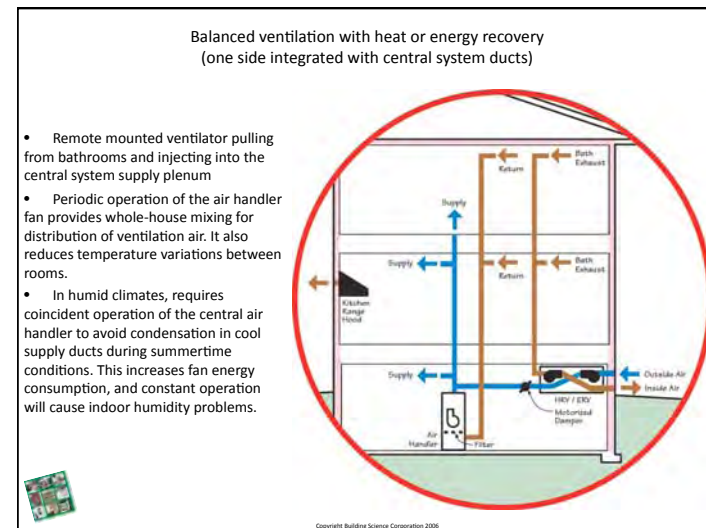


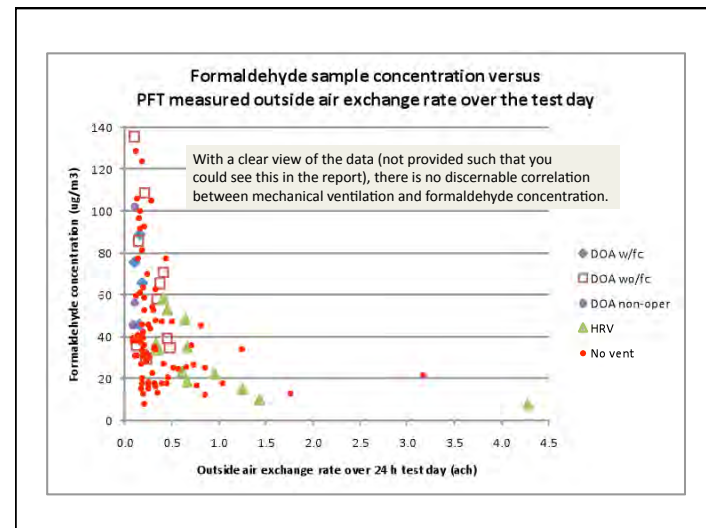
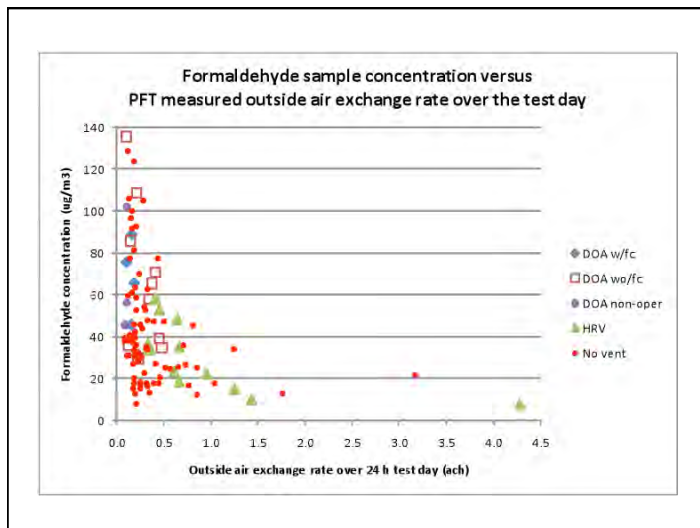
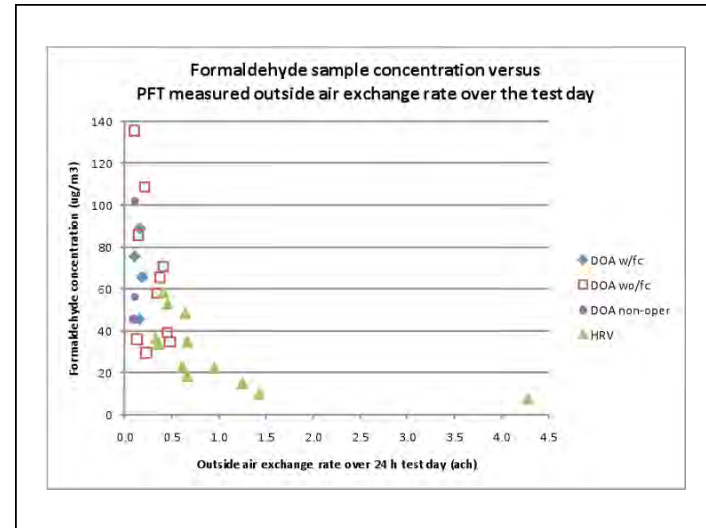
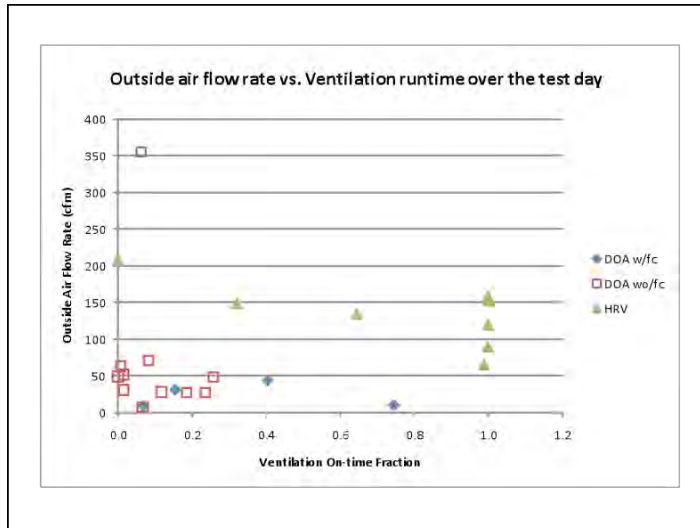
Pg. 65-66 (relative DOA systems)

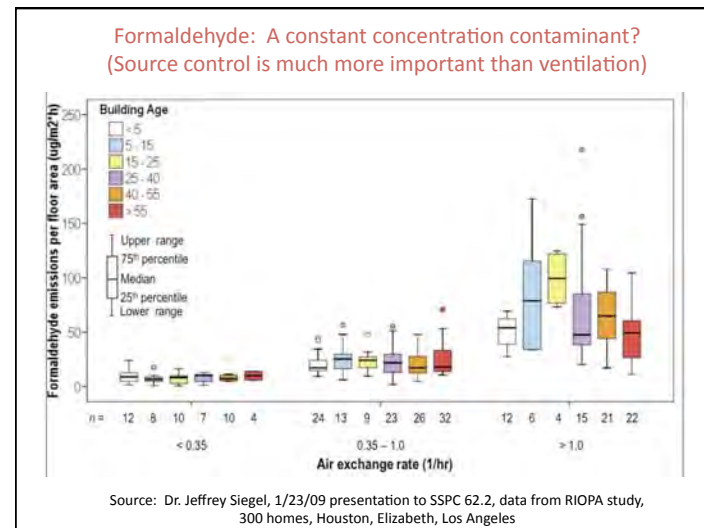
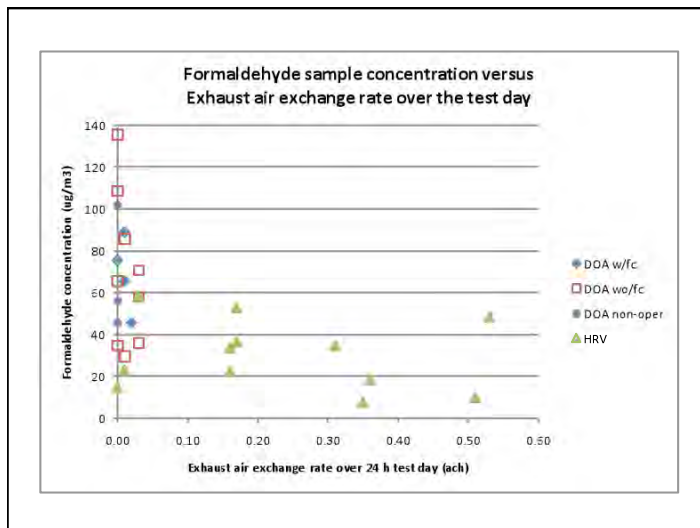
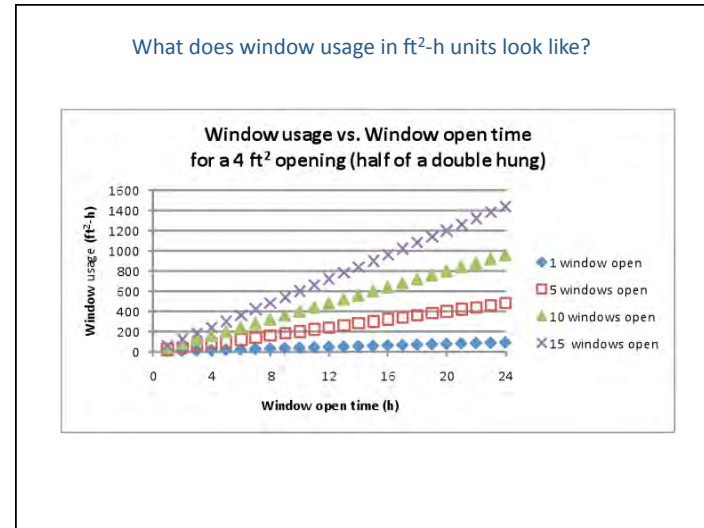
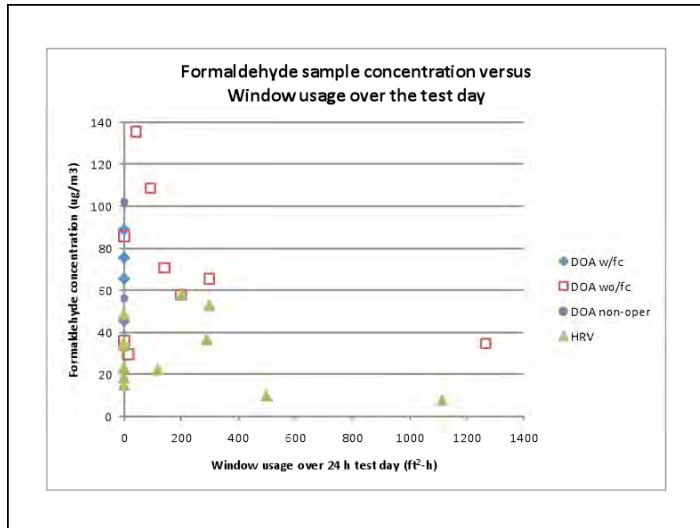
“Of the 17 homes with DOA systems only six had fan cyclers, four of which had automatic damper controls in the outdoor air duct.

Of the 14 homes with operational DOA systems, only four had fan cyclers, three of which had automatic damper controls in the outdoor air duct.

- one FAU fan was never turned on
- one was on for 10 minutes for each 90-minute cycle (i.e., 0.11 fractional on-time)
- one was on for 10 minutes for each 30-minute cycle (i.e., 0.33 fractional on-time)
- one FAU fan ran continuously, while the outdoor air damper opened 55 minutes for each 75-minute cycle (i.e., 0.73 fractional on-time)”







It's probably not practical to ventilate for formaldehyde

Based on a simple example*:

The continuous ventilation rate of a 2000 ft² house would have to be more than tripled (50 cfm to 170 cfm) to reduce formaldehyde concentration from 60 ppb to 27 ppb (27 ppb is the OEHHA -California Office of Environmental Health Hazard Assessment maximum recommended limit for 8 hour exposure.)

*Assumptions: Constant source emission rate producing an average concentration of 60 ppb, perfect mixing, and zero outside concentration. Source: Dr. Ren Anderson, 1/28/2006, presentation at USDOE Building America Ventilation Expert Meeting

Conclusions

- Complete and careful reporting of data is important
- Dilution ventilation will not work as a primary method for the control of formaldehyde or other dangerous indoor contaminants
- “The most effective way to reduce formaldehyde in indoor air is to remove or reduce sources of formaldehyde in the home...”*

*Source: CARB Indoor Air Quality Guideline, Formaldehyde in the Home, August, 2004.