

AGROMEDICINE PROGRAM UPDATE

MUSC DEPARTMENT OF FAMILY MEDICINE – DIVISION OF PUBLIC HEALTH AND PUBLIC SERVICE
19 HAGOOD AVENUE – SUITE 305 HOT, P.O. BOX 250805, CHARLESTON, SC 29425

Wm. M. Simpson, Jr., MD, Editor
Simpsovm@musc.edu
843-792-2281 Fax 843-792-4702

Volume 16
No. 4
April 15, 2004

Previous issues are available at www.musc.edu/oem/apunews.html

Program Notes

➤ Sam Caldwell Retires

Sam Caldwell, editor to the Agromedicine Program Update since its inception more than sixteen years ago and project administrator, retired at the end of March. While he has more than 32 years of service to the state, he left us earlier than he might have otherwise because of budget cuts which have reduced the Agromedicine Program's budget by more than 30% over the past three years and with possible additional cuts of 15% or more beginning in July.

His contributions to this office and to the state of South Carolina are extensive. We will sorely miss his expertise, integrity, commitment and attention to detail.

The staff and faculty of the Department of Family Medicine will say a formal "Thank You" to Sam at a staff function later this year.

➤ Lecture

On March 27, Dr. Simpson presented "Migrant and Immigrant Health" to the South Carolina Medical Association Annual Scientific Session in Charleston.

➤ Your Advice, PLEASE!

A recent caller to our Agromedicine Program Consultation Line (1-800-922-5250, or 843-792-2281) asked for information on health effects of indoor mold exposure. We discussed his particular concern and sent him a copy of the American College of Occupational and Environmental Medicine's "White Paper" on the subject. It is 10 pages long. Is there interest in a brochure on "Health Effects of Indoor Mold" like others in our series (Hearing Loss, Fire Ants, etc.)? These are available at our website:

www.musc.edu/oem/html

Let me know your thoughts or ideas at:

simpsovm@musc.edu

FROM THE LITERATURE

Work in Agriculture and Cancer Risk

Yet another study has been published which supports the idea that use of pesticides in farming apparently does not increase risk of cancer.

A new study¹ by scientists in Italy reports on a cohort of over 36000 farmers in northern Italy from 1969-1993. Their use of pesticides and fertilizers is largely comparable to that in the US. The total cancer mortality ratio was 0.85(95%CI 0.81-0.90), meaning a 15% reduction in cancer mortality compared to an age-matched non-farmer group.

Among the many cancers studied, only gastric cancer showed a significant excess mortality (1.25;CI 1.13-1.39) for the entire study period. When further analyzed over three time periods (1969-76,

¹ Bucchi L et al. Cancer Mortality in a Cohort of Male Agricultural Workers From Northern Italy. JOEM 2004;46(3):249-256

1977-84 and 1985-93) mortality ratios fell from 1.58 to 1.1 to 9.97 respectively, probably reflecting increases in use of refrigeration and decreased ingestion of salted meats over the time periods.

Two New Studies on Food Allergies

Researchers at the University of Canberra in Australia have evaluated records of patients referred to an allergy practice to obtain information on risks for recurrence of food anaphylaxis.²

In any year, one in 12 patients who have suffered anaphylaxis will experience recurrence and one in 50 will require hospital treatment or use of epinephrine. Compliance with carrying and using epinephrine is poor.

In a related article, reported in the Tufts University Health and Nutrition letter in March 2004, a review of medical records of almost 700 patients treated in 21 emergency rooms in both community and teaching hospitals in the US and Canada for severe food allergy, found that only 16 percent were given epinephrine and 16 percent received epi-pen prescriptions. Only 12 percent were referred to allergists.

² Mullins RJ. Anaphylaxis: risk factors for recurrence. *Clin Exp Allergy* 2003;33(81):1015-8

Established guidelines for treatment of severe food allergy recommend treatment with epinephrine, prescription of an epi-pen and instruction in its use and referral to an allergist, who can monitor patients and determine if other food allergies exist.

Treatment of Bacterial Conjunctivitis

Bacterial conjunctivitis is commonly part of the differential diagnosis of the red eye in those of our patients who work in agriculture.

Though more frequently the causative agent is a virus, antibiotic drops are often prescribed, since distinguishing between the two etiologies clinically is difficult (that pre-auricular node just isn't always there to help make the viral diagnosis, especially in adults).

Medical Letter consultants review treatment for bacterial conjunctivitis in a recent issue because of the availability of two new ophthalmic fluoroquinolones.³

The bottom line (well, maybe several lines): moxifloxacin and gatifloxacin have better *in vitro* activity against common ocular bugs that either older fluoroquinolones or other ophthalmic antibiotics, but there is no evidence that they are more effective clinically and they cost at

³ Medical Letter 2004;46(1179):25-6

least four times as much as a generic combination of trimethoprim and polymyxin B.

The old standby sulfacetamide is less favored because of lower rates of effectiveness, possibility of sensitization and rare development of Stevens-Johnson syndrome. Other choices (neomycin, chloramphenicol, gentamicin, tobramycin, bacitracin and erythromycin) either have more frequent or severe complications associated with their use or "holes" in their coverage for common organisms.

ON THE WEB

The Center for Food Security and Public Health at Iowa State University has outstanding resources on agroterrorism and farm-related illnesses—

www.cfsph.iastate.edu/

For a daily email with information about current infectious disease outbreaks, the Pro-Med Digest is available at no cost. Send an email to: majordomo@promedmail.org with the message: subscribe promed-digest

The weekly Morbidity/Mortality Weekly Report from the CDC is available at no charge from:

www.cdc.gov