THE PURPOSE OF CHEMOCHEK CERTIFICATION

The CHEMOCHEK Certification Program is designed to ensure that skill in handling chemotherapy drugs during administration has been attained and demonstrated by providing an objective system of evaluation the performance of an individual.

Because of the risks involved in handling chemotherapy drugs, individuals who prepare and/or administer these drugs must be thoroughly trained to reduce the exposure to these drugs. There are two primary goals of this training program:

1. To inform preparers of chemotherapy drugs of the risks associated with handling these drugs and the precautions that should be taken to reduce exposure.

2. To provide the administrator of chemotherapy drugs with a system to evaluate their knowledge in safely preparing, administering, handling and disposal of chemotherapy drugs.

Prior to this certification program, no formal means of evaluating competency had been available. This certification program should be used to evaluate whether an individual has the skills necessary to handle chemotherapy drugs with limited risk to oneself, other hospital personnel and patients.

THE PARTICIPANTS

For purposes of successful completion of this training course, it is assumed that the course participant has worked within a pharmacy environment, has prepared sterile products and has been evaluated by a supervisor to possess the prerequisite skills and knowledge necessary to enter a chemotherapy training program such as the CHEMOCHEK program.

THE PROGRAM

The first portion of this training program is the Introduction. The Introduction is designed to provide general information on all aspects of working with chemotherapy drugs. The second portion of this training program is a performance-based training system designed for course participants to master the specific skills necessary for safe handling of chemotherapy drugs.

WHAT IS PERFORMANCE-BASED TESTING?

Performance-based testing (PBT) is a training format used to teach a person how to perform a specific job or a portion of a job. Unlike traditional lecture-based programs, PBT program participants are provided with an opportunity to practice and then demonstrate their mastery of the learning objectives (performance objectives). PBT, and the way it is designed and implemented, provides an excellent record of worker competence and can serve to document qualifications (certification) for performance and safety. Performance-Based Modules

In this program, training is divided into specific units of instruction called modules. The purpose of a module is to provide the information and practice activities necessary to allow mastery of a job task or a series of related job tasks. A list of the modules is provided in the Introduction module. By using specific modules for each topic or task relating to a training program, the program can be self-paced. This offers many advantages to the learner. First learners can proceed through the training program at a learning rate which is comfortable to them. Secondly, all the information necessary to complete each module is contained within the module, saving the time of searching for the information needed to become certified. In order to successfully complete the program, all the text materials must be read and the modules must be successfully completed.
THE RIGHT TO KNOW

It is the right of any person who handles chemotherapy drugs to be informed of their risks and the precautions and techniques that can be used to reduce exposure. It is their responsibility to use the knowledge and techniques. A "Right to Know" informed consent form is provided with each CHEMOCHEK Program, in the Introduction. After reading the Introduction, you are advised to have the participant sign the "Right to Know" form and place it in their personnel file.

APPOINTING A CERTIFIER

A "certifier" will need to be appointed to oversee and administer the CHEMOCHEK Training and Certification Program. The Certifier should understand the Performance Criteria and be able to demonstrate correct technique when asked to do so. The Certifier will also aid in administering self-tests and assign pass/fail grades during performance tests. The Certifier will present the scores to Kendall-LTP to vouch for the authenticity of achievement. *Kendall-LTP will issue a Certification of Completion for the ChemoChek Training and Certification.

The Certifier could be a pharmacy director, pharmacy supervisor, assistant pharmacy supervisor or other pharmacy professional with the necessary skills, depending on the size of the institution. To qualify, the Certifier must also be familiar with the course content before administering this course to other personnel.

THE CERTIFICATION PROCESS

Several documents provide direction to the learners and allow for monitoring the process of learners. These documents are called progress plotters. A progress plotter lists all the modules in the Program and serves as the record of module completion and learner certification. For this reason, progress plotters must be accurate and current.

Two types of progress plotters are used in this course: the Master Progress Plotter and the Personal Progress Plotter. Both are shown at the beginning of this book.

MASTER PROGRESS PLOTTER

The Master Progress Plotter is a course management tool used by the certifier. The purpose of this plotter is to monitor and record the progress of all participants in the program at your institution. The Master Progress Plotter for this program is shown in the Introduction. When a module is completed, the certifier initials and dates the appropriate space on the plotter indicating certification for that module.

PERSONAL PROGRESS PLOTTER

The Personal Progress Plotter is a plotter used by each course participant. The purpose of this plotter is to maintain a record of individual progress in the program. To use the Personal Progress Plotter, the certifier signs and dates the appropriate space each time the participant satisfactorily completes a module. Keep a copy of this plotter with the participant's personnel records.
USING THE CHEMOCHEK KIT

The CHEMOCHEK Training and Certification Program is designed to provide a modular system for (1) training an individual in the special techniques necessary for safely handling chemotherapy drugs, and/or (2) certifying a trainee (or an experienced practitioner) as having mastered these special techniques. It is intended for individuals who have already demonstrated competence in basic aseptic technique or as an adjunct to an aseptic technique training program.

HOW DOES IT WORK?

The CHEMOCHEK system utilizes a special dye which is distinctly visible, even in small amounts, under an ultra-violet light. The dye is almost invisible in normal light, but appears as a yellow-green bright spot under an ultraviolet light. This yellow-green brightness is referred to as "fluorescence." The individual who will act as certifier should practice with the dye and ultraviolet light until the fluorescence can readily be identified. In addition, the certifier must always be aware of the following notes:

1. Ultraviolet light may be harmful to eyes an unprotected skin tissue. Never shine the light into eyes or for prolonged periods on the skin.

2. There is a certain "background level" of fluorescence in a given environment so scanning with the ultraviolet light must be done before any procedure is performed. This will eliminate any extraneous fluorescence from being unfairly attributed to the participant. The area must be cleaned before beginning any certification procedure.

3. The fluorescence may be invisible to those who suffer from certain types of "color blindness."

4. Fluorescence is generally more visible in a darkened or unlit area. BSC lights should be turned off when scanning the BSC work area and room lights should be lowered, as much as possible, for other procedures.

5. If traces of dye are difficult to remove, a 3.5% sodium bicarbonate solution will deactivate the dye.

6. For best results, use diluted or opened fluorescent dye solution (vial/ampoule) within a one month period. Keep out of direct light.

CERTIFICATION CRITERIA

The CHEMOCHEK Training and Certification Program is designed to allow the institution to establish and adjust the criteria of the Performance Objective according to its standards or to the level of the competency of the participant being certified.

Certain arbitrary limits have been assigned throughout the modules as the most conservative (not the most stringent) criteria to be employed. For example, some modules require that if more than three dime-sized spots are visible under ultraviolet scanning upon completion of the procedure, the participant has not mastered the task and must repeat the procedure. However, a participant of reasonable skill should be able to complete all of those modules with a total of five or less dye spots visible when scanned.
Most breaks in technique will produce spots that are quite small. The use of the "dime-sized" criteria is meant to eliminate the participant who produces a large spill that results in only one spot from meeting the criteria of the Performance Objective. Many of the modules require that proper cleanup and disposal procedures be performed prior to scanning. It may be more appropriate to scan the area before and after cleanup to check both preparation and disposal techniques.

**Note:**
The certifier, according to institution policy or agreement, must set the Performance Objective criteria prior to beginning a module, and the criteria must be communicated and understood. To avoid difficulty and potential labor disputes, institution-specific criteria should be established for groups or classes of participants (not individuals) and must be in writing.

If a participant fails to complete the Performance Objective for any module, the certifier, per institution policy or agreement, must determine if and how many times a participant may attempt the module.

**REPORTING TEST SCORES**

Upon completion of the CHEMOCHEK Training Program, the Certifier needs to send a copy of the Personal Progress Plotter and the completed Evaluation Form to: CHEMOCHEK Certification, Tyco Healthcare Group LP. Kendall-LTP, 2 Ludlow Park Drive, Chicopee MA, 01022

**Within three to four weeks** after receipt of the completed evaluation form and progress plotter, a certificate of completion will be mailed to the participant.

**FINAL CERTIFICATION**

A Certificate of Completion will be sent to the participant.
STEPS TO COMPLETE THE CHEMOCHEK PROGRAM

1. If a certifier has not yet been appointed for the program, one must be appointed before you begin. Typically the certifier is well versed on aseptic technique and preparation of chemotherapy drugs. Generally the Director, Assistant Director or Supervisor of the pharmacy is appointed as the program certifier.

2. Once a certifier is appointed, they must first read the Instructions to the Certifier module of this book.

3. After the certifier has been appointed and they have read the Instructions to the Certifier module you may begin with the Introduction module.

4. Upon completion of the Introduction module your certifier verifies successful completion of the module and initials the Personal Progress Plotter. All subsequent modules are verified in much the same way. Simply follow the easy to read directions in each module for the necessary steps on successful completion. Don't forget to include the amount of time it took you to complete each module on both the Performance Test page and on your Personal Progress Plotter.

5. After completing the Introduction module you should read and complete the Right to Know sign-off sheet. This should go into your personnel file.

6. After completion of all modules, please fill out the evaluation form and send it along with a copy of your Personal Plotter to the address listed on the evaluation. A certificate of completion will be mailed to you 3-4 weeks after receipt of the completed evaluation and progress plotter.
# PHARMACY

## Training and Certification Program

### Personal Progress Plotter

<table>
<thead>
<tr>
<th>Name:</th>
<th>Institution:</th>
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<table>
<thead>
<tr>
<th>MODULE</th>
<th>TITLE</th>
<th>SIGNATURE OF CERTIFIER</th>
<th>DATE</th>
<th>TIME REQUIRED</th>
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<tbody>
<tr>
<td>TEXT</td>
<td>Introduction to Chemotherapy Drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>Don and Remove Protective Clothing</td>
<td></td>
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<tr>
<td>A2</td>
<td>Don and Remove Protective Clothing for Spill Cleanup and Preparing Chemotherapy Drugs Outside BSC.</td>
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<tr>
<td>B1</td>
<td>Perform First Aid for Direct Skin/Eye Contact with Chemotherapy Drugs.</td>
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<tr>
<td>B2</td>
<td>Clean Up Spill Outside Biological Safety Cabinet (BSC)</td>
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<tr>
<td>B3</td>
<td>Clean Up Spill Inside Biological Safety Cabinet (BSC)</td>
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<td>C1</td>
<td>Disinfect Biological Safety Cabinet (BSC)</td>
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<tr>
<td>C2</td>
<td>Decontaminate Biological Safety Cabinet (BSC)</td>
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<tr>
<td>D1</td>
<td>Prepare Chemotherapy Drug for Transport and Delivery</td>
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<tr>
<td>D2</td>
<td>Set Up Chemotherapy Drug Storage Area</td>
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<tr>
<td>E1</td>
<td>Dispose of Chemotherapy Waste</td>
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<td>F1</td>
<td>Withdraw Solution from a Vial and Inject into Small Volume Parenteral (SVP)</td>
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<td>F2</td>
<td>Withdraw Solution from a Vial and Prepare Syringe for Delivery</td>
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<tr>
<td>F3</td>
<td>Withdraw Solution from a Vial and Inject into Large Volume Parenteral (LVP)</td>
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<td>F4</td>
<td>Withdraw Solution from Ampul and Inject into Large Volume Parenteral (LVP)</td>
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<td>F5</td>
<td>Prepare Chemotherapy Drug Outside Biological Safety Cabinet (BSC)</td>
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<tr>
<td>F6</td>
<td>Prepare an Oral Chemotherapy Drug for Administration as a Powder</td>
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