

Classroom Air Quality Guide for Districts

Most classrooms already have a 2'x4' lay-in troffer grid. Swapping those fixtures for UV-C air-cleaning troffers adds continuous air treatment with no ductwork, no floor units, and no filter budget.

Fixture count by classroom size

- 600 sq ft: approx. 6 fixtures
- 900 sq ft (typical): approx. 9 fixtures
- 1,200 sq ft: approx. 12 fixtures
- Baseline is one fixture per 100 sq ft; adjust for occupancy and ceiling height
- Target 4-6 air changes per hour

Phased rollout calendar

- Pilot: one wing or grade band to establish a baseline
- Break window: batch remaining classrooms (swaps take minutes per room)
- Non-grid spaces: corridors and cafeterias use linear or sconce fixtures
- Priority, not leftovers: nurse suites and special-education rooms

Board talking points

- Illness-driven absence costs instructional days and substitute coverage every year
- Air treatment rides on the lights, so it runs every class period automatically
- No filters to purchase and no portable units to store or maintain
- The LED lighting upgrade is included in the same fixture swap

UV-C troffers vs. portable HEPA

- UV-C troffer: ceiling-mounted, no floor space, no filter consumables
- Portable HEPA: occupies floor area, audible at classroom-scale airflow, filters replaced on a cycle
- UV-C inactivates pathogens in the airstream rather than accumulating them in media
- Fan speed is adjustable per room during commissioning

Safety summary for staff and families

- The germicidal LEDs are sealed inside the fixture housing
- No UV light reaches students or staff
- Nothing for a teacher to switch on or maintain
- Motion-sensor auto-on and scheduling align operation to the school day