

MODULE

B

This module is directed toward individuals, such as pharmacists or pharmacy technicians, who prepare or mix Antineoplastic Agents. Other terms used for antineoplastic agents include chemo-therapeutic drugs, cytotoxic drugs, and anti-cancer drugs.

1. During your career (including all jobs at this and other facilities), how long have you been preparing antineoplastic agents?
 - Less than 6 months
 - At least 6 months but less than a year
 - 1-5 years
 - 6-10 years
 - 11-20 years
 - More than 20 years


2. When have you received formal training at this facility on procedures for the safe handling of antineoplastic agents?
Please ✓ all that apply.
 - During orientation for your current job or task
 - Once, but not at orientation
 - Periodically, but less than once per year
 - At least annually (i.e., one or more times every year)
 - Other (Please specify): _____
 - Never received training at this facility

3. Have you received any certification for handling antineoplastic agents?
Please ✓ all that apply.
 - Yes, by employer
 - Yes, a "CPhT" by the Pharmacy Technician Certification Board
 - Yes, by another professional society
 - Yes, by a training provider, other than employer
 - Yes, by other (Please specify): _____
 - _____
 - No

4. Have you seen a copy of the OSHA guidelines for handling hazardous drugs at this facility?
 - Yes
 - No

5. Have you seen written policies or standard procedures at this facility for working with antineoplastic agents?
 - Yes
 - No

6. Do you ever wear or take home any clothing (protective clothing or street clothes) which were worn when handling antineoplastic agents at this facility? Yes No

7. At any time in the **past 7 calendar days** did you prepare or mix antineoplastic agents in a pharmacy or pharmacy-like setting? Yes No  **Skip to Question 35**

8. During the past 7 calendar days, which of the following antineoplastic agents did you prepare? **Please ✓ all that apply.**

- | | | |
|--|--|---------------------------------------|
| <input type="checkbox"/> Aldesleukin | <input type="checkbox"/> Docetaxel | <input type="checkbox"/> Melphalan |
| <input type="checkbox"/> Alemtuzumab | <input type="checkbox"/> Doxorubicin | <input type="checkbox"/> Methotrexate |
| <input type="checkbox"/> Allretinoin | <input type="checkbox"/> Epirubicin | <input type="checkbox"/> Mitomycin-C |
| <input type="checkbox"/> Altretamine | <input type="checkbox"/> Estramustine | <input type="checkbox"/> Mitotane |
| <input type="checkbox"/> Aminoglutethimide | <input type="checkbox"/> Etoposide | <input type="checkbox"/> Mitoxantrone |
| <input type="checkbox"/> Amifostine | <input type="checkbox"/> Exemestane | <input type="checkbox"/> Nilutamide |
| <input type="checkbox"/> Anastrozole | <input type="checkbox"/> Floxuridine | <input type="checkbox"/> Oxaliplatin |
| <input type="checkbox"/> Arsenic trioxide | <input type="checkbox"/> Fludarabine | <input type="checkbox"/> Paclitaxel |
| <input type="checkbox"/> Asparaginase- <i>E. coli</i> strain | <input type="checkbox"/> Flutamide | <input type="checkbox"/> Pegaspargase |
| <input type="checkbox"/> BCG live | <input type="checkbox"/> Fluorouracil | <input type="checkbox"/> Pentostatin |
| <input type="checkbox"/> Bexarotene | <input type="checkbox"/> Gemcitabine | <input type="checkbox"/> Plicamycin |
| <input type="checkbox"/> Bicalutamide | <input type="checkbox"/> Gemtuzumab ozogamicin | <input type="checkbox"/> Procarbazine |
| <input type="checkbox"/> Bleomycin | <input type="checkbox"/> Goserelin | <input type="checkbox"/> Rituximab |
| <input type="checkbox"/> Busulfan | <input type="checkbox"/> Hydroxyurea | <input type="checkbox"/> Streptozocin |
| <input type="checkbox"/> Capecitabine | <input type="checkbox"/> Idarubicin | <input type="checkbox"/> Tamoxifen |
| <input type="checkbox"/> Carboplatin | <input type="checkbox"/> Ifosfamide | <input type="checkbox"/> Temozolomide |
| <input type="checkbox"/> Carmustine | <input type="checkbox"/> Imatinib mesylate | <input type="checkbox"/> Teniposide |
| <input type="checkbox"/> Cetuximab | <input type="checkbox"/> Interferon Alfa-2a | <input type="checkbox"/> Thioguanine |
| <input type="checkbox"/> Cisplatin | <input type="checkbox"/> Interferon Alfa-2b | <input type="checkbox"/> Thiotepa |
| <input type="checkbox"/> Chlorambucil | <input type="checkbox"/> Irinotecan | <input type="checkbox"/> Topotecan |
| <input type="checkbox"/> Cladribine | <input type="checkbox"/> Letrozole | <input type="checkbox"/> Toremifene |
| <input type="checkbox"/> Cyclophosphamide | <input type="checkbox"/> Leuprolide | <input type="checkbox"/> Trastuzumab |
| <input type="checkbox"/> Cytarabine | <input type="checkbox"/> Lomustine | <input type="checkbox"/> Tretinoin |
| <input type="checkbox"/> Dacarbazine | <input type="checkbox"/> Megestrol | <input type="checkbox"/> Valrubicin |
| <input type="checkbox"/> Daunorubicin | <input type="checkbox"/> Mercaptopurine | <input type="checkbox"/> Vinblastine |
| <input type="checkbox"/> Dactinomycin | <input type="checkbox"/> Merchlorethamine | <input type="checkbox"/> Vincristine |
| <input type="checkbox"/> Denileukin diftitox | | <input type="checkbox"/> Vincorelbine |

Other (Please specify up to 2 more antineoplastic agents):

1. _____

2. _____

9. During the past 7 calendar days, how many days did you prepare or mix antineoplastic agents?

Number of days.....
 (Please write a number from 1-7)

10. During the past 7 calendar days, what was the total number of dosages of antineoplastic agents you prepared?

- 1-5 dosages
- 6-10 dosages
- 11-20 dosages
- 21-40 dosages
- More than 40 dosages

11. How does the number of dosages of antineoplastic agents you prepared during the past 7 calendar days compare with most weeks?

- Past 7 days were about normal
- Past 7 days were less than normal
- Past days were greater than normal

12. During the past 7 calendar days, in which of the following areas of this facility did you **ever** prepare antineoplastic agents? **Please ✓ all that apply.**

- a. Main inpatient pharmacy
- b. Secondary inpatient pharmacy
- c. Outpatient pharmacy
- d. Treatment room
- e. Private physician's office
- f. Some other location (Please specify):

12A. From the location(s) checked above, please write the **letter** (a, b, c, etc.) corresponding to the area where you most often prepared antineoplastic agents during the past 7 days.

Area most often prepared

13. During the past 7 calendar days, how often did you prepare antineoplastic agents in...

	Always	Sometimes	Never	Don't Know
a. A separate room dedicated to the preparation of only antineoplastic agents?.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Close proximity (~5 ft) to where food/drinks are consumed by you or any other employees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. An operating ventilated cabinet dedicated to the preparation of antineoplastic agents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. During the past 7 calendar days, how often did you prime IV tubing either with antineoplastic drugs or with diluent (i.e. a liquid other than the antineoplastic agent)?

Always
 Sometimes
 Never

Skip to Question 17.

15. During the past 7 calendar days, how often did you prime the IV tubing inside an operating ventilated cabinet?

Always
 Sometimes
 Never

16. During the past 7 calendar days, how often did you prime the IV tubing with diluent?

Always
 Sometimes
 Never

17. During the past 7 calendar days when **preparing** antineoplastic agents, how often did you use a...

	Always	Sometimes	Never	Don't Know
a. System with Luer-lock (or other similar type) fittings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Needle-less system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Closed-system technology (e.g., PhaSeal [®]) when transferring drugs from vials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Plastic-backed absorbent pad under the open drug vials and other preparation materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. During the past 7 calendar days, how many times did you puncture your skin with a sharp while **preparing** antineoplastic agents?

None
 One time
 2-3 times
 4-5 times
 more than 5 times

19. During the past 7 calendar days when **packaging** antineoplastic agents for delivery to the area(s) where they are administered, how often did you...

	Always	Sometimes	Never
a. Package antineoplastic agent dosages in sealed bags?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Attach a "hazardous" warning label to packages of antineoplastic agents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Store prepared antineoplastic agents in a designated area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. During the past 7 calendar days, how many spills (even a drop or two) occurred outside of a ventilated cabinet while you were **preparing** antineoplastic drugs?


	No spills	1-2 spills	3-5 spills	More than 5
a. Spills less than 5ml	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Spills more than 5ml.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. During the past 7 calendar days, did any of the following areas of your skin come into direct contact with antineoplastic agents (i.e., became wet) while **preparing** them?

	Yes	No
a. Face	<input type="checkbox"/>	<input type="checkbox"/>
b. Neck	<input type="checkbox"/>	<input type="checkbox"/>
c. Hands	<input type="checkbox"/>	<input type="checkbox"/>
d. Wrist or forearm	<input type="checkbox"/>	<input type="checkbox"/>
e. Torso, legs or feet	<input type="checkbox"/>	<input type="checkbox"/>

The following questions pertain to the use of personal protective equipment (PPE) during the preparation of antineoplastic agents.

22. During the past 7 calendar days, did you wear a **water resistant gown or outer garment with closed front and tight cuffs** while preparing antineoplastic agents?

Always  **Skip to Question 24.**
 Sometimes
 Never

23. What were the reason(s) you did not always wear a **water resistant gown or outer garment with closed front and tight cuffs** while preparing antineoplastic agents? Please all that apply.

- 1. Potential for exposure to antineoplastic agents is insignificant
- 2. Exposure to antineoplastic agents is possible but the health hazard is insignificant
- 3. Not required by employer
- 4. Not provided by employer
- 5. Not standard practice
- 6. Too uncomfortable or difficult to use
- 7. Not readily or always available in work area
- 8. Cross contamination to other areas is not a concern
- 9. Other (Please specify):

23A. From the reason(s) checked above, please write the number (1, 2, 3, etc.) of the one **most important reason** you did not wear a **water resistant gown or outer garment with closed front and tight cuffs** while preparing antineoplastic agents.

Most important reason

24. During the past week, did you wear **latex or chemo gloves** while preparing antineoplastic agents?

- Always
- Sometimes
- Never


Skip to Question 26.

25. What were the reason(s) you did not always wear **latex or chemo gloves** while preparing antineoplastic agents? Please all that apply.

- 1. Potential for exposure to antineoplastic agents is insignificant
- 2. Exposure to antineoplastic agents is possible but the health hazard is insignificant
- 3. Not required by employer
- 4. Not provided by employer
- 5. Not standard practice
- 6. Too uncomfortable or difficult to use
- 7. Not readily or always available in work area
- 8. Cross contamination to other areas is not a concern
- 9. Other (Please specify): _____

25A. From the reason(s) checked above, please write the number (1, 2, 3, etc.) of the one **most important reason** you did not wear **latex or chemo gloves** while preparing antineoplastic agents.

Most important reason



During the past 7 calendar days if you NEVER wore latex or chemo gloves when preparing antineoplastic agents, skip to question 28.

26. During the past 7 calendar days, did you perform any of the following activities while wearing **latex or chemo gloves** that had been used to prepare antineoplastic agents?

	Yes	No
a. Answer the phone	<input type="checkbox"/>	<input type="checkbox"/>
b. Use a keyboard or calculator	<input type="checkbox"/>	<input type="checkbox"/>
c. Handle files or record cards	<input type="checkbox"/>	<input type="checkbox"/>
d. Eat or drink	<input type="checkbox"/>	<input type="checkbox"/>
e. Smoke	<input type="checkbox"/>	<input type="checkbox"/>

27. During the past 7 calendar days, did you **ever reuse latex or chemo gloves** while preparing antineoplastic agents (reuse means remove and later put on the same gloves)?

- Yes
- No

28. During the past 7 calendar days, did you wear **eye protection** (*safety glasses, goggles, face shield*) while preparing antineoplastic agents?

- Always
- Sometimes
- Never

Skip to Question 30.

29. What were the reason(s) you did not always wear **eye protection** while preparing antineoplastic agents?
Please ✓ all that apply.

- 1. Potential for exposure to antineoplastic agents is insignificant
- 2. Exposure to antineoplastic agents is possible but the health hazard is insignificant
- 3. An engineering control (e.g., exhaust ventilation or an enclosure) is already being used
- 4. Not required by employer
- 5. Not provided by employer
- 6. Not standard practice
- 7. Too uncomfortable or difficult to use
- 8. Not readily or always available in work area
- 9. Other (Please specify):

29A. From the reason(s) checked above, please write the number (1, 2, 3, etc.) of the one **most important reason** you did not wear **eye protection** while preparing antineoplastic agents.

Most important reason

30. During the past 7 calendar days, did you wear **respiratory protection, not including a surgical mask**, while preparing antineoplastic agents?

- Always
- Sometimes
- Never



Skip to Question 32.

31. What type(s) of respirator(s) did you use? **Please ✓ all that apply.**

- Disposable particulate respirator (also called filtering face-piece respirator, e.g., N95)
- Half mask or full-face piece respirator with replaceable filters or cartridges
- Powered air-purifying respirator (PAPR)
- Don't know



During the past 7 calendar days if you ALWAYS wore respiratory protection, not including a surgical mask, while preparing antineoplastic agents, skip to Question 33.

32. What were the reason(s) you did not always wear **respiratory protection, not including a surgical mask**, while preparing antineoplastic agents? **Please ✓ all that apply.**

- 1. Potential for exposure to antineoplastic agents is insignificant
- 2. Exposure to antineoplastic agents is possible but the health hazard is insignificant
- 3. An engineering control (e.g., exhaust ventilation or an enclosure) is already being used
- 4. Not required by employer
- 5. Not provided by employer
- 6. Not standard practice
- 7. Too uncomfortable or difficult to use
- 8. Not readily or always available in work area
- 9. Other (Please specify):

32A. From the reason(s) checked above, please write the number (1, 2, 3, etc.) of the one **most important reason** you did not wear **respiratory protection** while preparing antineoplastic agents.

Most important reason

33. During the past 7 calendar days, did you wear **booties** while preparing antineoplastic agents?

- Always
- Sometimes
- Never

Skip to Question 35.

34. What are the reason(s) you did not always wear **booties** while preparing antineoplastic agents? **Please** ✓ **all that apply.**

- 1. Potential for exposure to antineoplastic agents is insignificant
- 2. Exposure to antineoplastic agents is possible but the health hazard is insignificant
- 3. Not required by employer
- 4. Not provided by employer
- 5. Not standard practice
- 6. Too uncomfortable or difficult to use
- 7. Not readily or always available in work area
- 8. Cross contamination to other areas is not a concern
- 9. Other (Please specify): _____

34A. From the reason(s) checked above, please write the number (1, 2, 3, etc.) of the one **most important reason** you did not always wear **booties** while preparing antineoplastic agents.

Most important reason

**You have now completed this module.
Thank you.**