CALCULATING THE RIGHT AIR PURIFIER SIZE FOR YOUR CHILD CARE SPACE

Facing the impacts of COVID-19 & wildfire smoke? Getting the right portable air purifier for your space can help. Learn more about air quality issues in child care here.

Instructions:

1. **CALCULATE THE ROOM SIZE**
   Length x Width x Height = Room Size

2. **IDENTIFY THE PURIFIER’S CADR**
   The CADR, or Clean Air Delivery Rate, is provided by the manufacturer. Look for the tobacco smoke CADR.

3. **CONVERT THE CADR TO CUBIC FEET PER HOUR**
   If the CADR is provided in cubic feet per minute (cfm), multiply the number by 60 for cubic feet per hour (cfh).

4. **CALCULATE THE AIR CHANGES PER HOUR**
   Divide the CADR amount (in cfh) by the room size to find the air changes per hour (ACH). The ideal ACH is 5 or higher.

Example:

**STEP 1:** Calculate room size: 25 feet x 20 feet x 8 feet = 4,000 cubic feet

**STEP 2:** Identify the CADR: 400 cfm *(for example)*

**STEP 3:** Convert the CADR to cubic feet per hour: 400 cfm x 60 = 24,000 cfh

**STEP 4:** Divide the CADR per hour by the room size to find the ACH: 24,000 ÷ 4,000 = 6