



Hospital Idle Reduction: eliminating ambulance idling on the hospital campus

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Fast Facts on Hospitals and Ambulance Services

Number of registered community hospitals in U. S. ¹	4,999
Number of registered community hospitals in SEDC region ²	989
Number of ambulance service providers nationally ³	15,276
Number of registered ground ambulances nationally ³	48,384

1. American Hospital Association; <http://www.aha.org/research/rc/stat-studies/fast-facts.shtml>
2. The Henry J. Kaiser Family Foundation; <http://kff.org/other/state-indicator/total-hospitals/>
3. American Ambulance Association; http://www.the-aaa.org/media/ambulance_facts.html

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Why do Ambulances idle?

To provide energy for:

1. Cab/cabin heating or cooling to maintain critical medicines, and provide patients and EMTs with proper environmental conditions
2. Maintain the capacity of the engine start battery
3. Provide power to operate medical equipment for patient treatment and diagnostics

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nce idling?

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Driver moves the emergency vehicle once someone lodges a

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The Latest Queens Library board puts Tom Galante on paid administrative leave

Idling ambulances cause headaches

Adjacent residents claim running engines, foul language bothersome

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Idling ambulances wearing out their stay

Vivian Ho
Published 10:30 pm, Wednesday, December 19, 2012

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A private ambulance is parked in a space reserved for active loading or unloading at Sacramento and Fillmore streets. Photo: Paul Chinn, The Chronicle

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Nashua man charged with ambulance theft

The Lowell Sun
UPDATED: 12/24/2009 06:35:40 AM EST 0 COMMENTS

LACONIA, N.H. (AP) -- Police say an ambulance idling outside a Laconia hospital was stolen and the suspect needed to be subdued with a stun gun after being tracked down 18 miles away.

WMUR-TV reports that 26-year-old Stephen Cummings Jr. of Nashua has been charged with stealing the ambulance Tuesday afternoon. Police needed a "rolling roadblock" to get him to stop the ambulance.

Police say the ambulance was taken outside Lakes Region Hospital after its crew had left the vehicle for about 15 minutes to pick up a patient. In winter, ambulances are often kept running to keep them warm.

Stewart's Ambulance Service officials say they're reviewing their policies.

Court officials say Cummings is being held for lack of \$10,000 bail. It was unclear yesterday whether he had a lawyer.

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Grant Welker 2hrs

MA Teachers Assoc President Barbara Madeloni at today's UMass trustees meeting in Lowell.

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What are the concerns over Ambulance idling?

1. Exhaust emissions
2. Greenhouse gases
3. General exposure to toxic, noxious, poisonous and odorous air contaminants
4. Building infiltration of exhaust emissions
5. Excessive wear and tear on engine
6. Denial of warranty claims
7. Excess fuel costs
8. Inefficient use of energy
9. Noise

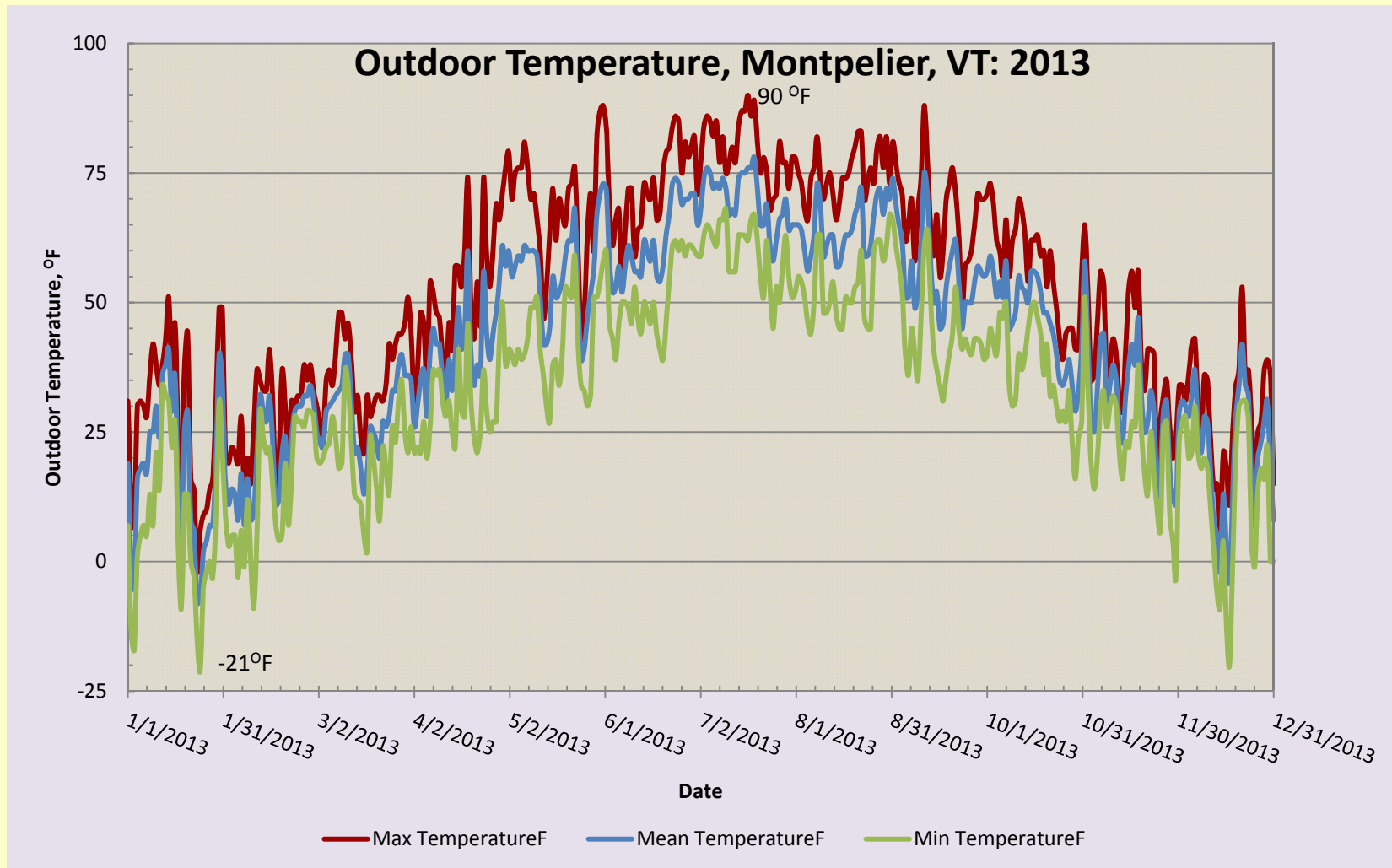
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Projects in Vermont and New Hampshire to eliminate Ambulance idling?



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The Climate of Northern New England



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MediDock



Model A200

Source Voltage	208/120v 60hz 40 amp feed
Dimensions	76.75"H x 38"W x20"D
Total Available Power	(3) - 120vac/20amp rated GFCI receptacles (3840va total combined available power)
Cab Power and UWA Faceplate Receptacles	(2) 120vac/20amp GFCI -1920va combined available power.
Retractable cord	(1)110 volt retractable cord for charging batteries and supplying power to on board medical equipment when engine is not running
Unit Weight	Approx. 470 Pounds
A/C Capacity	14,000 BTU
Heating Capacity	12,000 BTU
Auxiliary Resistive Heat	(2)@1,500W/208V, 3,000W Total (10,000 BTU)
Total Heat Capacity	Approx. 22,000 BTU
Air Flow Capacity	150 CFM @ the window adapter

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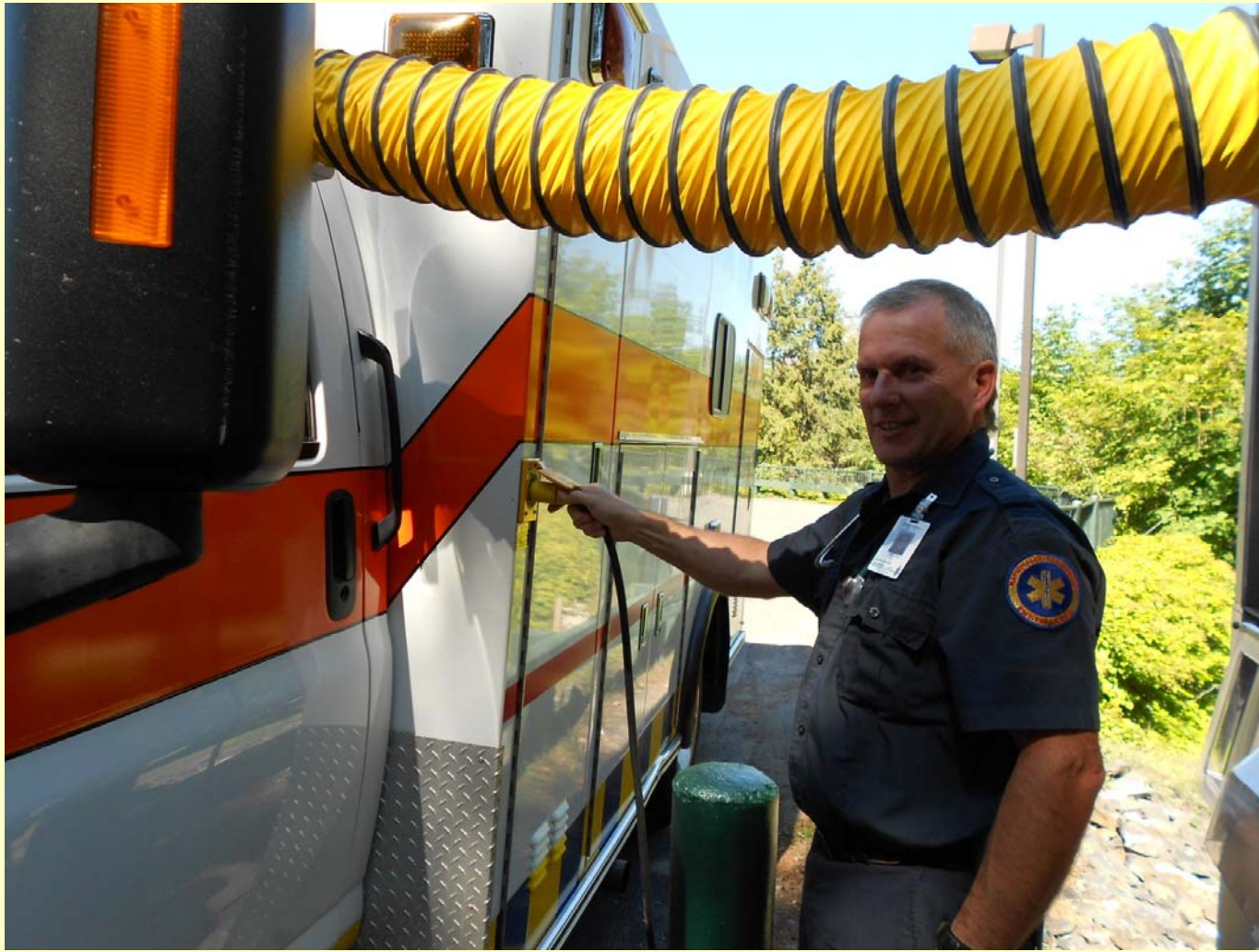
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Fuel Consumption, Emissions and Cost from Idling

Idling engines consumes from 0.5 to 1.0 gallons per hour – use mid point of 0.75 GPH

Range of idling time: 10 min. to 2-1/2 hours: assume 30 minutes

Assume 1,400 call-outs per year →

525 gallons of fuel annually from idling
~10,000 lbs of CO₂

Fuel Price: \$3.53 to \$4.19/gallon:

Use \$4.00/gallon
\$2,100 per year in fuel cost
plus increased maintenance costs

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Energy Use of MediDock

@ 30 minutes per call-out and 1,400 call-outs per year → 700 hours/year

Range of electric use: 0+ - 40 amps: assume mid-point of 20 amps or 4.4kW

@ 700 hours/year and 4.4 kW per hour → 3,080 kWhr per year

@ 10¢ per kWhr → \$308 per year

Summary of Annual Energy Costs

Energy Supplied by:

Diesel Engine Idling

21,233 kWhrs

\$2,100 per year

MediDock

3,080 kWhrs

\$308 per year

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Thank –you for your attention

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Brattleboro Memorial Hospital, Brattleboro, VT

