

Involving the Community, Overcoming Controversy: West Nile virus in NYC

Sandra Mullin

**New York City Department of Health
and Mental Hygiene**

KILLER BUG

Mosquito virus
kills two in
Queens

PAGES 2-3



The bug-eyed
mosquito that
carries the St.
Louis encephali-
tis virus plaguing
sections of
northern Queens.

SPORTS

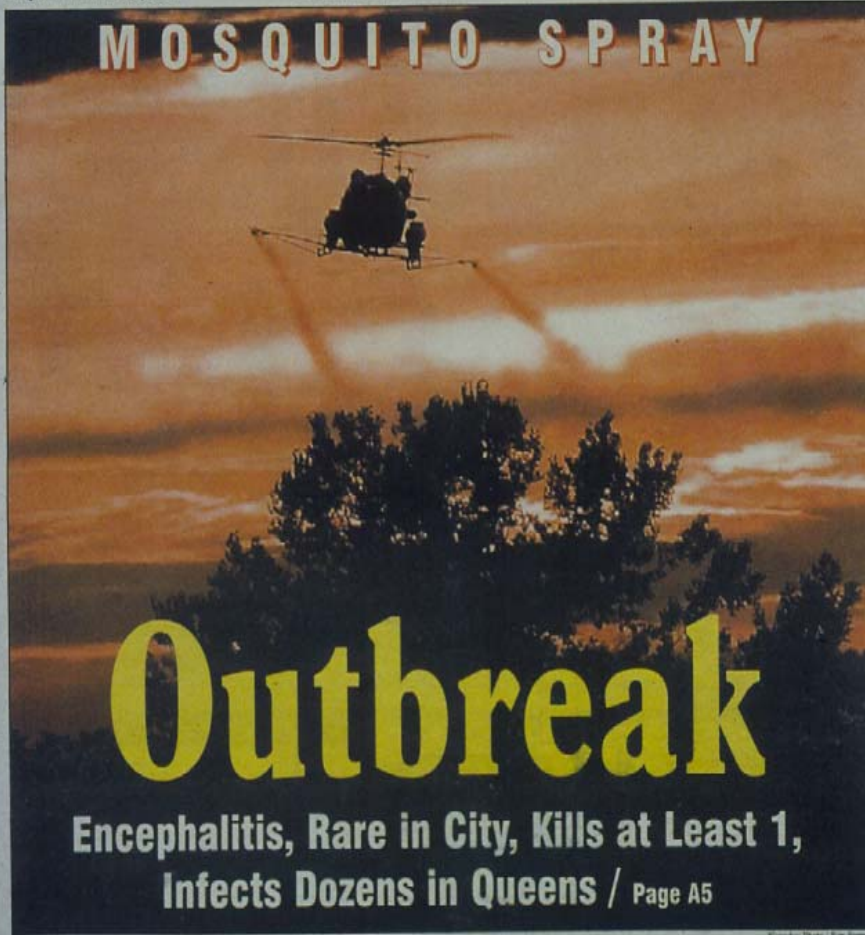
Newsday

<http://www.newsday.com>

SATURDAY, SEPT. 4, 1999 • QUEENS

50¢

MOSQUITO SPRAY



Outbreak

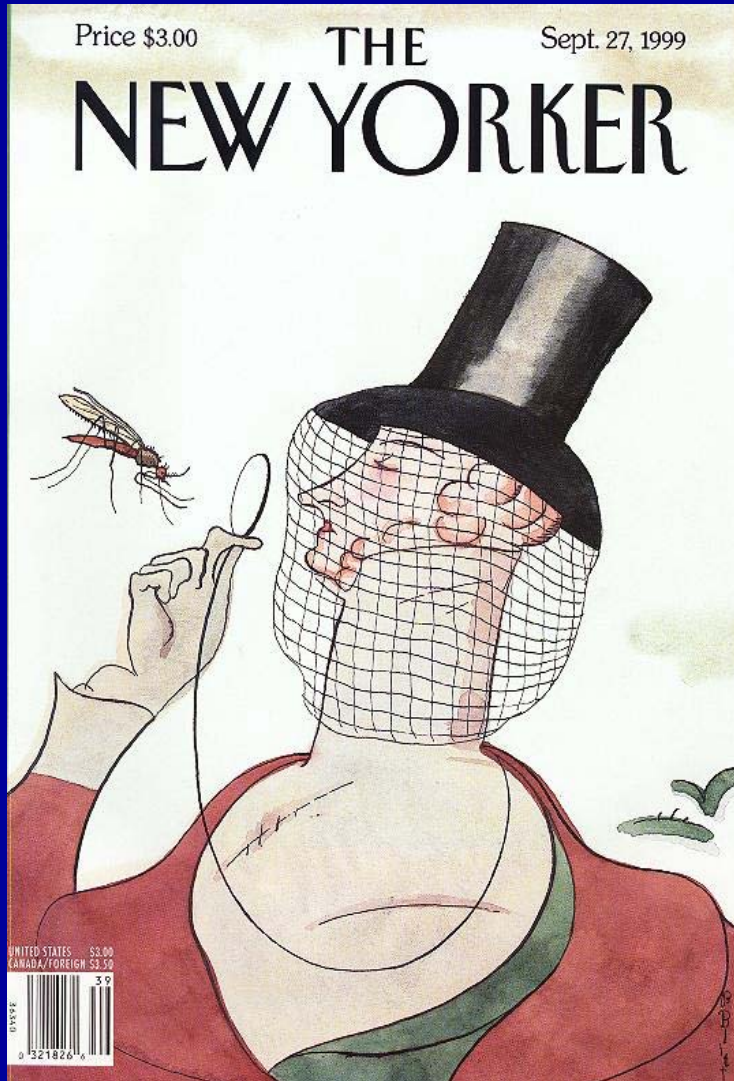
Encephalitis, Rare in City, Kills at Least 1,
Infects Dozens in Queens / Page A5

A helicopter releases spray intended to kill disease-carrying mosquitoes over Powell's Cove Park in College Point.

Newsday Photo / Ron Sanchez

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“Buzz City”



Buzz City

by

Barry Blitt

The New Yorker

Sept. 27, 2000

We Don't Know From Mosquitoes!

- **West Nile virus never before seen in the Western hemisphere**
- **An insect problem other than the cockroach in NYC.....FUGGEDABUDIT!!!!**
- **Media capital + exotic disease = 7 weeks of headlines and/or prominent stories**
- **Enhanced communication: Press release a day, press conferences, two way radios, laptops, etc**
- **Health Department transformed into 24/7 emergency response agency**

Immediate Communication Concerns

- Had to act quickly---- within hours launched aerial spraying campaign
- National/International media on scene
- 100- 150 media inquiries per day
- Quickly set up hotline staffed by DOH personnel
- Developed multilingual fact sheets
- Attended numerous community forums
- Public health decision to spray was perceived by some as an involuntary risk (we were not adequately skilled in risk communication)

LET US SPRAY!



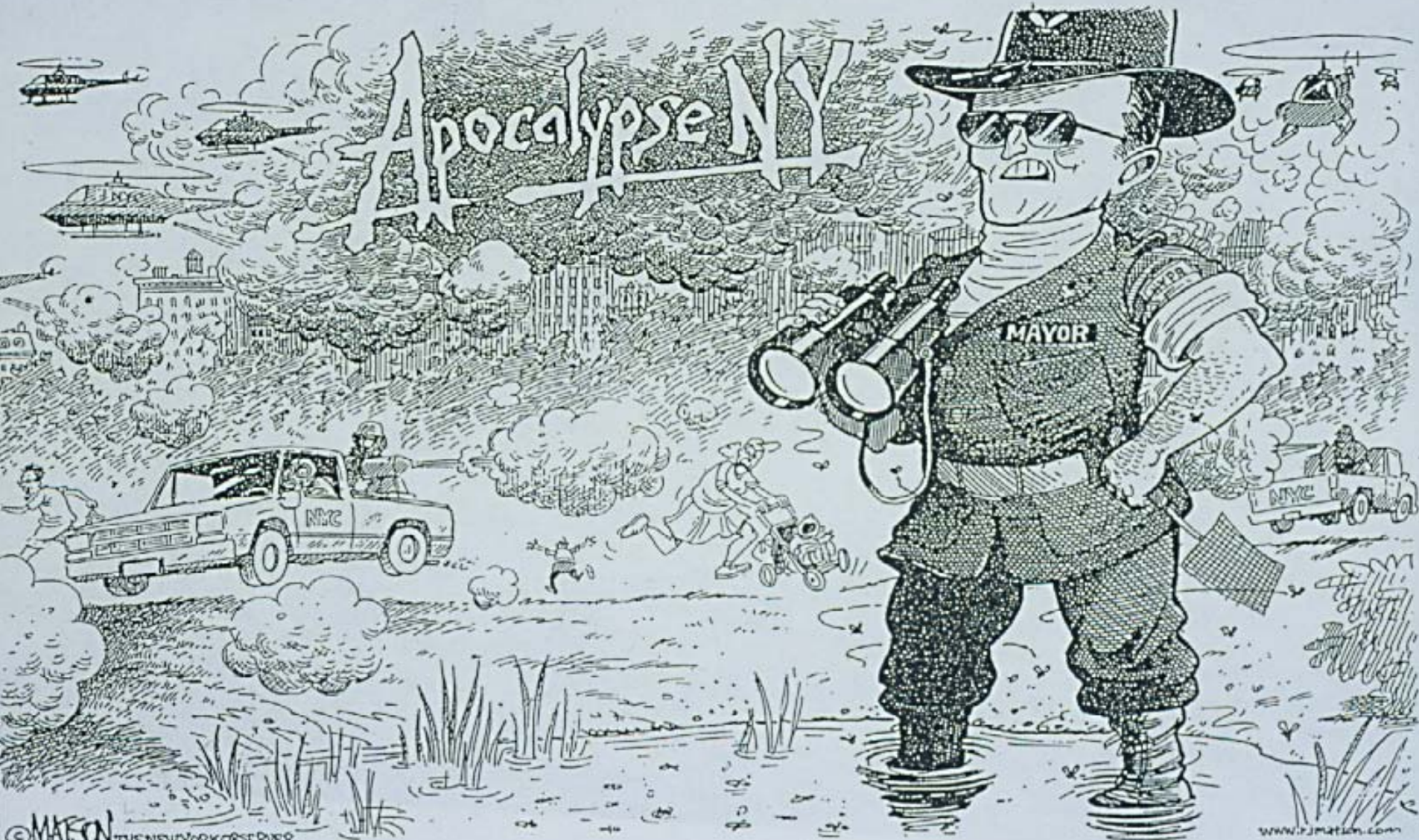
Citywide
war on
mosquitoes

PAGES 4-7

FREE!

5,000 tickets to The Radio City Christmas Spectacular

SEE MONDAY'S POST TO ENTER — AND WIN



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www.jmason.com

"I LOVE THE SMELL OF MALATHION IN THE MORNING!"

Public Anxiety

- **From September 3, 1999 – October 23, 1999, over 150,000 calls were received from the public.**



Shanahan

"We're pretty sure it's the West Nile virus."

DAILY NEWS

★ ★ ★ ★ ★
SEE PAGE 9

FINAL

City poised to spray a Queens neighborhood

By LISA L. COLANGELO
Daily News Staff Writer

The deadly West Nile virus has reappeared in Queens, and if ongoing tests confirm preliminary findings, the city will begin ground spraying in the section of the borough early in the summer. The virus that killed a sickened dog...

If, as expected, the virus has returned, city officials plan to attack it aggressively, starting with ground spraying of the pesticide resmethrin Monday night. The use of a pesticide is the...

Last year, Giuliani and his administration were criticized by residents for environmental...

THE NEW YORK TIMES METRO WEDNESDAY, SEPTEMBER 8, 1999

New York City Mosquito Control Is Weak and Late, Experts Say

By JODI WILGOREN

New York City has one of the least aggressive mosquito-control programs in the nation, with virtually no preventive maintenance and a budget that is less than 6 percent of that in nearby Suffolk County, where human population is only one-fifth the size of New York's.

City Health Department officials even borrow malathion, a pesticide sprayed over the week-long program, from Suffolk County's Department of Health. "They are spray-

NEW YORK TIMES - FRIDAY, MAY 12, 2000

E.P.A. Finds Malathion Poses Low Risk Mosquito Spray Deemed Safe at Proper Levels

By ANDREW C. REVKIN

A new federal review of the health effects of malathion, the insecticide sprayed around New York City last year to kill disease-carrying mosquitoes, has found "suggestive evidence" that high doses of the chemical may cause cancer in laboratory animals, but no evidence of a threat to people when used as directed. The Environmental Protection Agency...

are spray- can't go to the park." By residents they can't he...


Sorry, wrong virus!

SPORTS

Newsday

<http://www.newsday.com> SATURDAY, SEPT. 25, 1999 • QUEENS 60¢

Second Virus



**Potentially Deadly
West Nile
Encephalitis
Is Detected In
Dead Birds in City**

AP Wire Photo
A female *Culex pipiens* mosquito, which can carry West Nile encephalitis.

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Dilemmas

- Risk communication no-no: We used data to make the point that pesticides were relatively harmless without adequately acknowledging fear and skepticism....we over-reassured!
- WNV and pesticides: exotic, out of individual's control, unfair
- Government wasn't trusted (Sandman's seesaw)
- Communication seemed contradictory: the risk of getting serious illness from West Nile virus is low but we're gonna spray anyway...and by the way the risk from spraying is low too
- We didn't share this dilemma openly

Challenges in 1999

- **Community meetings: very difficult - - vocal opposition to spraying – Malathion in particular**
- **News media – protests and opposition provided ongoing grist for news coverage**
- **Despite how difficult meetings were, we went anyway**
- **Despite how difficult news interviews were, we did them anyway**
- **We sprayed with other insecticides in 2000**

Social marketing helped

- **Used marketing principles to influence behavior**
- **There were things for people to do to protect themselves**
- **We appealed to community and civic responsibility**

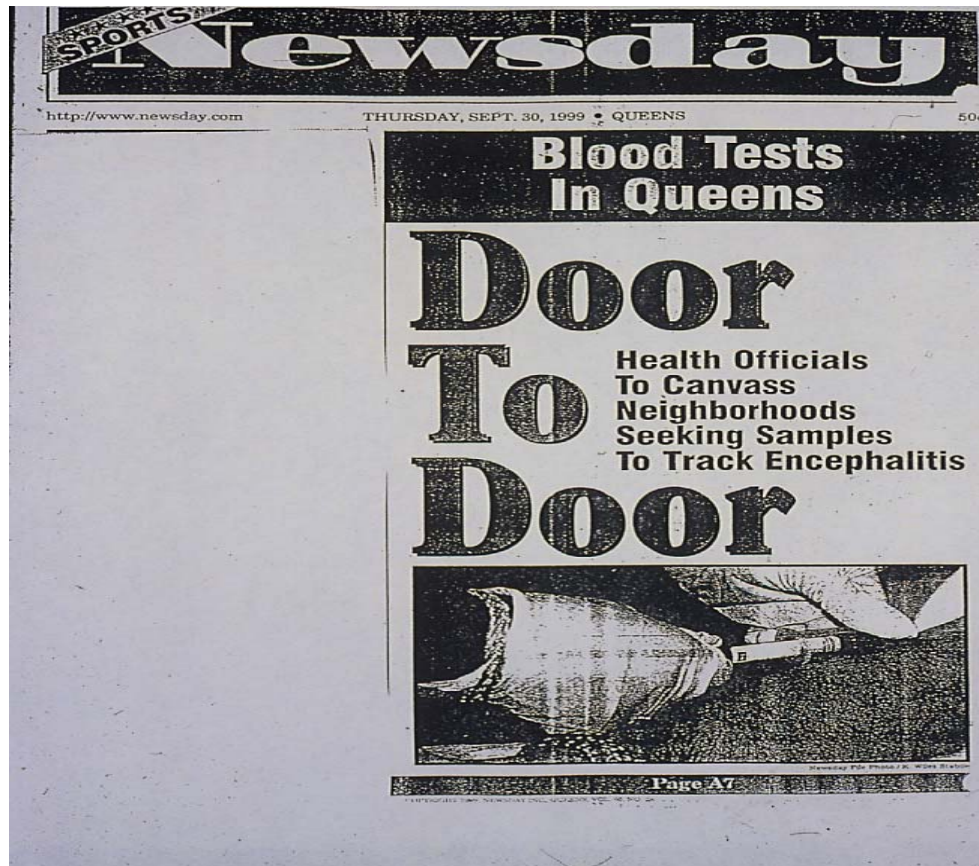
Social Marketing, 1999-2002: communications and...

- **Hotline - outsourced; IVR with schedule**
- **News media - printed spray schedule**
- **Provides other than spraying media ops.**
- **Radio spots announced schedule**
- **Animated TV spot**
- **Subway and bus shelter campaign**
- **Brochure , 16 fact sheets – 17 languages**
- **Door hangers, magnets, tshirts**

...working with communities

- **West Nile speakers' bureau**
- **Numerous community presentations**
- **Population/interest-based fact sheets – children, elderly, workers, pets**
- **West Nile Youth Corps**
- **Transportation Hubs – spray warnings**
- **Community leaders helped**

Sero-survey of 1999



Rolling up sleeves for public health in October 1999

- **Of 1077 households, 470 gave blood, 677 participated (1.2 – 4.1 infection rate)**
- **Took 5 days instead of what was projected to be 3 weeks to conduct survey!**
- **Community boards, BP, media helped**
- **As promised, held press conference in community announcing results**

Normalizing WNV

- **Website based approach - - click on send reports; learn about spray schedules**
- **Routinely place human case numbers, mosquito pools, dead bird and other animal reports on website**
- **Press release beginning of the season, unusual occurrences, promotional opportunities, every spray event, when deaths occur, wrap up of season**

Report Dead Birds!!



Success in 1999

- Arguably, we stopped the outbreak
- Relationship strengthened between medical care community and DOHMH
- We showed how quickly NYC could mount a public health and a public communication response
- We received funding to build surveillance and control infrastructure

...and in 2000 and beyond

- **Increasing orientation toward preparedness and prevention**
- **More staff –control, surveillance, education**
- **Kick off Spring campaign with Mayors**
- **Intra-agency coordination**
- **Baseline of data**

Public Education in 2000



Eliminate
Standing
Water
Around
the House



Keep
swimming
pools and
birdbaths
clean

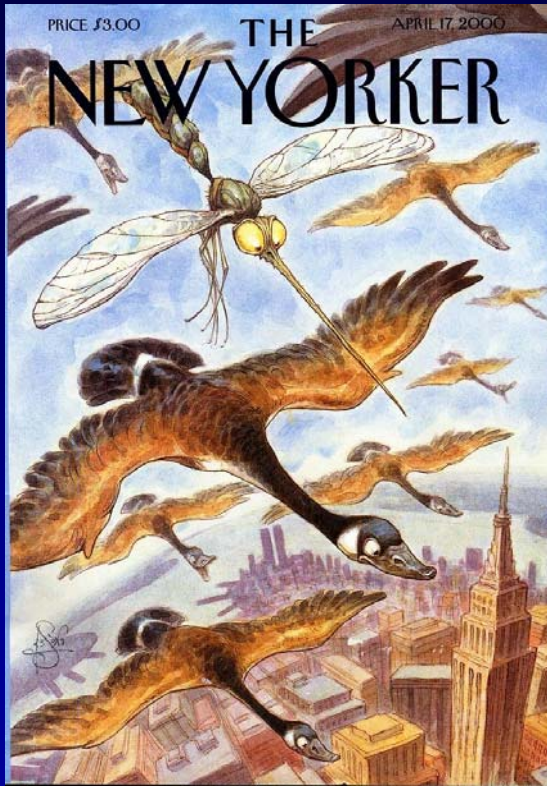
Throw
away
used
tires



Summary of Human Cases, West Nile virus 1999-2002

	Cases	Deaths
■ 1999	45	5
■ 2000	14	1
■ 2001	7	0
■ 2002	29	3

Thank you
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The Bite of Spring

by

Peter de Seve

The New Yorker
April 17, 2000

