

Asthma and congestion pricing – a closer look

Mayor Michael Bloomberg has proposed that New York City establish a new system of “congestion pricing,” in which private cars and trucks driven into Manhattan below 86th Street on weekdays between 6:00 AM and 6:00 PM would be subject to charges of \$8.00 per day for automobiles and \$21 for trucks. (For those driving within Manhattan below 86th Street, the charge would be \$4.00 for cars and \$5.50 for trucks.) Supporters of the Mayor’s proposal have asserted that congestion pricing would significantly improve air quality in the City – and specifically, that it would provide significant relief to those who suffer from asthma.

On closer inspection, however, claims that congestion pricing would significantly reduce the incidence or severity of asthma in New York City appear to be seriously exaggerated. In some of the neighborhoods with the highest asthma rates, the proposed congestion pricing system could even make the problem worse.

- Asthma is a complex ailment, the causes of which are still not fully understood. But research suggests that a wide range of factors contribute to both the incidence and severity of asthma – including ambient air quality, indoor air pollution (from smoking, from poorly maintained heating systems, etc.), living in a high-stress environment, cockroaches, pet dander and lack of proper health care.

Auto and truck traffic is thus *one of* several sources of the air pollution that is *one of* the causes of asthma. The complex (and to some extent uncertain) relationship between vehicular pollution and other causes of the disease is highlighted by the fact that the prevalence of asthma in New York City has risen during the past decade, even as the volume of pollutants produced by motor vehicles has declined.

- The City estimates that the congestion pricing system proposed by the Mayor would result in a 3 percent reduction in the total volume of pollutants generated within the City by on-road vehicles. However, most of this reduction would be concentrated within the congestion pricing zone – that is, in Manhattan below 86th Street.

- The area that would benefit the most in terms of improved air quality is one in which asthma hospitalization rates are already relatively low. In 2005, according to the New York State Department of Health, the asthma hospitalization rate for the ZIP codes that roughly cover Manhattan below 86th Street was 16.2 per 10,000 residents.
- In the rest of Manhattan, where the asthma hospitalization rate is much higher – 46.1 per 10,000 residents – the reduction in vehicular pollution would be much more modest.
- Asthma rates in the Bronx are even higher than those in upper Manhattan. In seven mid-Bronx ZIP codes traversed by the Cross Bronx Expressway, for example, the asthma hospitalization rate in 2005 averaged 76.2 per 10,000. While the data published by the City are not sufficient to allow us to analyze the impact of congestion pricing at the neighborhood level, it seems likely that diversion of car and truck traffic away from the Manhattan CBD would increase the volume of traffic on the Cross-Bronx Expressway – and thus aggravate air quality problems in this corridor.
- Without more detailed information, we cannot definitively say that the proposed congestion pricing system would make the already-serious air quality problems of these mid-Bronx neighborhoods worse. But the risk seems real enough to suggest that further analysis is needed before the City is authorized to implement congestion pricing.

Supporters of the Mayor's proposed congestion pricing system may thus be seriously overstating the extent to which it would alleviate asthma. This might seem to be, in the overall scheme of things, a relatively harmless exaggeration. Air quality could, after all, improve significantly within the congestion pricing zone, and to a lesser degree in some other neighborhoods. But there is a risk here as well – that by overselling the benefits of congestion pricing, its advocates could divert attention from other, more serious efforts to address one of New York's most difficult and most persistent health problems, especially in those neighborhoods where it exacts the greatest toll.

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