**MODULE C: Antineoplastic Agents (Oncology Nurses)**

This module is directed toward oncology nurses or other individuals who administer Antineoplastic Agents to patients. Other terms used for antineoplastic agents include chemotherapeutic drugs, cytotoxic drugs, and anti-cancer drugs.

1. During your career (including all jobs at this and other facilities), how long have you been administering antineoplastic agents to patients?
   -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 check 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 check all that apply.
   -Yes, by employer
   -Yes, by the Oncology Nursing Certification Corporation (OCCN). This includes OCN®, CPON®, AOCNP, and AOCNS.
   -Yes, other certification (Please specify): ____________

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 administer antineoplastic agents to patients?  
   □ Yes  
   □ No  
   → Skip to Question 30.

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

   □ Aldesleukin  
   □ Alentuzumab  
   □ Alitretinoin  
   □ Alitretamine  
   □ Aminoglutethimide  
   □ Amifostine  
   □ Anastrozole  
   □ Arsenic trioxide  
   □ Asparaginase-E. coli strain  
   □ BCG live  
   □ Bexaroline  
   □ Bicalutamide  
   □ Bleomycin  
   □ Busulfan  
   □ Capecitabine  
   □ Carboplatin  
   □ Carmustine  
   □ Cetuximab  
   □ Cisplatin  
   □ Chlorambucil  
   □ Cladribine  
   □ Cyclophosphamide  
   □ Cytarabine  
   □ Dacarbazine  
   □ Daunorubicin  
   □ Daclomycin  
   □ Denileukin diftitox  
   □ Docetaxel  
   □ Doxorubicin  
   □ Epirubicin  
   □ Estramustine  
   □ Etoposide  
   □ Examustane  
   □ F loduridine  
   □ Fluorouracil  
   □ Gemcitabine  
   □ Gemtuzumab ozogamicin  
   □ Goserelin  
   □ Hydroxyurea  
   □ Idarubicin  
   □ Ifosfamide  
   □ Imatinib mesylate  
   □ Interferon Alfa-2a  
   □ Interferon Alfa-2b  
   □ Irinotecan  
   □ Letrozole  
   □ Leuprolide  
   □ Lomustine  
   □ Megestrol  
   □ Mercaptopurine  
   □ Mercurhethamine  
   □ Meplhalan  
   □ Methotrexate  
   □ Mitomycin-C  
   □ Mitotane  
   □ Mitoxantrone  
   □ Nilutamide  
   □ Oxaliplatin  
   □ Paclitaxel  
   □ Pegaspargase  
   □ Pentostatin  
   □ Plicamycin  
   □ Procarbazine  
   □ Rituximab  
   □ Streptozocin  
   □ Tamoxifen  
   □ Temozolomide  
   □ Teniposide  
   □ Thioguanine  
   □ Thiopepa  
   □ Topotecan  
   □ Toremifene  
   □ Trastuzumab  
   □ Tretinoin  
   □ Valrubicin  
   □ Vinblastine  
   □ Vincristine  
   □ Vinorelbine

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

   1. __________________________

   2. __________________________
9. During the past 7 calendar days, how many days did you administer antineoplastic agents to patients?

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

10. During the past 7 calendar days, what was the total number of treatments of antineoplastic agents you administered to patients? *(One treatment equals all drugs administered to one patient during one visit.)*

- 1-2 treatments
- 3-4 treatments
- 5-9 treatments
- 10-20 treatments
- 21-40 treatments
- More than 40 treatments

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

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

12. During the past 7 calendar days, in which of the following areas of this facility did you ever administer antineoplastic agents to patients? Please check all that apply.

- a. Patient’s hospital room
- b. Treatment room (e.g., for infusion therapy)
- c. Specially area (e.g., X-ray)
- d. Private physician’s office
- e. Patient’s home
- 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 administered antineoplastic agents.

Most often administered: ________________
13. During the past 7 calendar days, while administering antineoplastic agents to patients, how often did you use a…

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Designated room or area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Drug delivery system with Luer-lock (or other similar type) fittings?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Needle-less system?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Plastic-backed absorbent pad under the patient's arm?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

14. During the past 7 calendar days, how often did you store prepared antineoplastic agents in a designated and restricted area before administering to patients?

- ☐ Always
- ☐ Sometimes
- ☐ Never

15. During the past 7 calendar days, which of the following best describes how antineoplastic agents were most commonly received from the pharmacy (or drug preparation area)?

- Please ✓ only one.

- ☐ Primed with antineoplastic agent
- ☐ Primed with diluent (i.e., a liquid other than antineoplastic agent)
- ☐ Primed, unsure of the solution used
- ☐ IV tubing is not primed

16. During the past 7 calendar days, how often did you prime the IV tubing before administering antineoplastic agents to patients?

- ☐ Always
- ☐ Sometimes
- ☐ Never

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

- ☐ None
- ☐ One time
- ☐ 2-3 times
- ☐ 4-5 times
- ☐ More than 5 times

18. During the past 7 calendar days while you were handling or administering antineoplastic agents, did a leak or spill of any amount (even a few drops) ever occur?

- ☐ Yes
- ☐ No

Skip to Question 21.
19. During the past 7 calendar days, did any of the following factors cause a leak of antineoplastic agents during handling or administration?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Leak from syringe while attaching, injecting, or detaching from IV line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Leak while drawing up or expelling air from syringe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Leak due to a bad connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Leak due to excessive pressure in vial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Other (Please specify):</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. During the past 7 calendar days, how many spills (even a drop or two) of antineoplastic agents occurred during handling or administration?

<table>
<thead>
<tr>
<th></th>
<th>No spills</th>
<th>1-2 spills</th>
<th>3-5 spills</th>
<th>More than 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Spills less than 5ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Spills more than 5ml</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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) during handling or administration?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Face</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Hands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Wrist or forearm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Torso, legs or feet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following questions pertain to your use of personal protective equipment (PPE) while handling and administering 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 administering antineoplastic agents to patients?
   □ Always □ Sometimes □ Never
   □ Skip to Question 24.

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 administering 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. Concerned about raising the patient’s anxiety
   □ 10. 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 always wear a water resistant gown or outer garment with closed front and tight cuffs while administering antineoplastic agents.

Most important reason .................. [___]

24. During the past 7 calendar days, did you wear latex or chemo gloves while administering antineoplastic agents to patients?
   □ Always □ Sometimes □ Never
   □ Skip to Question 26.
25. What were the reason(s) you did not always wear latex or chemo gloves while administering antineoplastic agents? Please ✓ all that apply.

- Potential for exposure to antineoplastic agents is insignificant
- Exposure to antineoplastic agents is possible but the health hazard is insignificant
- Not required by employer
- Not provided by employer
- Not standard practice
- Too uncomfortable or difficult to use
- Not readily or always available in work area
- Cross contamination to other areas is not a concern
- Concerned about raising the patient's anxiety
- 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 always wear latex or chemo gloves while administering antineoplastic agents.

Most important reason .............. [ ]

STOP During the past 7 calendar days if you NEVER wore latex or chemo gloves when administering 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 administer antineoplastic agents?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Answer the phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Use a keyboard or calculator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Handle files or record cards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Eat or drink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Smoke</td>
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<td></td>
</tr>
</tbody>
</table>
27. During the past 7 calendar days, did you ever reuse protective gloves while administering 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 administering antineoplastic agents to patients?

- Always
- Sometimes
- Never

Skip to Question 30.

29. What were the reason(s) you did not always wear eye protection while administering antineoplastic agents?

Please check 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. Concerned about raising the patient's anxiety
- 10. 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 always wear eye protection while administering antineoplastic agents.

Most important reason .............

You have now completed this module.
Thank you.