

### Introduction

Long term and post-acute care (LT/PAC) centers manage a variety of pharmaceuticals as part of everyday patient care, ranging from nonhazardous medications like lidocaine to acutely hazardous drugs such as warfarin. Juggling a variety of responsibilities, centers can be sometimes unprepared to comply with the numerous pharmaceutical waste disposal regulations, which can inadvertently put staff, residents, and the surrounding environment at risk.

Credit: [http://www.providermagazine.com/archives/2016\\_Archives/Pages/1116/Pharmaceutical-Waste-A-Checklist-For-Compliance.aspx](http://www.providermagazine.com/archives/2016_Archives/Pages/1116/Pharmaceutical-Waste-A-Checklist-For-Compliance.aspx)

### Checklist

**\*\*1. Assess the care center's inventory.\*\*** Centers should go through their pharmaceutical inventory and determine what waste they generate and what forms it takes. If the center contracts with an outside pharmacy, make sure to understand the types of waste it has present. One specific category to look for is P-listed waste, which not only requires centers to be careful when disposing of unused medications but also the empty packaging as well. As mentioned before, controlled substances are another regulatory category of waste of which to be aware.. **2. Create a plan.** If EPA comes onsite to assess the center's pharmaceutical waste-disposal program, the first thing they will check is whether the center has a plan in place for proper disposal of the waste stream.

There are several resources online and within vendor centers to help with creating a comprehensive and appropriate plan that can be targeted to the center.

**3. Determine how many, and where, waste containers are necessary.** The next step is to quantify the waste and determine the right number of containers that are required. Then, centers need to examine where they dispose of pharmaceutical waste and how much waste is generated in each area.

As a rule of thumb, LT/PAC centers typically place at least one pharmaceutical waste container in each medication room.

**4. Obtain a scale for P-listed waste.** EPA regulations currently require centers to measure this kind of waste before disposal. The amount of P-listed waste generated is taken into account when determining the waste generator status (CESQG, SQG, or LQG).

**5. Once equipment is in place, start training staff.** Provide as many training options as possible to give staff convenient access to ample education. Depending on the center, this may include online tools, posters, and tips in staff meetings. When providing education, it can be especially helpful to offer specific examples that staff can understand and relate to.

### Checklist (cont)

**6. Keep manifest records up to date.** When EPA staff arrive on site, they will want to review the center's manifests. Also, should the center have a question about waste disposal, it is helpful to have an accurate record.

**7. Perform audits.** While developing processes is the first step, centers should verify that they consistently follow those processes.

### Pharmaceutical Waste

#### Pharmaceutical Waste:

- ◆ Two main types of pharmaceutical waste: hazardous and non-hazardous.
- ◆ Hazardous waste as defined by EPA RCRA is waste with properties making it dangerous or potentially harmful to human health or the environment, and includes chemicals and drugs.

### Consequences of Noncompliance

By not having a defined pharmaceutical waste management program, a center can put itself at various types of risk. First, substantial penalties for noncompliance can be incurred from EPA and DEA. These penalties can not only cause financial strain, but also impact the overall perception of the care center, which in turn can affect patient and staff retention and loyalty.

Improper disposal can also lead to environmental issues. When LT/PAC centers do not dispose of hazardous pharmaceutical waste correctly, it can leach into the environment, polluting groundwater and freshwater resources.