



# Exposure Location Assignment

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In the Cleaner Air Oregon program, risk is evaluated differently depending on the length of exposure and how sensitive the population being exposed is. This is assessed based on the type of activity that occurs at a given location. For example, a school will have a more sensitive population than an industrial site and a home will have a longer length of exposure than a park. The four exposure types covered by Cleaner Air Oregon are:

- Residential
- Child
- Worker
- Short-term exposure (acute)

The starting point for determining the proper exposure location assignment is the underlying zoning. Zoning is available at the state, county, and local level depending on who is the local zoning authority. Below is a graphic showing the area immediately around a facility, color coded to the type of zoning. This zoning has been grouped to match the four exposure types required in Cleaner Air Oregon. Following this graphic are requirements and considerations for assigning exposure locations for a risk assessment.



### **Requirements and considerations for all exposure types**

- Risk must be assessed throughout the property including outdoor locations as well as buildings.
- Risk must be assessed along the property boundary, unless that boundary is along an area where risk need not be evaluated, such as roads and railroads.
- If city or county zoning differs from the state zoning classification, that information should be provided in the Risk Assessment Work Plan.
- If a facility chooses to assign an exposure location less conservative than the underlying zoning (e.g., assigning acute to a residential zone with no homes), they must provide annual documentation that the underlying assumptions have not changed, or conduct the risk assessment again.

### **Residential exposure**

- Any location where a house currently exists or could exist under zoning laws.
- For most residential zoning categories, the area should include the house and property
- A Farmhouse is considered residential, but the fields may be considered acute. Places where daily activity occurs, such as a barnyard should be assigned to a worker exposure.
- Grandfathered residential properties, such as a house in an industrial zone, must be assigned to residential exposure location.

### **Child exposure**

- Any location where a child can spend multiple hours a day, multiple days a year, such as daycare facilities, schools, etc.
- Schools/daycare can be in a variety of zoning classifications. Facilities should identify child exposure locations that may be different from underlying zoning.

### **Worker exposure**

- Any location where an industrial or commercial facility exists or could exist under current zoning laws.

### **Short-term exposure (acute)**

- Acute exposure is evaluated at almost all locations outside of the facility boundary, including all residential, worker, and child exposure locations.
- There may be locations where only acute exposure needs to be evaluated.
- This includes any location where people 'normally congregate' or 'spend several hours a day'.
- This includes all chronic exposure locations, as well as parks, golf courses, swimming pools, etc.
- Locations where people would not normally congregate, such as roadways and railways, do not need to be evaluated for acute exposure.