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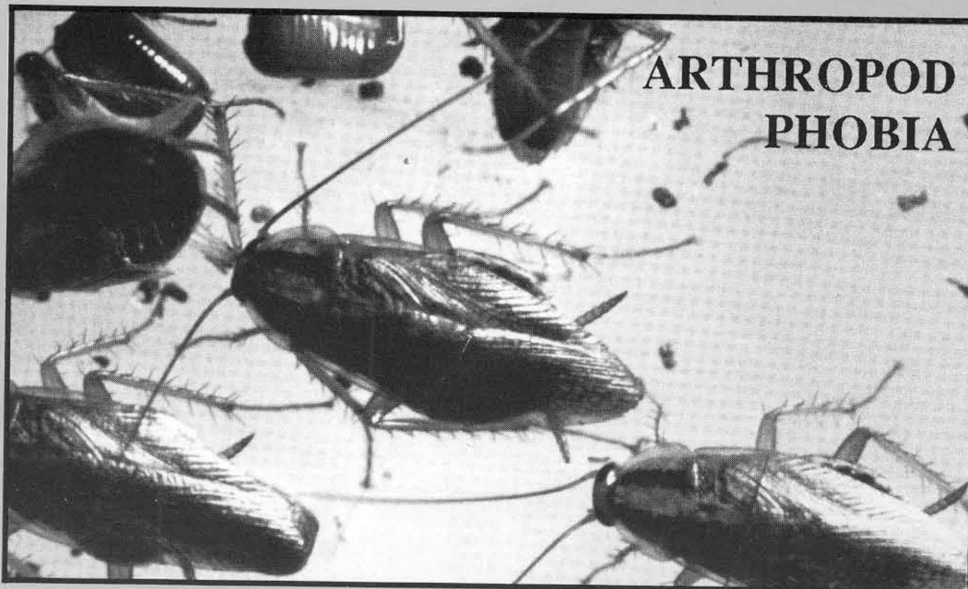

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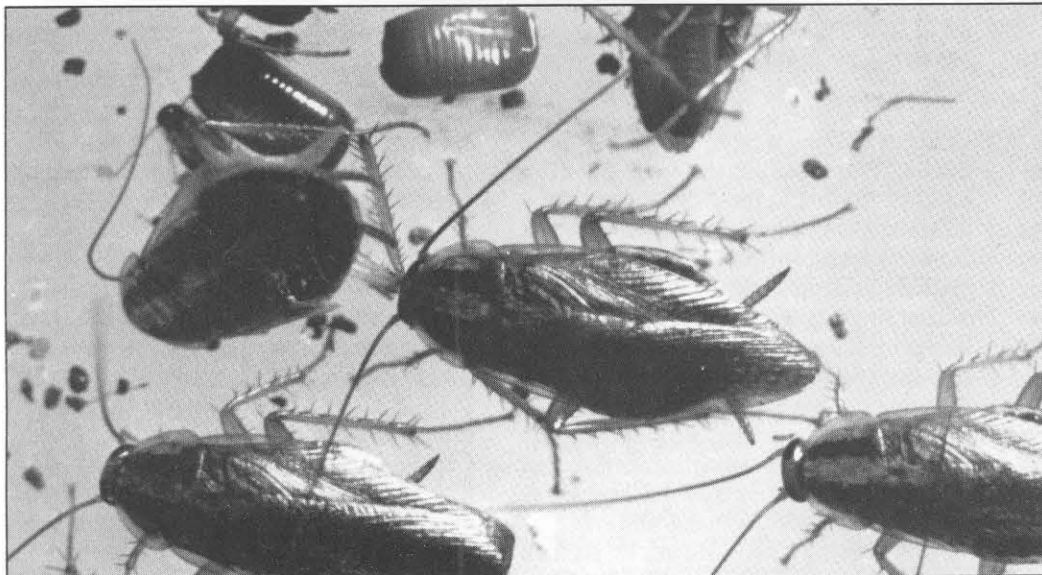
CANADIAN INSTITUTE OF PUBLIC HEALTH INSPECTORS
L'INSTITUT CANADIEN DES INSPECTEURS EN HYGIENE PUBLIQUE

ARTHROPOD PHOBIAS

Guidelines for Assisting Persons Suffering From Fears Derived From Real or Imagined Pest Problems



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Insects and other arthropods have had a dramatic impact on man throughout history and continue to do so into our modern era. The problems posed by arthropod pests include serious threats of agriculture and human health on a worldwide basis. It is not at all surprising, therefore, that relatively minor nuisance pest problems or even imagined pest problems cause serious distress to some individuals. The fear and anxiety experienced by these persons can be manifested in phobic conditions, which may become intensified in the absence of early and adequate assistance.

Public health, health care and pest control specialists frequently lack specific guidelines to assist satisfactorily in these cases. For example, the medical practitioner is faced with addressing a serious concern of a patient without the practical possibility of an environmental assessment. Likewise a public health inspector may not find any evidence of pests to indicate that the phobia is justified, but may still not be able to allay the intense concern. Finally, the pest control professional may be asked to undertake repetitive treatments in the absence of any detectable pests.

THE POWER OF AUTO-SUGGESTION

Who has not been at a movie and heard or joined in the chain of coughs? Likewise, travellers finding accommodations to be below their expectations may experience severe itchiness. In a substandard hotel room, one of the authors experienced such an acute sense of itchiness and undertook an intensive search for unknown and invisible ectoparasites. Knowledge of the wide variety of ectoparasites transformed one psychological discomfort into another. Added to this the discovery of a tick, from a sojourn in the woods, creeping on skin late at night in bed and the result was a specific arthropod-related phobia based upon two unrelated circumstances. Ectoparasites originating in the substandard accommodation were never found, but the itchiness subsided immediately when better accommodations were located.

In other instances an actual physical discomfort of unknown origin is believed to be caused by arthropods. A principle difficulty here is in not jumping to erroneous conclusions when providing assistance. Cases of family practitioners diagnosing insect bites in the absence of any corroborative evidence of specific ectoparasites are not uncommon. Faced with a normally rational patient who believes that his or her family is being bitten, and an apparent dermatitis, the physician is parsimoniously inclined to support the patient's belief.

When real or imaginary physical discomfort is attributed to arthropods, an exterminator is logically called upon to treat the premises. In many cases, faith in the efficacy of this treatment may allay the concern, providing that the "bites" do nor recur. The real difficulty lies in those situations in which the belief of arthropod related afflictions does not subside. The longer the situation remains unsatisfactorily resolved, the stronger the belief becomes. Resolution of problems of this nature necessitate patience and a team approach, which may involve public health, health care, pest control, and social care professionals as well as property management staff.

THREE CATEGORIES OF ARTHROPOD RELATED PHOBIAS

1.ENTOMOPHOBIA - an irrational fear of insects. Persons suffering from this are aware that they have an irrational fear, which may be aggravated by the presence of some actual insects. Careful monitoring (glue boards, roach motels) may reassure the client and enable resolution of a minor problem.

2.ILLUSORY PARASITOSIS - physical discomfort (e.g., dermatitis, allergies) thought to result from an insect infestation but in fact having another environmental basis. Examples are "cable mites," irritations from bits of paper, insulation, dust, or static electricity, and allergies to ink or other office materials. These irritations can be aggravated by entomophobia, and may also stimulate delusions (i.e., if you scratch, then I also start to itch).

3.ARTHROPOD RELATED DELUSIONS - unwarranted beliefs of insect infestation without any actual physical evidence, although illusory parasitosis may be involved in triggering or reinforcing the delusion. Sightings of unrelated insects or entomophobia may also reinforce the delusion. Delusions may be stress-related or symptoms of other mental problems. The most extreme form is **DELUSORY PARASITOSIS**, in which the victim believes that insects or other arthropods are actively infesting his/her body and boring holes in the skin. A related problem is **DELUSORY CLEPTOPARASITOSIS** in which the victim believes that the home is infested and that damage is being caused to a variety of items (e.g., holes in linen, damages to upholstery or woodwork).

CASE HISTORIES

Case 1: Delusory Parasitosis triggered by Entomophobia

A recently widowed elderly woman living along discovered grain insects in her pantry. This caused her a great deal of alarm and anxiety, and she called a pest control firm to treat the problem. She also threw out all of her dry goods and cleaned her pantry as thoroughly as she was able. A few straggler beetles reappeared within a week. She then called the pest control firm in great alarm that the problem had not been resolved. A retreatment was performed according to the pesticide label. Although no further problems appeared in her pantry, she began to experience itchiness in her legs. This led her to conclude that insects had infected her entire home. The pest control technician returned to her home and after an hour of discussion and a brief inspection could not find any other insect problem. The client had collected a variety of cotton threads, dust, particulate matter and some dead insects which were returned to the company and examined by the resident entomologist. The insects were common intruders (an assassin bug and sow bug or isopod). When she continued to call the pest control firm dissatisfied that the problem had not been solved, a visit was made by the company entomologist. The woman's legs were bloody from scratching. She showed him damages to linen and upholstery, as well as specks on the walls, and produced a further sample of dust. An hour was spent in investigation and listening. Another hour was spent in reassurance that there were no biting or fabric pests in her home and that the two categories of pest were separate and distinct (i.e., a fabric pest would not bite and an ectoparasite does not eat fabric). The second sample was examined in the office and the client reassured by telephone that nothing was found of significance. A week later, a letter of thanks was received by the pest control firm.

Case 2: Illusory Parasitosis

Clerical staff in a food plant (vinegary) complained of itching which they believed to be caused by insect bites. However, a thorough investigation of the office area did not reveal any insect pests. The time of year was mid-summer and very hot, humid exterior conditions, and the office was well air conditioned. A strong odour of vinegar and "heavy" humid air was noted in process areas of the plant to the extent that the eyes burned at initial entry into the operation. On investigation of the air-conditioning ducts situated under a mezzanine storage area for old files, it was found that the main duct opening into the office area was partially blocked with cardboard. This had been done intentionally due to the cold air draft bothering the staff, and the cardboard had been in place for many years and was laden with dust. The problem of itching was resolved by removing the cardboard and adjusting the air conditioning ducts.

Case 3: Entomophobia

A well-educated disabled person was deeply upset by chronic cockroach problems in his apartment. This problem was investigated by a pest control technician and a low-grade infestation was found. Following treatment, the tenant complaints continued. The technician returned and placed a half-dozen cockroach traps (glue monitors). On inspection of the traps for a period extending to three months, he was unable to find any cockroaches. However, the tenant continued to report sightings and initiated demands that the entire building be fully treated for cockroaches. The entre building was then monitored, and very few infestations found. The apartments surrounding that of the complaining tenant lacked any major infestation. A full treatment of the entire building was undertaken on a selected treatment basis, and control results were excellent. However, the tenant was still unhappy, called on a weekly basis and required additional visits. Twenty monitors were placed in the apartment, and two cockroaches were found. The tenant's complaint was thus acknowledged as being valid, although the degree of infestation was minor. The tenant was reassured that the major problem in the building was under control, and that any recurrence of infestation in his suite would be handled efficiently. After six months of complaints, the tenant expressed thanks for solving his problem. In this case, monitoring the full building was performed not only on the basis of the tenant's complaint, but as a planned service. The problem might have been resolved earlier if extensive monitoring has been performed at the onset.

GUIDELINES

The keys to resolving these problems are investigation and reassurance. Investigation involves careful and thorough inspection to determine whether a real arthropod or other environmental problem exits, and to enable the undertaking of proper corrective measures. Reassurance should not presume that the problem is a delusion, but rather should be aimed at gaining the confidence of the client in your ability to identify and resolve any environmental problems.

There is no easy formula to handle real or imaginary fears. Every person has different feelings, ideas, circumstances and experiences. There are, however, some effective common sense approaches:

1.GOOD LISTENING. While it can be difficult at times, hearing someone's concerns or complaints fully is extremely important. Loss of patience at this first stage will ensure that you will lose any possibility of gaining the client's trust and confidence.

2.REASSURANCE. Timing is extremely important in this. Trying to reassure some-

one before they have actually expressed the over-all sense of their concern can result in failure.

3.HAVE YOUR FACTS STRAIGHT. If you are uncertain about some aspect of the client's concern from a technical perspective, then do not give possibly inaccurate answers. Get your facts straight, i.e., "I can understand why you are worried about this, and I will check with other experts and get back to you."

4.INVESTIGATE THOROUGHLY AND SYSTEMATICALLY. If a person is convinced of a problem that your investigation does not reveal, then increase the detail of your investigation. For example, if three insect glue monitors do not reveal any evidence of insects but the client remains unconvinced, placing 10 or 20 monitors may be appropriate. Careful vacuuming into a clean vacuum bag in the person's home will enable microscopic investigation by an entomologist.

5.BENEFIT OF DOUBT. If the client states that he or she has a severe problem, then you must accept that this is his or her sincere belief. Your goal should be to identify and resolve the problem, or to provide evidence to the client that the problem is in fact less severe than believed. A person should never be demeaned by casual rejection of their belief.

6.NEVER LOSE PATIENCE. If you lose patience, the attitude that this conveys will result in a loss of confidence in you by the client.

7.SEEK ASSISTANCE. It is extremely important to seek and develop support mechanisms in dealing with troubled persons. For example, it is always worthwhile to contact health care, social care, property management, pest control professionals or other individuals mentioned by the client or known by you to be involved. Furthermore, you should keep these other support professionals or family members informed of your progress and conclusions so that they can assist you and your client.

BIBLIOGRAPHY

(1)Bennett, G.W., J.M. Owens and R.M. Corrigan (1988). Truman's Scientific Guide to Pest Control Operations. Edgell Communications, Duluth MN.

(2)Ebeling, W. (1975) Urban Entomology. University of California Division of Agricultural Sciences, Berkeley CA.

(3)Grace, J.K. and D.L. Wood (1987). Delusory cleptoparasitosis: delusions of arthropod infestation in the home. Pan-Pacific Entomologist, 63(1):1-4.

(4)Harwood, R.F. and M.T. James (1979). Entomology in Human and Animal Health. Macmillan, New York.

(5)Katz, H.L. (1982). Entomophobia, pp. 1033-1039 in Handbook of Pest Control (A. Mallis, ed.). Franzak & Foster, Cleveland OH.

(6)Keh, B. (1983). Cryptic arthropod infestations and illusions and delusions of parasitoses. Pp. 165-185 in Urban Entomology: Interdisciplinary Perspectives (G.W. Frankie and C.S. Koehler, eds.) Praeger, New York.

Letters to the Editor
Continued from page 4

Dear Tony:

Your plans to implement an editorial board for the Environmental Health Review have our full support. Review of manuscripts by professionals throughout Canada will serve to offer authors valuable feedback.

We are pleased that you have included the School of Environmental Health at Ryerson to Participate in This process and would like to nominate one of our faculty members, Mrs. Marilyn Lee to sit on the Editorial Board. Her experience in the public health field, research, and teaching will make her an asset to your editorial staff.

Yours truly,

T. Sly, D.P.H.I., M.Sc., C.P.H.I.(C)
Director, School of Environmental Health

Dear Mr. Amalfa:

I was most pleased and honoured to receive your letter of February 10, 1990 in which you are seeking Associate Editors to form an Editorial Board for our profession's publication. Your forward thinking and strong support has been quite apparent since you took over the editor's desk of the Environmental Health Review. The concept of an Editorial Board appears to be another example of this.

I am very pleased to place in nomination as an Associate Editor, Mr. Gene Shkurhan. Mr. Shkurhan is a member of the teaching faculty at BCIT and I am proud to present him to you in nomination.

He teaches in our Public Health Inspection training program from his position in the Department of Basic Health Sciences. His leadership and guidance in his areas of expertise to both students and practising public health inspectors in Western Canada has continued over fifteen years.

If I may provide any more information, or support, to you in this undertaking, I trust that you will not hesitate to contact me at your convenience.

Yours very truly,

C.L. Young, C.Tech., C.P.H.I.(C.), R.P.H.I., M.Ed.

Dear Mr. Amalfa:

Re: 1990 NATIONAL C.P.H.I. CONFERENCE

The Thunder Bay District Health Unit and the Northwestern Health Unit will be hosting the 1990 National & Ontario Branch Conference of the Canadian Institute of Public Health Inspectors in Thunder Bay on July 30 to August 3, 1990.

THUNDER BAY - The Friendly City

Thunder Bay, a powerful name for a powerfully exciting city. Here, in this urban centre of 120,000 beats the dynamic heart of the vast North of Superior Tourism Area, a place rich beyond measure in natural beauty and human accomplishment. A dynamic city, but a friendly one too - a place where hospitality is more than just a word, its a way of life!

Thunder Bay is a lively port city - Canada's second largest and the worlds largest grain handling port. From the head of Lake Superior, North America's shining inland sea, the city commands a spectacular view of one of the worlds great natural harbours...a harbour watched over by the Sleeping Giant, the mighty stone legend of the Ojibwa. For lovers of crystalline beauty, the Thunder Bay area is world famous Amethyst Country.

THUNDER BAY IS GOD'S COUNTY ...THE LONGER YOU STAY, THE BETTER IT GETS.

Thank-you.

Sincerely,
A.L. Campbell, C.P.H.I.(C), E.H.A.C. Conference Co-Chairman