anger, impatience, and frustration. Finally, stress also can result in behavioral symptoms, such as increased or decreased eating, fidgeting, crying, yelling, blaming, drinking, smoking, or other nervous habits like biting nails, twirling hair, or pacing. Individual reactions to stress vary widely, so it is important to know your unique stress response pattern.

In addition to understanding your symptoms of stress, it's also helpful to identify the sources. Stress can come from both internal and external sources. Several internal factors, such as lifestyle, thought patterns, and personality traits, contribute. For example, increased caffeine consumption, delayed sleep, over-scheduling of activities, and skipped meals are common responses to stress, but these lifestyle choices usually increase rather than decrease stress. Negative thinking can lead to unpleasant moods when stressed, and certain personality characteristics, like perfectionism, the Type A behavior pattern, being a workaholic, and even being a people pleaser, can heighten the stress experience. External sources, such as the physical environment, organizational rules, daily hassles and life events play a role in increasing stress levels as well. Lab spaces often are small and crowded. Organizational rules, while ensuring safety and standardization, sometimes increase pressure. Controls must be run properly. CLIA, CLSI, OSHA, HIPAA, and JCAHO guidelines must be followed, not to mention your own office's policies and procedures, and no one ever complains about having too little paperwork or "red tape." Finally, daily hassles, such as fre-

quent interruptions, traffic jams, or complaints from patients, and major life events, such as a personal or family illness, can be enough to put you "on edge."


Once you have identified your unique symptoms and the sources of your stress, then you can determine if the stress is something that you need to **ALTER**, **AVOID**, or **ACCEPT**. Too often, stress levels go up when we're acting and thinking as if we can control the stressor, when in reality, the stress is something that we must accept and work to avoid. For example, we can't always alter a patient's frustration with waiting for their lab results, but we can avoid confrontations by encouraging the patient to talk with their doctor and working to improve our inter-office communications. Similarly, we may not like all of the regulations that govern laboratory operations, but we can accept the policies, alter attitudes, and avoid additional stress by following the guidelines and limiting negative thoughts about them.

A The ability to recognize our stresses and respond in a healthy manner is affected by our **BELIEFS** about ourselves, our environment, and the things that cause us to feel stressed. Thus, monitoring our thoughts and reframing them into more positive or realistic beliefs are important components of a good stress management strategy. All of us have occasional thoughts that can interfere with our coping. For example, have you ever had negative thoughts about the doctor who always runs late in clinic and leaves you with a backlog of patients at the end of the day? Would you feel less stressed if you focused on the fact that those patients are highly satisfied with the time the doctor spends with them and are always kind to you in return? What kind of thoughts do you have when a particular employee fails to complete the lab form correctly or puts it in the wrong file—*again*? Do you repeatedly get irritated and dwell on how incompetent they seem and the extra work that you now have, or do you remind yourself of what they do right and laugh about the paperwork that no one enjoys?

Over the years, most of us have learned to respond to stress with a typical pattern of thoughts, emotions, and behaviors. When



under stress, our thoughts often occur automatically and are related to basic belief systems that are rooted in our development. These thoughts also reflect some of our personality characteristics and as such, play a particularly important role in our experience of stress. For example, someone who is more optimistic will likely discover some type of challenge or benefit in dealing with a problematic situation (i.e., see their glass as half full), whereas a pessimist may focus on the difficulty and resign themselves to a miserable experience (i.e., see their glass as half empty). Idealistic, rather than realistic expectations, can influence the degree to which we punish ourselves with “*should’s*” or accept our limitations. Similarly, thinking that is more rigid (all-or-nothing, black-or-white) can limit the options that we perceive for managing a stressful situation. Levels of distress also increase when we *awfulize* or *catastrophize*, that is, assume the worst, as well as when we ruminate about something that cannot be changed. Overall, our beliefs about stressors and how we think we can handle them play a large role in determining our subsequent emotional and behavioral reactions to stress.

 In addition to accurately assessing stress and modifying beliefs that elevate distress, there are many things that can be done to better manage or **CHANGE THE CONSEQUENCES** of stress. These stress management strategies tend to fall into several categories.

1. Change Your Lifestyle: Too often, stress contributes to unhealthy habits, such as overeating or under-eating, compromising sleep, and skipping exercise in the hopes of getting more done or increasing comfort, but these behaviors typically only add to the experience of stress. A healthy lifestyle is one of the best ways to combat stress, so practice the following strategies:
 - Eat a well-balanced diet: Eating nutritionally sound meals, especially breakfast, limiting junk food, and consuming appropriately-sized portions can improve energy levels and physical health. Caffeine and chocolate are *not* major food groups, so limit their use for immediate gratification when stressed.
 - Sleep: When stressed about things we “*have*” to do, we often stay up late, get up early, or sleep poorly during the night and end up feeling more fatigued, irritable, or distractible. Recent research has indicated that sleep deprivation is associated with poor performance, increased accidents, changes in immune system functioning, and increases in some illnesses. Consistently getting a good night’s sleep also provides some protection against stress.
 - Exercise: Regular exercise can increase energy levels and stamina, improve physical fitness, and elevate mood by stimulating the release of endorphins, the body’s natural pain killers. Stress is the reason that many give up for getting out of exercise routines, but maintaining such routines can keep stress levels manageable. Remember though, exercise should decrease stress, not create it!
 - Limit harmful substances: Increasing the intake of caffeine, alcohol, tobacco, or other substances is an automatic response to stress for some. Thus, limiting or eliminating these substances can improve long-term stress management.
 - Leisure time: In a busy office, multitasking is the norm. For many, going home simply means switching the focus to other people and tasks. Making time for yourself and engaging in pleasurable activities are important ways to replenish your energy and avoid burnout.
2. Change Your Thinking: Take a moment to reflect on the negative self-talk that may be increasing your stress response. Are your thoughts helping you or hurting you? Are they getting you what you want?
 - Try not to view stress in exaggerated terms by awfulizing or catastrophizing. Similarly, avoid overreacting and thinking of everything as absolutely critical and urgent. Can your beliefs be reframed into something that is more realistic or positive? For example, is the day really ruined because the rapid strep kits weren’t reordered in time, or is



this an unfortunate problem that's causing some inconvenience?

- Watch out for "should's" and "must's;" these may be unrealistic expectations.
 - Be careful not to personalize that which doesn't specifically pertain to you.
 - When it comes to standardized protocols for specific lab tests, you can't modify what you do, but you can sacrifice perfection to get the job done in other situations. No one can be perfect, but you can be good enough.
 - Take time to recognize the positives in your day. Remind yourself of what went well.
 - Keep a good sense of humor. Laugh often. "A merry heart doeth like a good medicine" (Proverbs 17:22).
3. Change Stressful Situations: Remember that stress cannot be eliminated, but often you can change the way you respond to stress or change situations that are stressful.
- Relaxation exercises: Stop and take a few deep breaths when you feel the tension mounting. It sounds simple, but you can't be both tense and relaxed at the same time. Learn specific exercises for progressive muscle relaxation, meditation, mindfulness, self-hypnosis, or guided imagery. For example, taking a deep breath and imagining a successful resolution can help you address a conflict with a colleague. Self-help books, audio and video tapes, CD's, and professional resources are available to help you learn and practice these techniques.
 - Problem-solving: Change what you can, avoid or accept what you can't. Think creatively to discover more effective solutions.
 - Time management: To be more efficient, determine what is necessary and urgent versus desirable but can wait. It also helps to think about tasks in terms of what you *must* do, *should* do, or *want* to do. Don't waste time on minor issues. Pace yourself to save time and make your "to-do" list more manageable.
- Money management: Developing a budget and sticking to it can reduce bill paying stress, pressure to work more hours, and conflicts at home, as well as provide more resources for leisure.
 - Assertiveness: Learn how to say "no" when you're overwhelmed or when the request isn't reasonable. If being a "people pleaser" isn't pleasing you, work on setting appropriate limits regarding what you do for others.
 - Relationships: Lack of social support is as much of a health risk factor as smoking, high cholesterol, and lack of exercise, so it's not surprising that having a good support system is essential to managing stress. Think about your support. Can some of your work be delegated? Can someone help you with resources that you need, whether at work or at home? Nurture your relationships with partners, families, friends, and co-workers. Consider leaving relationships or jobs that are destructive or aren't a good fit. Get involved in activities with others. Some larger offices have committees, and getting involved usually results in greater job satisfaction. Share your ideas for stress management with others. They may be able to share some with you too. Finally, get connected spiritually. Research indicates that religious beliefs, prayer, and participation in a faith community, regardless of the type of faith, are associated with perceptions of greater health and well-being.
- Just as you had to work at developing phlebotomy skills, recognizing bacteria under the microscope, or dealing with inter-office communications, you have to learn and practice stress management skills to make them effective in times of stress. The strategies described above are not a finite list. Keeping stress in that optimal range to be productive and efficient at work and home while also learning how to relax and enjoy life involves



both multi-tasking and letting go. The ABC's of managing stress will be a little different for everyone, but in principle, these basic strategies can help you feel a lot more stress-free.

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Under the Microscope: Pinworm Prep

Pinworms, or *Enterobius vermicularis*, are human parasitic pathogens which are highly infectious via fecal-oral transmission of the egg phase of the organism's life cycle. Infections are especially common in children who typically present with symptoms of itching/scratching and irritation of the perianal area. In addition, the patient may complain of restlessness, insomnia, and nightmares. Infections are more common in females, who may also exhibit symptoms of vaginitis with mucoid discharge or urethritis.

E. vermicularis has a simple life cycle. The ingested eggs mature in 4-6 weeks in the intestine. The adult female worm migrates from the anus during the night and deposits her eggs around the anal opening and in the perianal folds. This migration and presence of eggs is responsible for the irritation and itching. Scratching allows the eggs to be transferred to the hands, primarily underneath the fingernails, allowing them to be passed to the next victim.

Diagnosis is confirmed by visualizing the pinworm eggs or adult worms microscopically. Stool specimens are frequently negative for

this parasite. Instead, the specimen of choice is the so-called "scotch (cellulose) tape" prep.

The sample should be collected early in the morning, before the patient has bathed or used the bathroom. A piece of tape, approximately 4 inches long, is firmly pressed, sticky side down, over the anal opening and surrounding perianal skin. Note: only use clear cellophane tape, avoid frosted ("magic") tape. The tape is then placed onto the surface of a glass microscope slide. Collection kits are also available commercially.

When the slide is received in the laboratory, the tape may be lifted and a small drop of xylene added beneath the tape to clear cellular debris. The slide is then examined under low power, using reduced contrast. Pinworm eggs are approximately 30 x 50 µm in size and are asymmetric oval or football shaped with one side slightly flattened. They possess a thin, smooth shell and the developing larva may be seen inside. The adult worm measures approximately 8 x 13 mm long by 0.4 mm in diameter. They can be recognized by their characteristic long pointed tail ("pin") and the presence of a winglike expansion at the anterior end.

A series 4-6 of tape samples collected on different days is recommended to rule out pinworm infection.

Due to the highly infectious nature of this parasite, laboratory personnel are advised to always wear gloves and practice good hand washing technique when handling suspected pinworm specimens.

Sources:

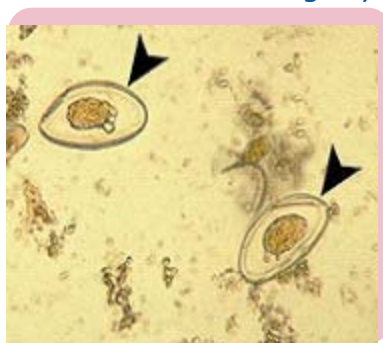
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2. Forbes BA, Sahm DF, Weissfeld AS, *Bailey & Scott's Diagnostic Microbiology*, 10th ed. St. Louis: Mosby, Inc.; 1998.

3. Henry, JB, *Clinical Diagnosis and Management by Laboratory Methods*, 19th ed. Philadelphia: W.B. Saunders Co.; 1996.

4. Koneman EW, Allen SD, Janda WM, Schreckenberger PC, Winn, Jr WC, *Color Atlas and Testbook of Diagnostic Microbiology*, 5th ed. Philadelphia: Lippincott; 1997.

5. NCCLS. *Provider-Performed Microscopy Testing; Approved Guideline*. NCCLS document HS2-A (ISBN 1-56238-487-2). NCCLS, 940 West Valley Road, Suite 1400, Wayne, Pennsylvania 19087-1898 USA, 2003.



CLIA Update

The Medicare Learning Network (MLN) has prepared a new brochure providing an overview of the Clinical Laboratory Improvement Amendments (CLIA). This publication is designed all health care providers involved in providing laboratory services to their patients. It contains information on test categorization, types of certificates, how to obtain a certificate, and proficiency testing.

The brochure will be available at the AAFP-PT booth at meetings later this summer. The brochure may also be downloaded from www.cms.hhs.gov/MLNProducts/downloads/CLIABrochure.pdf.

More detailed information about CLIA can be found at www.cms.hhs.gov/clia/.

2006-B CME Questions

The material necessary to review to answer the following questions may be found in this issue of the *P.O.L. Insight* and the *AAFP-PT Handbook* or on the AAFP-PT website (<http://www.aafp.org/pt> and click on Continuing Medical Education). The Test Sheet may be found on page 16 of the *P.O.L. Insight*. The Accreditation information may be found on the inside cover of this issue.

1. True or False: Textbooks may supplement, but not replace written procedures.
 - A. True
 - B. False
2. Pre-analytic policies should include procedures for:
 - A. Test requisitioning
 - B. Specimen collection & handling
 - C. Specimen rejection
 - D. All of the above
3. True or False: If policies overlap, you must included them in duplicate in the manual.
 - A. True
 - B. False
4. True or False: It is not necessary to copy information from the manufacturer's package insert if the insert is included in the manual.
 - A. True
 - B. False
5. Method validation should be included in which setion of the procedure manual?
 - A. Pre-analytic
 - B. Analytic
 - C. Post-analytic
 - D. Is not part of a procedure manual
6. True or False: Panic values and the protocol for reporting them should be specified in the procedure manual
 - A. True
 - B. False
7. In addition to actual test procedures, the following must also be documented:
 - A. Proficiency testing
 - B. Safety issues
 - C. Personel policies
 - D. All of the above
8. True or False: It is not necessary to document review of proficiency testing results.
 - A. True
 - B. False

9. Most laboratory records should be maintained for at least:
 - A. 6 months
 - B. 1 year
 - C. 2 years
 - D. 5 years
10. True or False: If a procedure is no longer in use, you may discard it as long as a current procedure is available.
 - A. True
 - B. False
11. Stress can _____?
 - A. Be both good and bad
 - B. Be a signal that something in your environment requires attention.
 - C. Lead to performance impairment.
 - D. All of the above
12. True or False: The Yerkes-Dodson Human Function Curve describes the relationship between stress and performance.
 - A. True
 - B. False
13. True or False: Sources of stress are always external.
 - A. True
 - B. False
14. True or False: Increasing caffeine consumption and skipping meals are effective ways to deal with stress.
 - A. True
 - B. False
15. True or False: Some stress can be managed by altering, avoiding, or accepting the stressor.
 - A. True
 - B. False
16. Our typical stress response pattern arises from our:
 - A. Beliefs
 - B. Personality Type
 - C. Emotions
 - D. All the above
17. "Awfulizing" a situation can cause stress levels to:
 - A. Decrease
 - B. Remain the same
 - C. Increase
 - D. Increase immediately, then gradually decrease
18. True or False: An individual's basic personal belief systems do not influence their stress response.
 - A. True
 - B. False
19. Changes in which of the following can help manage stress:
 - A. Lifestyle
 - B. Thinking
 - C. The stressful situation
 - D. All of the above
20. True or False: Overeating, skipping exercise, and sleeping less are effective ways to manage stress.
 - A. True
 - B. False
21. Sleep deprivation is associated with:
 - A. Increased accidents
 - B. Changes in immune system function
 - C. Improved performance
 - D. "A" and "B"
22. True or False: Limiting or eliminating caffeine, alcohol, and tobacco can improve stress levels.
 - A. True
 - B. False



23. True or False: "Musts" and "shoulds" may be signs of unrealistic expectations.
- A. True
 - B. False
24. Changing your behavior in response to stress may include:
- A. Practicing relaxation exercises
 - B. Calling in sick
 - C. Effective time management
 - D. "A" & "C"
25. Deep breathing, meditation, and self-hypnosis are examples of:
- A. Problem solving skills
 - B. Relaxation exercises
 - C. Time management
 - D. All of the above
26. Lack of social support is a health risk similar to:
- A. Smoking
 - B. High cholesterol
 - C. Lack of exercise
 - D. All of the above
27. A social support network can include:
- A. Family
 - B. Co-workers
 - C. Friends
 - D. All of the above
28. True or False: A having spiritual connection is associated with perceptions of greater health and well-being.
- A. True
 - B. False
29. *Enterobius vermicularis* parasites are commonly called "tapeworms."
- A. True
 - B. False
30. True or False: Pinworm infections are spread via the fecal-oral route.
- A. True
 - B. False
31. Sign of pinworm infection may include:
- A. Itching and irritation in the perianal area
 - B. insomnia
 - C. Urethritis in females
 - D. All of the above
32. The pinworm life cycle is _____ weeks.
- A. 1-2
 - B. 3-4
 - C. 4-6
 - D. 10-12
33. True or False: Multiple samples may need to be collected to detect a pinworm infection.
- A. True
 - B. False
34. Collect the specimen using:
- A. Clear cellophane tape
 - B. Duct tape
 - C. Frosted "magic" tape
 - D. Any of the above
35. True or False: Pinworm eggs are slightly football shaped and possess a thin, smooth shell.
- A. True
 - B. False



AAFP-PT CME Test Answer Sheet

ALL INFORMATION MUST BE COMPLETED TO OBTAIN CREDIT

2006-C (submit by September 30, 2007 to obtain credit)

Fill in the circles for the correct answers:

Please print:

Individual AAFP #: _____

(All participants in the AAFP-PT are now assigned a 7-digit AAFP number; AAFP-member physicians should use their AAFP-ID number; non-member physicians and laboratory personnel are assigned an ID number the first time CME is submitted)

Lab AAFP #: _____

(All labs enrolled in AAFP-PT are assigned a 7-digit AAFP number. The Lab ID number may be found on the Order Confirmation and on evaluations.)

Name (Last) (First) (Initial)

Street

City / State/ Zip Code

Fax Number

Email Address

Address, Fax, or Email change Name change

Select one if you are a physician:

- FP IM
 PED OB/GYN
 Other

Select one if you are laboratory personnel:

- MT MLT Nurse Practitioner
 RN LPN Physician Assistant
 Med. Assist. Laboratory Manager
 Laboratory Consultant Other

Evaluation: please fill in bubble between 1 & 5 – 1 denotes poor, 5 denotes excellent:

1. To what extent were the objectives achieved?
poor ① ② ③ ④ ⑤ *excellent*
2. To what extent did the AAFP-PT education program *content* relate to the program's objectives?
poor ① ② ③ ④ ⑤ *excellent*
3. Rate your overall degree of satisfaction with this education program.
poor ① ② ③ ④ ⑤ *excellent*
4. In what general area of laboratory practice would you like to receive educational materials? (please mark all that apply).
 - CLIA and/or regulatory. requirements
 - Good laboratory practices
 - Test Procedures
 - Technical Subjects
 - Business/Financial Aspects
 - Other, please specify _____

	A	B	C	D
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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Important: Keep a copy of the completed form for your records. Documentation of CME hours earned is mailed to lab personnel in January, April, July, and October. Allow 7-10 business days for requested transcripts.