

## **Example of a Medication Dispensing Protocol to Accompany the Medication Assessment Form Developed by the Missouri Medical Countermeasures/Strategic National Stockpile Program**

As part of the response to a bioterrorism attack utilizing certain types of bacterial agents, prophylactic antibiotics would be offered to potentially-exposed persons at point of dispensing (POD) sites. Persons who will receive prophylaxis at these sites will first provide to POD staff certain medically-relevant information so that the appropriate antibiotic accompanied by appropriate dosage instructions can be provided. One mechanism to collect this information is the medication assessment form developed by the Missouri Medical Countermeasures/Strategic National Stockpile Program. If this assessment form is used, there would need to be an accompanying medication dispensing protocol that POD staff could use to determine, based on the answers provided on the form, which antibiotic to provide, in what form (i.e., tablet, suspension, or tablet with crushing instructions), and in what dosage.

On the following page is an example of what a dispensing protocol might look like. It is very important to understand that the protocol shown here is meant to be an example, and it is based on a number of assumptions that might not be valid in an actual bioterrorism incident. Among these assumptions are the following:

- Both doxycycline and ciprofloxacin (the two antibiotics available at the PODs) would provide effective prophylaxis against the organism.\*
- Doxycycline is the preferred drug for individuals of all ages, except in pregnant women where ciprofloxacin would be the preferred drug.
- Doxycycline suspension would be used in children less than 31 pounds; if doxycycline suspension was not available, ciprofloxacin suspension would be used in these individuals. If neither suspension was available, these children would receive doxycycline tablets with crushing and dosage instructions.
- Individuals 31-66 pounds who cannot take doxycycline, but can take ciprofloxacin, would receive ciprofloxacin suspension if it is available.

In an actual incident, some or all of these assumptions might be different. Also, local medical professionals (including the physician[s] who will be signing the Standing Orders for POD staff) might believe changes to the protocol need to be made. Consequently, the actual dispensing protocol that would be utilized in a real incident can only be finalized after the incident is recognized and incident-specific information and guidance become available. However, while a dispensing protocol cannot be completely finalized in advance, it is important for jurisdictions to decide beforehand the basic format for this document, and the protocol example shown below is intended to assist in this process (and it can also, of course, be utilized in exercises). It is emphasized that all decisions on these issues should be made in close collaboration with appropriate medical professionals, including the physician(s) who will sign the Standing Orders for POD staff.

\*Also note that the dosages in the dispensing protocol example are based on guidance provided in the current Emergency Use Instructions (EUIs) for anthrax prophylaxis. The recommended dosages for other bacterial agents may be different.

## Doxycycline Preferred With Ciprofloxacin Alternate (Ciprofloxacin Preferred for Pregnant Women)

# EXAMPLE ONLY

1. Weight <b>76+ pounds</b>			
2. Able to Swallow Pills			
Yes		No	
3. Cannot Take Cipro	4. Cannot Take Doxy	5. Pregnant?	Dispense
No/DK	No/DK	No/DK	Doxy 100 mg Tablets
No/DK	No/DK	Yes	Cipro 500 mg Tablets
Yes	No/DK	Any	Doxy 100 mg Tablets
No/DK	Yes	Any	Cipro 500 mg Tablets
Yes	Yes	Any	Refer

1. Weight <b>67-75 pounds</b>			
2. Able to Swallow Pills			
Yes		No	
3. Cannot Take Cipro	4. Cannot Take Doxy	5. Pregnant?	Dispense
No/DK	No/DK	No/DK	Doxy 100 mg Tablets + Crushing Instructions
No/DK	No/DK	Yes	Cipro 500 mg Tablets
Yes	No/DK	Any	Doxy 100 mg Tablets + Crushing Instructions
No/DK	Yes	Any	Cipro 500 mg Tablets
Yes	Yes	Any	Refer

Note that in the tables, **Yes**, **No**, or **DK** (Don't Know) refer to the answers given to the questions on the Medication Assessment Form. For example, for "3. Cannot Take Cipro," a **No** answer means the person has indicated they do not have any of the reasons listed on the form for not taking ciprofloxacin, and thus they can be given this drug if indicated. On the other hand, a **Yes** answer means the person has indicated they do have one or more of the reasons listed on the form for not taking ciprofloxacin, and thus they should not be given this drug.

1. Weight <b>31-66 pounds</b>			
2. Able to Swallow Pills <b>Any</b>			
3. Cannot Take Cipro	4. Cannot Take Doxy	5. Pregnant?	Dispense
No/DK	No/DK	NA	Doxy 100 mg Tablets + Crushing Instructions
Yes	No/DK	NA	Doxy 100 mg Tablets + Crushing Instructions
No/DK	Yes	NA	Cipro Suspension*
Yes	Yes	NA	Refer

1. Weight <b>0-30 pounds</b>			
2. Able to Swallow Pills <b>Any</b>			
3. Cannot Take Cipro	4. Cannot Take Doxy	5. Pregnant?	Dispense
No/DK	No/DK	NA	Doxy Suspension**
Yes	No/DK	NA	Doxy Suspension**
No/DK	Yes	NA	Cipro Suspension*
Yes	Yes	NA	Refer

**DK** = Don't Know, **NA** = Not Applicable      Note that the crushing instructions for doxycycline tablets contain a dosage chart based on weight.

\*Provide Cipro Suspension according to the instructions in Table 1, below. Ensure the dose, based on Table 1, is written on the bottle AND marked with a line on the graduated teaspoon or oral syringe provided. If Cipro Suspension is not available, refer.

\*\*Provide Doxy Suspension according to the instructions in Table 2, below. Ensure the dose, based on Table 2, is written on the bottle AND marked with a line on the graduated teaspoon or oral syringe provided. If Doxy Suspension is not available and the individual can take ciprofloxacin, then provide Cipro Suspension according to the instructions in Table 1, below. Ensure the dose of Cipro, based on Table 1, is written on the bottle AND marked with a line on the graduated teaspoon or oral syringe provided. If neither Doxy Suspension or Cipro Suspension is available and the individual can take doxycycline, then provide Doxy 100 mg Tablets + Crushing Instructions.

**Table 1. Ciprofloxacin Oral Suspension**

Weight in pounds (kilograms)	Dose* in milliliters (mL) 250 mg/5 mL strength	Dose* in milliliters (mL) 500 mg/5 mL strength	Number of 100 mL bottles needed for 10-day supply for one patient	
			250 mg/5 mL strength	500 mg/5 mL strength
0-7 lbs (0-3 kg)	1 mL (50 mg)	0.5 mL (50 mg)	ONE (1) Bottle	ONE (1) Bottle
8-14 lbs (4-6 kg)	2 mL (100 mg)	1 mL (100 mg)		
15-22 lbs (7-10 kg)	3 mL (150 mg)	1.5 mL (150 mg)		
23-29 lbs (11-13 kg)	4 mL (200 mg)	2 mL (200 mg)		
30-36 lbs (14-16 kg)	5 mL (250 mg)	2.5 mL (250 mg)		
37-44 lbs (17-20 kg)	6 mL (300 mg)	3 mL (300 mg)		
45-51 lbs (21-23 kg)	7 mL (350 mg)	3.5 mL (350 mg)	TWO (2) Bottles	TWO (2) Bottles
52-58 lbs (24-26 kg)	8 mL (400 mg)	4 mL (400 mg)		
59-66 lbs (27-30 kg)	9 mL (450 mg)	4.5 mL (450 mg)		
> 67 lbs (> 31 kg)	10 mL (500 mg)	5 mL (500 mg)		

**Table 2. Doxycycline Oral Suspension**

Weight in pounds (kilograms)	Dose in mL (based on 25 mg/5 mL concentration)	Number of 60 mL bottles (25 mg/5 mL concentration) needed for 10-day supply for one patient
0-5 lbs (0-2 kg)	1 mL (5mg)	ONE (1) Bottle
6-10 lbs (3-4 kg)	2 mL (10 mg)	
11-15 lbs (5-7 kg)	3 mL (15 mg)	
16-20 lbs (8-9 kg)	4 mL (20 mg)	TWO (2) Bottles
21-25 lbs (10-11 kg)	5 mL (25 mg)	
26-30 lbs (12-14 kg)	6 mL (30 mg)	