

Making a Clear Difference in the Air We Breathe

The AirCare program began in September 1992 with a simple mandate - to improve the region's air quality by reducing harmful vehicle pollutants. AirCare is a major component of both the Greater Vancouver Regional District's (GVRD) Air Quality Management Plan (AQMP) and the Fraser Valley Regional District's (FVRD) Air Quality Management Plan (AQMP) that is intended to combat air pollution.

AirCare tests non-diesel vehicles for three regulated pollutants: Hydrocarbons (HC), Carbon Monoxide (CO), Oxides of Nitrogen (NO_x) and diesel vehicles for smoke. By identifying and requiring repairs to high emitting vehicles, AirCare makes an important contribution to improving the quality of the air we breathe.

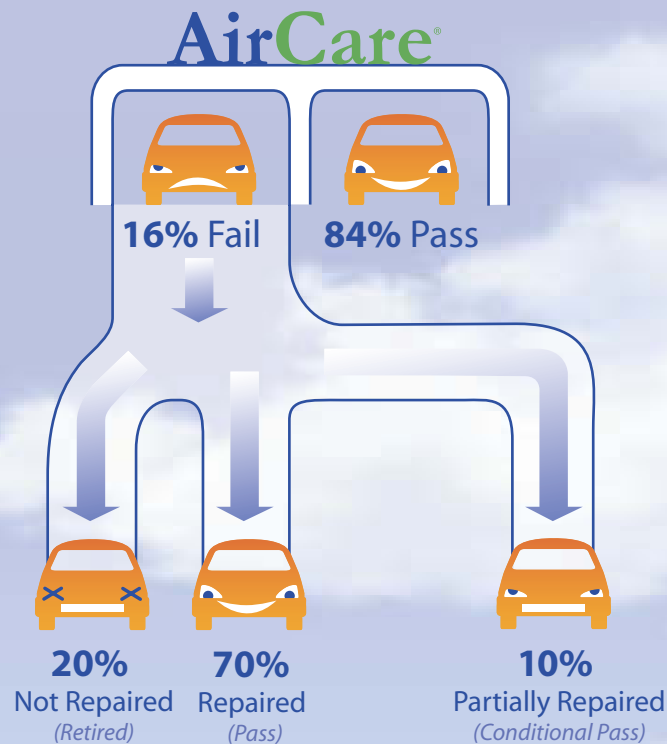
AirCare regularly conducts detailed scientific reviews that assess overall program effectiveness and report on total reductions in vehicle emissions attributed to the program. These technical reviews follow established scientific methodology and are fair appraisals of the program's successes and shortcomings.

This Public Report contains highlights from AirCare's 2001-2002 Technical Review. The full technical report, along with other reviews and studies of the program are available from the AirCare website at www.aircare.ca.

To request a full printed copy of AirCare's 2001-2002 Technical Review contact:

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604-820-2226

For detailed reports, inspection results,
odometer readings, pass/fail statistics,
addresses, maps and more, visit the website:
www.aircare.ca

Public Report

*Highlights from the 2001-2002
Technical Review of AirCare*



AirCare
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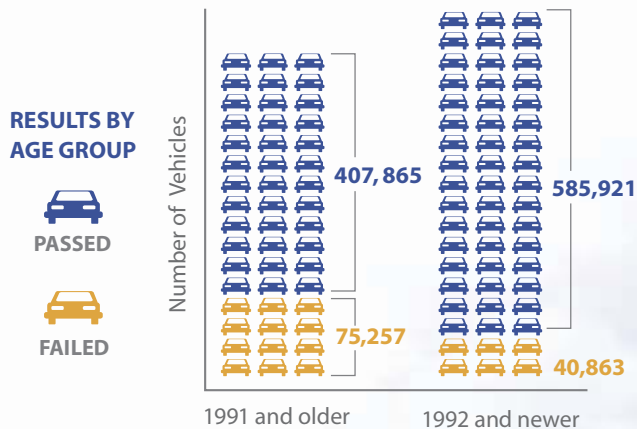
Inspections

The AirCare program is designed to identify high emitting vehicles and ensure that they are repaired. AirCare uses proven, state of the art testing technology to measure the smog-forming pollutants in vehicle exhaust.

There were approximately 1.2 million light-duty vehicles registered in the Lower Mainland and Fraser Valley in 2002. AirCare inspected 748,068 light-duty vehicles in 2001 and 778,521 light-duty vehicles in 2002.



Enhancements to the AirCare program were made to keep pace with modern vehicle technology. These enhancements have significantly improved the program's ability to identify vehicles with unacceptably high emissions. This is reflected in the increase in fail rates for vehicles inspected during the period covered by this report. 114,189 light-duty vehicles (15.26%) failed their initial AirCare inspection in 2001 and 127,436 light-duty vehicles (16.36%) failed their initial AirCare inspection in 2002. In both years, the majority of vehicles that failed can be attributed to 1991 and older vehicles.



The data also shows that the introduction of the enhanced inspection for 1992 and newer vehicles has had a dramatic effect on the failure rate for newer vehicles. Prior to 2001, the failure rate for 1992 and newer vehicles was less than 3%. In 2002, the failure rate for 1992 and newer vehicles reached 9.6%. It is fair to conclude that this new, enhanced test is catching excessively emitting vehicles that were not being identified by the previous test.

Repairs

The AirCare program is very good at correctly identifying excessively polluting vehicles. However, reductions in vehicle emissions, which ultimately lead to improvements in regional air quality, cannot be achieved without effective repairs.

AirCare has developed special programs to train, certify and monitor AirCare Certified Repair Centres and AirCare Certified Repair Technicians. These Certified Technicians must take additional studies in emissions control systems and must pass an exam prior to earning their certification. The AirCare program regularly audits AirCare Certified Repair Centres and Certified Repair Technicians to ensure effectiveness of all emissions-related repairs.

There are currently about 1,300 AirCare Certified Repair Technicians and approximately 430 AirCare Certified Repair Centres.



Data provided by AirCare Certified Repair facilities indicates that they handle approximately 30% of all the vehicles that fail AirCare. Of these vehicles, about 68% are successfully repaired and receive a full pass on re-inspection. Approximately 32% are only partially repaired and receive a Conditional Pass upon failing the re-inspection.

The average cost to repair a failed vehicle was \$343 in 2001 and \$377 in 2002.

Benefits



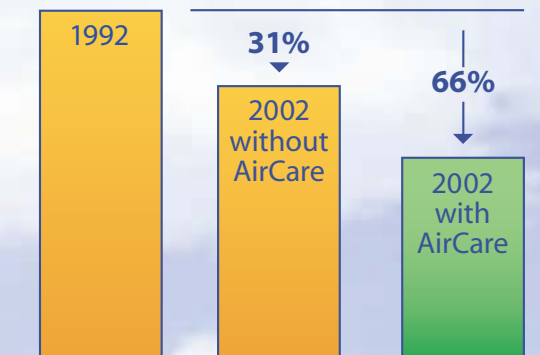
By identifying excessively polluting vehicles and ensuring proper repairs, the AirCare program has helped to greatly reduce vehicle emissions, leading to significant improvements to the air we breathe.

In 2001 and 2002, AirCare data shows that Hydrocarbons (HC), Carbon Monoxide (CO) and Oxides of Nitrogen (NO_x) were reduced by a total of 23,208 tonnes.

	2001	2002
HC	13% (1,262 tonnes)	15% (1,338 tonnes)
CO	8% (9,068 tonnes)	10% (10,440 tonnes)
NO_x	5% (506 tonnes)	7% (594 tonnes)

In its first ten years, from 1992-2002, the AirCare program reduced total vehicle emissions by 35% for a total reduction of 731,790 tonnes of HC, CO and NO_x.

Vehicle Emission Reductions



There are other benefits in addition to those directly related to vehicles that were repaired as a result of the AirCare program. Data shows that approximately 20% of vehicles that failed the initial AirCare test in 2001 and 2002 were removed from use.

A random sample of these 'retired' vehicles indicates that in virtually all cases, the vehicles were no longer licensed in British Columbia. The estimated total emissions reductions from this portion of the fleet in 2001 and 2002 could be as high as 47,388 tonnes.