

The Naples Public Health Evaluation (PHE) has been completed under the guidance of the Navy and Marine Corps Public Health Center. The PHE was designed to evaluate the potential short and long-term health risks associated with living in the Naples area as a result of inadequate waste disposal practices.

Launched in 2008 and completed in June 2011, the PHE involved the collection of air, water, soil and soil gas samples from throughout the region.

For details and background information, visit the website listed at the bottom of this page.

Your Health: Facts for Navy Families in Naples

About: Summary of Enduring Processes for Continued Health Protection

The U.S. Navy is committed to ensuring families are safe while serving our country at home or overseas. Although the Public Health Evaluation has formally ended, what the Navy learned led to new health protective policies and ongoing oversight of necessary steps to take to ensure a continued safe presence in the Naples area, in support of essential missions. In line with our commitment to continually share important health information, we encourage you to review this fact sheet.

What are the Navy's health protective processes?

Throughout the Naples Public Health Evaluation (PHE), the Navy was able to identify and address public health risks for U.S. personnel living in the Campania region. The Navy established health protective policies and took immediate actions, when necessary, to protect the health of U.S. personnel and their families. With the completion of the PHE, existing health protective policies will remain in place, and a few new procedures will be implemented to ensure continued health protection beyond the life of the study.

Health protective processes already implemented that will remain in place include:

- **Bottled water advisory.** The Navy will permanently continue the bottled water advisory that was initially issued in July 2008. The bottled water advisory states that all personnel living off-base should use bottled water for drinking, cooking, food preparation, making ice and for pets.
- **Health protective lease clauses for off-base rentals.** The Navy will permanently continue the health protective lease clauses that were implemented in November 2008 for U.S. personnel living in off-base rental homes. Landlords are required to:
 - Provide bottled water service from a Navy-approved vendor.
 - If a water holding tank is present in the home, clean and disinfect the home's water holding tank and associated plumbing twice a year and prior to the occupancy of a new tenant.
 - Connect the home's plumbing system to the municipal water supply and disconnect from non-permitted wells. The home must be connected to either the municipal water supply or to an appropriately permitted drinking water well to be eligible to rent to U.S. personnel.
- **New Lease Suspension Zones.** In November 2008, the Navy established three New Lease Suspension Zones, or areas off-limits for new off-base rentals (see map on page 2). The Navy will maintain the New Lease Suspension Zones indefinitely.
- **Health information updates on the Naples Community Health Awareness website.** The Navy established the website in February 2008 as an information resource for U.S. personnel and their families. This website will be maintained indefinitely: <http://www.cnmc.navy.mil/Naples/About/HealthAwareness/>

In addition, off-base rental homes are subject to random oversight visits by Navy Housing personnel and scheduled inspections prior to re-leasing.

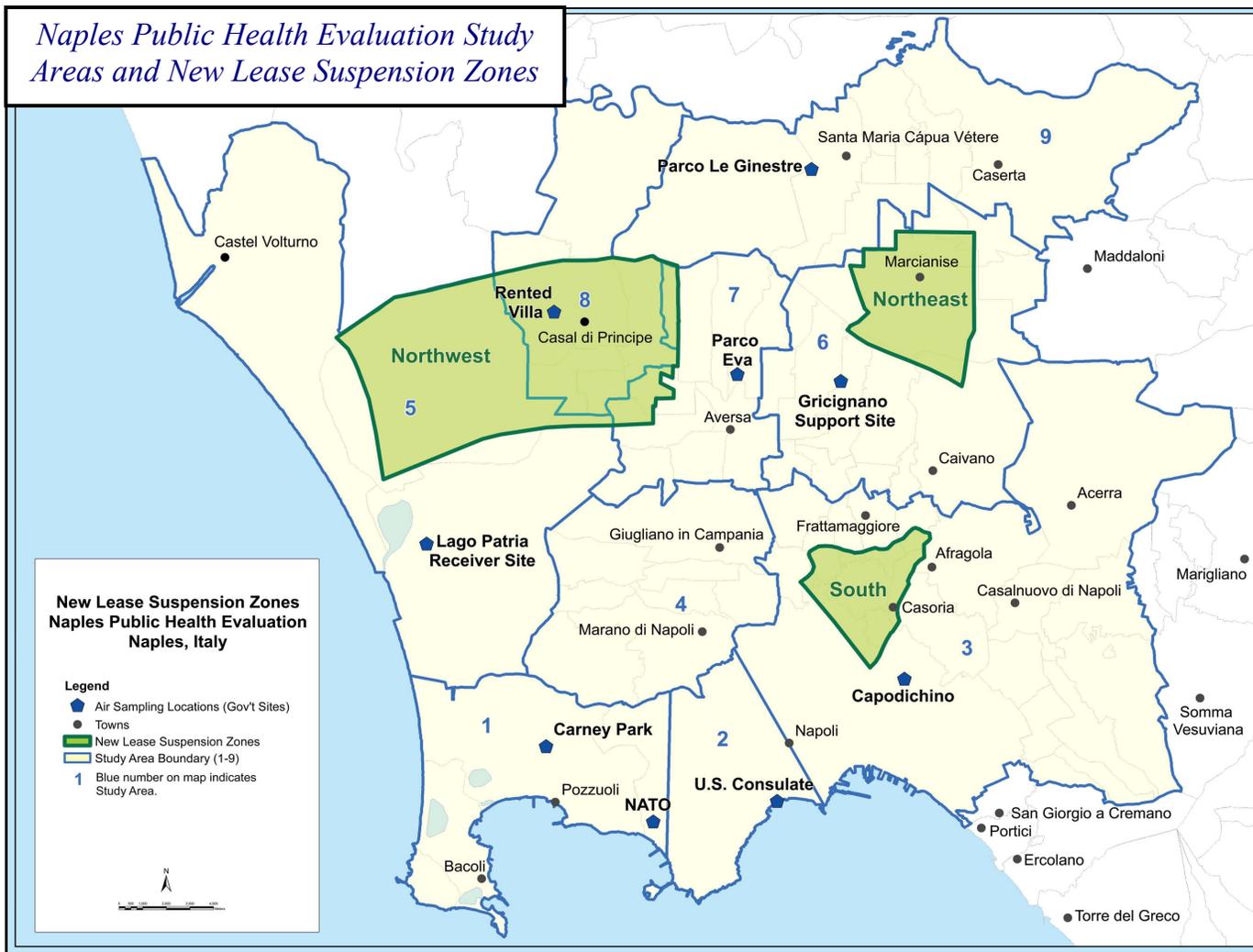
- **Education and counseling at the Environmental Health Information Center.** The Environmental Health Information Center (EHIC) was established at the U.S. Naval Hospital Naples in October 2008. EHIC staff is comprised of physicians and health professionals and will continue to be available to discuss environmental health-related concerns. EHIC can be reached at DSN 314-629-6299 or 081-811-6299.

In addition to continuation of the above measures, the Navy established new strategies for continued health protection based on the conclusions of the PHE reports. New strategies include developing additional educational programs and providing more staff to ensure all personnel and families are informed on how to protect their health while living in Naples. These new strategies were developed to provide a pragmatic, cost effective and executable

long-term strategy for protecting human health. New health protective processes that will be implemented include:

- **More robust health risk education programs for U.S. personnel.** The Navy will provide refresher health risk training to personnel that have resided in Naples for more than six years. The Navy-wide Housing database will be used to proactively track and flag the personnel who reside in Naples for greater than six years. Historically, approximately six percent of U.S. personnel reside in Naples for more than six years. The Navy will also continue to educate personnel on how to choose a home with characteristics that can significantly reduce the potential risk of vapor intrusion. For example, homes that have ground floor parking garages that are well ventilated and living quarters above the ground floor or higher can significantly reduce the likelihood of vapor intrusion into the

Naples Public Health Evaluation Study Areas and New Lease Suspension Zones



home. Residents should also avoid living in basements.

- **Reminders about cleaning and disinfecting the home's water holding tank.** The Housing office will modify its database system to enable distribution of reminders on a semi-annual basis to residents and landlords about required cleaning and disinfection of the home's water system. Housing will also arrange to randomly observe the cleaning procedures.
- **U.S. Naval Hospital Naples will continue monitoring Italian environmental and health-related information and make public health information available to U.S. personnel.** The Navy is in the process of adding a bilingual staff member at U.S. Naval Hospital Naples for this purpose.

How did the Navy evaluate the sampling data to develop the new health protective processes?

There are a number of ways to evaluate the data collected. During the PHE, a conservative approach that assumed a person was living in Naples for 30 years was used to evaluate the sampling data. This conservative 30-year approach was selected to compensate for many unknowns, such as the lack of historical data regarding land use, contaminant sources and contaminant types. The 30-year exposure duration is also the U.S. Environmental Protection Agency's (USEPA) default duration that is typically applied to residents in the U.S. While this 30-year assumption was overprotective in the short-term while the Navy was investigating the situation in Naples, now that the PHE has been completed, using more accurate assumptions for enduring processes is appropriate.

In finalizing the health protective processes that will be maintained indefinitely, the Navy used a more appropriate assumption of living in Naples six years or less, which applies to 94 percent of U.S. personnel. The average military tour length is 2.2 years and the average civilian tour length is 3.2 years. The overall population average tour length is 2.8 years. Therefore, it is clear that developing the new enduring processes based on exposure duration of six years rather than 30 years is appropriate for the

typical length of stay of U.S. personnel and is supported by the guidance listed below.

- Navy Human Health Risk Assessment (HHRA) policy and guidance states that assessments be conducted in a tiered fashion, with refinements made to conservative initial assumptions (i.e., 30-year assumption) to meet site-specific characteristics (i.e., six-year assumption).
- Department of Defense Vapor Intrusion Handbook (January 2009), Section 4.2.2, Military-Specific Exposure Factors, recommends using exposure parameters that are applicable to military personnel, with tours shorter in duration than USEPA's 30-year default exposure duration, which is typically applied to non-military residents in the U.S.

Overall, the PHE determined that the potential health risks for living off-base can be mitigated by adopting the U.S. Navy established enduring processes.

For more information about the Naples Public Health Evaluation, visit <http://www.cnicy.navy.mil/Naples/About/HealthAwareness/> or contact the Environmental Health Information Center at U.S. Naval Hospital Naples, DSN 314-629-6299 or commercial 081-811-6299.



For more information contact:

Environmental Health Information Center
U.S. Naval Hospital Naples, Room 2102
COMM: 39-081-811-6299
DSN: 314-629-6299

Navy and Marine Corps Public Health Center

620 John Paul Jones Circle, Suite 1100
Portsmouth, VA 23708
757-953-0664
Fax: 757-953-0675

Naval Support Activity, Naples

Public Affairs Office
PSC 817 Box 40
FPO AE 09622
COMM: 39-081-568-5907
DSN: 314-626-5907