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County Executive

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Commissioner, Department of Health

ATTENTION

Public Health Update

The Westchester County Department of Health provides public health updates to members of the medical community on important issues affecting public health in Westchester

Please share this letter with your colleagues in the Departments of Internal Medicine, Pediatrics, Family Medicine, Ob/Gyn, Emergency Medicine, and Laboratory Medicine

TO: Health-Care Providers for HIV/AIDS-Infected and Other Immunocompromised Patients

FROM: Ada Huang, M.D. *AJH*
Deputy Commissioner, Disease Control

DATE: March 11, 2002

SUBJECT: **Decrease in levels of *Giardia* and *Cryptosporidium* found in the reservoirs supplying Westchester County and New York City: Advising immunocompromised patients about potential risk due to public drinking water**

Decrease in levels of *Giardia* and *Cryptosporidium* found in reservoirs supplying Westchester County and NYC

Recent water samples of reservoirs supplying Westchester County and New York City have shown a decrease in the concentration of *Cryptosporidium* oocysts and *Giardia* cysts from the slight increase over baseline seen in mid-February. The Westchester County (WCDH), New York State and City Departments of Health and the NYC Department of Environmental Protection (DEP) are assessing water quality data, water operations and disease surveillance information to closely monitor the situation. However, disease surveillance for *Cryptosporidium* in Westchester County residents over the last three weeks has not revealed an increase in cases of cryptosporidiosis. This memorandum is a reminder that the significance of finding small numbers of *Cryptosporidium* oocysts in the municipal water supply is not known and that patients with severely immunocompromising conditions may wish to consider the potential risk of drinking tap water even when levels of oocyst detection are low.

DEP's *Cryptosporidium* and *Giardia* Monitoring Program: Monitoring for the protozoa *Cryptosporidium* and *Giardia* began in 1992, as part of a comprehensive watershed monitoring program. Samples are collected weekly from the effluents at Kensico and New Croton Reservoirs, just before the water is chlorinated. Results are regularly posted on the DEP website at: <http://NYC.gov/html/dep/html/pathogen.html> At the present time, there are no EPA numerical standards for *Cryptosporidium* and *Giardia* in drinking water.

Recent *Giardia* and *Cryptosporidium* Test Results in Westchester County and NYC Water Samples:

Since the implementation of a new and more sensitive assay in October 2001 (Method 1623HV), the concentration of *Giardia* cysts in the City's reservoirs has ranged from 0 – 4 per 50 L. The concentration of *Cryptosporidium* oocysts has ranged from 0 – 2 per 50 L. In mid-February there was a slight increase from these levels. While the overall levels of both *Cryptosporidium* oocysts and *Giardia* cysts have decreased since the alert of February 14th, both organisms are being detected more frequently than in the past. All other water quality parameters, including turbidity and fecal coliforms, are within acceptable levels.

The Risk of Disease due to Small Numbers of *Cryptosporidium* Oocysts in Drinking Water is Not Known: The significance of finding small numbers of *Cryptosporidium* in municipal water supplies to the public's health is not known. Due to limitations in the current methodologies for testing for *Cryptosporidium* oocysts in water supplies, public health decisions cannot be based on *Cryptosporidium* test results alone. Testing does not distinguish between viable (potentially infectious) oocysts and non-viable ones. The test also cannot distinguish among different species of *Cryptosporidium*, not all of which are infectious for humans.

No evidence of increased diarrheal disease has been detected due to these low levels of *Cryptosporidium*: Surveillance in Westchester County has not shown an increased number of cases of cryptosporidiosis. Between February 12, 2002-March 4, 2002, no cases of cryptosporidiosis were detected. In the same time period in 2001, no cases of cryptosporidiosis were reported. During the past five years, an average of 2-3 cases were reported to WCDH during the month of February.

Please continue to consider *Cryptosporidium* in the differential diagnosis of patients presenting with watery diarrhea and report any increase in diarrheal disease to the WCDH:

Because of the long incubation period for cryptosporidiosis and the delay for many patients in seeking medical care for diarrheal illness, please continue to consider cyptosporidiosis in the differential diagnosis of patients presenting with watery diarrhea. Most clinical laboratories do not perform *Cryptosporidium* testing as part of a routine ova and parasite examination. If you suspect your patient may have cryptosporidiosis, your order for laboratory testing should specifically request a test for *Cryptosporidium* (e.g., modified acid fast staining, immunofluorescent antibody staining, or ELISA). All positive *Cryptosporidium* tests should be reported routinely to the WCDH. If you observe an increased number of patients presenting with watery diarrhea, please contact the Division of Disease Control immediately:

During business hours:

| | |
|---------------------|---------------------------------------|
| 914-813-5159 | Monday-Friday 8:30AM – 4:30 PM |
| 914-813-5182 | (FAX) |
| 914-813-5000 | 7 days/week, 24 hours/day |

Advising Immunocompromised Patients about *Cryptosporidium* and Drinking Water

This follow-up alert is a reminder that the Westchester County and New York City water supply is a clean, chlorinated, system, but it is not sterile. The risk of becoming infected with *Cryptosporidium* due to drinking tap water is unknown. Low levels of *Cryptosporidium* in the water are not felt to pose a risk to healthy people. However, patients who are more severely immunocompromised (e.g., patients with HIV/AIDS, especially those with CD4 counts less than 200, patients with leukemia, patients that are post bone marrow transplantation) are at higher risk of developing cryptosporidiosis, and may potentially be more susceptible to low levels of *Cryptosporidium* in the water supply. Because there is no treatment for cryptosporidiosis, such patients may be unable to clear the infection.

These patients may wish to reduce their potential risk of cryptosporidiosis due to drinking water regardless of the levels tested by taking any one of the following measures. To be effective, these

precautions must be taken at all times (i.e., both inside and outside the home). For specific advice for immunocompromised patients, see Public Health Update of 2-15-02: Low levels of *Giardia* and *Cryptosporidium* found in the reservoirs supplying Westchester County and New York City which is posted on the Physician's Corner section of the WCDH website at: <http://www.westchestergov.com/health>.

For more information:

The NYSDOH fact sheet on cryptosporidiosis is available at the Health Department's Web site at <http://www.health.state.ny.us>. For more information about Westchester County and New York City's drinking water contact visit DEP's Web site at <http://NYC.gov/html/dep>. Information is also available by calling EPA's Safe Drinking Water Hotline at (800) 426-4791 (9:00am-5:30 pm, M-F) or from CDC's Web site at <http://www.cdc.gov>.

The DEP, Westchester County, New York State, and New York City Departments of Health will continue to monitor closely ongoing water test results as well as our surveillance systems and alert you if the levels of *Cryptosporidium* in the water supply or diarrheal illness in the community increase. All water test results will be posted on DEP's Web site at: <http://NYC.gov/html/dep/html/pathogen.html>. Thank you for your cooperation.

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