



THE PUBLIC'S HEALTH

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Rattlesnake Season Returns

We are in the midst of “Rattlesnake Season”, when the highest population of out-and-about rattlesnakes coincides with peak outdoor family activities. The California Poison Control System manages and reports approximately 250 cases of rattlesnake bites each year, with over 50 cases occurring in Southern California.

California is home to eight species of rattlesnakes, which may be spotted anywhere from off-road dirt trails to your own backyards and front porches. The most common Southern California rattlers include the Western Diamondback and Southern Pacific Rattlesnakes, though bites from Sidewinder, Speckled, Red Diamond, and Mojave Rattlesnakes are reported every year. For unsuspecting home gardeners, fervent hikers, or children playing in Griffith Park, rattlesnake bites are frightening, though not entirely unexpected, events.

The most important concept to grasp is that we live in *their* backyards, not the other way around. Therefore, prevention and avoidance are the most important methods to deal with rattlesnakes during the season.

How can you spot a rattlesnake?

The rattle itself is the most notable feature; however, you may get fooled: rattlesnakes often lose their rattles during skin shedding or after fights with other animals. The pattern or coloring on the snake’s back is not a dependable way to distinguish rattlers from non-rattlers.

Rattlers tend to have “pointy” heads, in addition to



hooded eyes with elliptical pupils. Non-poisonous wild snakes in Southern California have round pupils. In general, it’s best not to use any of these techniques to confirm the identity of a snake on your own. Numerous bites occur as a result of this very curiosity. In terms of medical care, observation of the patient for progression of signs and symptoms is enough to tell the story. Further, it is not necessary to know the species of rattlesnake; virtually all rattlesnake envenomations are handled the same way.

What should your patients do immediately after a rattlesnake bite?

The most important thing to do is not to panic. Rattlesnake envenomations are slowly progressing injuries and rarely fatal. First aid is simple: (1) gently wash the bite site with water and soap if available, (2) elevate the affected extremity above the level of the heart, and (3) get to the nearest emergency facility as soon as possible.

More important is what *not* to do.

DO NOT pack the wound in ice

DO NOT apply a tourniquet or constricting band

DO NOT cut or slice the wound with any instrument

DO NOT apply suction to the wound with your mouth or any device

DO NOT apply open flame to the wound

DO NOT apply electricity to the wound



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American Pets Aging with Their Owners

Veterinarians are seeing more senior pets as their owners age. The percentage of older cats and dogs is increasing according to U. S. Pet Ownership & Demographics sourcebooks.

About 60% of all households in the United States have a pet. A survey by the American Animal Hospital Association of pet owners in 2004 found these interesting responses.

What Do Pet Owners Say?

When asked, "Who listens to you best?" 45% chose their pet, while 30% chose their spouse or significant other.

If they were deserted on an island and could choose only one companion, 50% would pick a dog or cat rather than a human.

55% have an emergency preparedness plan that includes their pet in case of natural disasters such as fire, flood or earthquake.

94% think their pet has human-like personality traits, such as being emotional or sensitive, outgoing, inquisitive or stubborn.

Research Expands into Elderly Pets

A large amount of recent veterinary research has focused on geriatric conditions such as cognitive dysfunction, glaucoma, and osteoarthritis. Still, other studies have examined conditions such as diabetes, heart disease, and neoplasia.

Breast Cancer in Pets

The frequency of mammary neoplasia in different species varies tremendously. The dog is by far the most frequently affected domestic species, with a prevalence of about three times that in women. Roughly half of all tumors in female dogs are mammary tumors.

There are differences in both the biologic behavior and histology of mammary tumors in dogs and cats. About 45% of mammary tumors in dogs are malignant, whereas about 90% are malignant in cats. Spread of mammary carcinomas in both dogs and cats is primarily to regional lymph nodes and lungs.



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Rattlesnake Season Returns...from page 1

Although healthcare providers, major health organizations, and the Boy Scouts of America have advised each of the treatments listed in the box on page 1, none of these treatments improve the outcome of snakebites. In fact most have been shown to make matters *worse*.

It is not advisable to purchase or carry a “Snakebite Kit” The most valuable “First Aid Kit” to have with you is a mobile phone to call 9-1-1 Emergency Services.

What are the symptoms of a rattlesnake envenomation?

The victim will first experience stinging and burning at the site of the bite. Symptoms often progress over the next several hours to nausea, vomiting, sweating, numbness and tingling (sometimes in places remote from the bite site), and mildly increased heart rate and blood pressure. Progressive, painful swelling of the affected extremity ensues.

How do you evaluate a patient with rattlesnake envenomation?

Hematological abnormalities are common, with marked decreases in platelets and fibrinogen, and elevations in prothrombin time (PT) and partial thromboplastin time (PTT). These laboratory indices initially suggest that the patient has disseminated intravascular coagulation (DIC); however, the peripheral smear evaluation reveals *no microangiopathic hemolytic process* (the defining feature of DIC). The components of rattlesnake venom yield a “positive DIC panel” by alternate mechanisms. Therefore, snakebite patients do not generally require administration of blood products. In fact, when blood products are given to patients, they result in no change in coagulation parameters. On rare occasions, when the snake’s fangs manage to pierce through a major artery or vein, the patient may experience a rapid progression of symptoms, including true disseminated intravascular coagulation and spontaneous bleeding. These patients are treated symptomatically, with blood products and antivenom.

How do you treat a patient with rattlesnake envenomation?

Call the California Poison Control System (1-800-222-1222). Experts in medical toxicology and poison information are on hand 24/7 to provide you with up-to-date, minute-to-

minute guidelines to suit your patient’s clinical scenario. In general, patients are assessed for progression of swelling and laboratory evidence of coagulation abnormalities, suggesting the need to administer rattlesnake antivenom. Antivenom is administered until the swelling and laboratory abnormalities are controlled. Supportive care is paramount, which includes close observation, elevation of the extremity above the level of the heart, and pain control (often with narcotics). Some patients may experience fasciculations, which may be relieved by benzodiazepines. A typical hospitalization is 2-3 days, however severe cases may require longer stays.

What are some myths about rattlesnakes and management of envenomations?

1. Myth: Antibiotics are indicated in all snake bites.

Fact: Rattlesnakes do not carry bacteria in their mouths. Routine use of antibiotics after envenomation is usually unnecessary in the absence of a wound complication.

2. Myth: Baby Rattlesnake bites are more dangerous than bites from more mature rattlesnakes.

Fact: So-called “Baby Rattlesnakes” are not characteristically more dangerous than more mature rattlesnakes due to an inability to control the amount of venom injected into the bite site. Younger rattlesnakes tend to produce less venom overall and thus the clinical course and outcome of envenomations from any aged rattlesnake is similar.

3. Myth: Surgical intervention with fasciotomy is often indicated in rattlesnake envenomation.

Fact: Surgical intervention with fasciotomy is almost never indicated in rattlesnake envenomation. The affected extremity may feel quite tense, with diminished palpable pulses, giving the appearance of a compartment syndrome. Despite the ominous appearance, compartment pressures are usually normal because envenomations are subcutaneous injuries. Studies confirm that supportive care and the administration of antivenom produces better clinical outcomes than surgical fasciotomy.

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Non-tuberculous *Mycobacterium* Infections

Rapidly-growing, non-tuberculous mycobacteria (NTM) are commonly found in water and soil, and have caused many outbreaks of infections following cosmetic surgery. In December 2007, a local public health department informed the California Department of Public Health of a cluster of *Mycobacterium chelonae* infections among patients who had plastic surgery by a single surgeon at a physician-owned, free-standing facility; patients' surgery dates ranged from March 2007 to September 2007.

Cases of NTM infections associated with previous medical procedures should be reported to Acute Communicable Disease Control as an unusual disease and possible outbreak.

A joint epidemiologic and laboratory outbreak investigation was conducted. A retrospective cohort study of all patients undergoing surgery in that seven-month period found 8 additional suspect cases that were not confirmed by culture but clinically compatible. The median time from surgery to symptom onset of the four culture-confirmed patients was 38 days (range, 19-51 days). Patients receiving an implant of any kind were more likely to develop infection. A site visit was made to review infection control practices and obtain environmental specimens for acid-fast bacillus (AFB) culture. Numerous infection control deficiencies were noted, including poor documentation of instrument sterilization procedures and use of skin marking pens on multiple patients. All environmental specimens were culture negative for *M. chelonae*, but one sample was positive for *M. goodii*, another mycobacterium that has been associated with skin infection outbreaks.

In 2006, ACDC described an outbreak of three cases of *M. chelonae* infection in customers who received tattoos within a short period at the same tattoo parlor in Lancaster, California.¹ Temporary use of tap water to dilute inks was felt to be the cause of contamination. Other local investigations have associated mycobacterial infections with injections of unlicensed alternative medication,² liposuction, face lift, pedicure, and ophthalmologic examination.

Discussion

Despite a growing number of published reports, NTM remain an underappreciated cause of post-surgical and post-injection infections. As more surgical procedures are performed

in non-hospital settings (i.e. "surgi-centers"), the risk of infection may increase, since such settings are generally not regulated and inspected to the degree that hospitals are, if at all.

NTM should be suspected when lesions at the site of previous surgery or injections demonstrate a long incubation relative to the date of procedure. Skin infections that are unresponsive to standard antibiotics should be specially cultured for mycobacteria. If special culturing techniques and prolonged incubation of culture media are not performed, the correct diagnosis may not be established, and appropriate treatment may be delayed or omitted. Furthermore, when patients seek treatment from a provider who did not perform the original procedure, identification of case clusters is less likely, making remediation of poor practices or identification of contaminated medication difficult.

Cases of NTM infections associated with previous medical procedures should be reported to Acute Communicable Disease Control as an unusual disease and possible outbreak.

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Myths of Herbal Medication Use

Herbal treatments are widely used by patients across the United States. They have the potential for both benefit and harm. Patients should be advised about herbal product use or avoidance based on a product's quality, efficacy, and safety. Uncertainty in quality and the relatively few well-designed studies make it difficult for physicians to proactively recommend herbal therapies for most patients.¹

Statistics indicate that Americans are increasingly replacing prescription medications with vitamin and mineral supplements as well as medicinal herbs. Recent analyses estimate that 60 million Americans use herbs and dietary supplements at a cost of more than \$19 billion a year.²⁻⁴ Herbal medicines are still less expensive than the average cost of prescription medications and may stand as the only resort for uninsured patients. This is largely seen in Los Angeles County where barriers to health care benefits are prevalent.

According to the Weingart Institute, 26% of L.A. County adults report difficulty acquiring necessary medical care.¹ An alarming 34% of Hispanic residents in Los Angeles County are uninsured.¹ The preference toward herbal medicine is a direct reflection of a combination of the impaired access to affordable health care and common misconceptions of herbal medication. Opting for herbal therapy over allopathic medicine often entails bypassing several costly steps:

- Health care provider visits
- Pharmacist dispensing
- Appropriate counseling of medication use

The aforementioned steps help to ensure patient safety, and unsafe use of herbals may consequently increase overall patient cost due to toxicity, delay in necessary treatment, and drug-herb interactions. These situations may lead to:

- Emergency room visits

- Hospitalization
- Subsequent MD visits

This issue not only encompasses the uninsured but also includes patients across all socioeconomic classes. Primary care physicians are generally unaware of the non-prescribed therapies their patients are taking despite their patients' compliance with scheduled office visits. Most patients are reluctant to share this information with their healthcare providers⁵⁻⁷ even if they experience adverse events that might be related to use of medicinal herbs or dietary supplements.⁸

Common Misconceptions of Herbal Medications

- *"Natural is always synonymous with safe."*

In contrast to prescription medications, herbal medicine and other

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Most Commonly Sold Herbal Medications.¹²

| Common Name | Indication | Adverse Effects | Herb-Drug Interactions |
|-----------------|---------------------------------------|---|--|
| Echinacea | Common cold, URI | dizziness; fever, chills; hypersensitivity; nausea, vomiting; pruritus, erythema; tachyphylaxis if use >8 wk | azathioprine, basiliximab, corticosteroids, cyclosporine, daclizumab, muromonab-CD3, mycophenolate, sirolimus, tacrolimus |
| Ginseng | Hyperglycemia, Stress | hypoglycemia; estrogenic effects | anticogulants, antidiabetic agents, estrogen, loop diuretics, MAOIs, nifedipine |
| Ginkgo Biloba | Dementia, peripheral vascular disease | GI distress, nausea; headache, dizziness; anticoagulant effects; seizures, palpitations; Stevens-Johnson syndrome and allergic skin reaction | anticoagulants, anticonvulsants, antiplatelets, buspirone, insulin, LMW heparins, MAOIs, nifedipine, nifedipine, NSAIDs, st. john's wort, SSRIs, thiazide diuretics, thrombolytics, trazodone |
| Garlic | HTN, Atherosclerosis | anaphylaxis; anticoagulation; asthma; burns; contact dermatitis; headache; nausea; offensive odor | anticoagulants, antiplatelet agents, LMW heparins, protease inhibitors, thrombolytics |
| St. John's Wort | Depression | GI distress, nausea, diarrhea, constipation, anorexia, dry mouth, edema, frequent urination, anorgasmia; mania/hypomania, anxiety, schizophrenia relapse; photosensitivity; pruritus, exanthema; restlessness, fatigue, headache, paresthesia | acitertin, amiodarone, anesthetics, amsacrine, anticoagulants, contraceptives, cyclophosphamide, cyclosporine, digoxin, erlotinib, etoposide, ginkgo biloba, imatinib, irinotecan, MAOIs, nefazodone, non-nucleoside reverse transcriptase inhibitors, paclitaxel, phenytoin, protease inhibitors, SSRIs, sirolimus, tacrolimus, tamoxifen, trazodone, venlafaxine |
| Kava | Anxiety | toxic liver damage; dry mouth, GI distress, diarrhea; dyskinesia, headache, dizziness, drowsiness; eye movement disorder, near vision abnormality, mydriasis; morning hangover or fatigue may occur at start of therapy; skin rash; weight loss | anticoagulants, antiplatelets, barbiturates, benzodiazepines, centrally acting muscle relaxants, dopamine agonist/antagonist, hepatotoxic drugs, LMW heparins, MAOIs, opioid analgesics, phenothiazines, thrombolytics |
| Saw palmetto | Benign Prostatic Hyperplasia | GI distress, dry mouth, nausea, vomiting, diarrhea; ejaculation/erectile dysfunction, reduced libido, urinary retention; headache, dizziness, fatigue; muscle pain; postural hypotension, tachycardia, angina; rhinitis | Warfarin |
| Nopal | Diabetes Mellitus II, Hyperlipidemia | breathing problems, chest pain; skin hives/rash | No human drug interaction data available |

*A good source for herbal medication is the Alternative Medicine Database available in Micromedex.

Myths of Herbal Medication Use...from page 5

dietary supplements are not subjected to the same rigorous pre-market testing on quality, safety, and efficacy. Moreover, since makers of herbal supplements are not obligated to report post-marketing adverse effects, their safety profile is often unknown. Impurities and inconsistencies amongst manufacturers impact their efficacy and safety.⁹ For example, a single dose of Kava, has, in rare cases, caused liver failure.⁹ On the other hand, other Kava supplements have shown to be safe for the liver at usual recommended doses.

• *“Alternative and conventional medicines are mutually exclusive.”*

This is not the case. Some physicians believe that most patients are best served by a combination of the two.⁹ However, every case varies and a patient should consult a provider before assuming that the combination of conventional and alternative medications is ideal. It is highly recommended that anyone suffering immediate, serious or painful symptoms should first opt for the conventional standard of care.⁹

• *“Natural supplements do not interact with the conventional prescribed medicines.”*

A 2003 systematic review identified 51 unique drug-herb pairs that have been reported to potentially interact.¹ Warfarin was the most frequent pharmaceutical implicated and St. John's Wort was the most common herbal product reported.¹ For example, supplements including ginkgo biloba, garlic, or ginger have antiplatelet and antithrombotic effects. This potentiates interactions with anticoagulants such as warfarin, NSAIDs, and aspirin, yielding an increased risk for spontaneous hemorrhage and bleeding.

When patients decide to use herbal therapies they should disclose this information to their health care providers. Health care providers should also be responsible for inquiring about patient use

of these treatments as part of a thorough medication history.¹

Ensure that your patients know how to use an herbal product safely¹⁰:

- Remind them to consult you or a pharmacist first
- Ensure they are aware of drug-herb interactions
- Instruct them not to take larger doses than the label recommends
- Remind them that all herbal products should be administered under the guidance of a trained medical professional
- Remind them to be especially cautious if they have co-morbid conditions or are pregnant/nursing

With regards to herbal medications, knowledge is power. Education is the key for both the patient and provider. Medical schools and CE programs are integrating herbal education into their curriculum, and reputable pharmacopoeias are becoming more available.¹¹ This will, in turn, increase patient awareness of alternative therapy possibilities as well as improve health professionals' ability to properly counsel patients. As a team, health care providers and patients can work together to dispel these common misperceptions.

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American Pets Aging with Their Owners...from page 2

Mammary tumors in dogs are most frequent in intact females and extremely rare in male dogs. Spaying before the first estrus reduces the risk of mammary neoplasia to 0.5% of the risk in intact females. Females spayed after maturity, have generally been considered to have the same risk as intact female dogs.

Mammary tumors in cats are most common in elderly, intact females. Spaying at an early age, especially before the first estrus, has a sparing effect and reduces the risk, but the degree of protection is less precisely documented than it is for dogs.

It has been demonstrated that obesity a year prior to diagnosis is associated with an increased risk of mammary gland tumors in intact or spayed dogs.

Practitioners Deal with Obesity Daily

Small animal veterinarians deal with overindulged, overweight pets. One out of every four dogs and cats in the Western world is now obese. Due to decreased physical activity and slowed metabolism, older dogs need 20 percent less total calories than middle-age adult dogs. The basic prescription for chubby pets is eating less and exercising more. Like humans, dogs and cats that are obese run a higher risk of developing diabetes, heart disease, or other health problems.

Diabetes mellitus is an increasing problem in pets with most cases of spontaneous diabetes occurring in middle-aged dogs and cats. The disease is more common in older dogs than elderly cats. In dogs, females are affected twice as often as males, and the incidence appears to be increased in certain small breeds such as Miniature Poodles, Dachshunds, Schnauzers, Cairn Terriers, and Beagles, but any breed can be affected. In cats, males were more commonly affected than females in one study; however, no breed predilection is seen in cats.

The onset of diabetes is often insidious and the clinical course is chronic. Common signs in dogs include polydipsia, polyuria, polyphagia with weight loss, bilateral cataracts, and weakness. Cataracts develop frequently in dogs with poorly controlled diabetes mellitus, but not in cats.

Studies in dogs aid in understanding Alzheimer's disease

Studies on aged animals are essential for understanding the processes inherent in normal aging and the progression of age-related diseases. For example, in geriatric dogs, Alzheimer-like behavior is frequently observed. Aging

dogs can develop brain changes similar to those of humans with Alzheimer's disease. Tests were developed in the 1990s to detect deficits in learning and memory of dogs in the laboratory setting allowing researchers a more accurate way to evaluate treatments for slowing, or stopping cognitive dysfunction.

Arthritis

Osteoarthritis is common in elderly dogs. Large breeds of dogs may have hip dysplasia, which can cause severe degenerative joint disease. Such dogs can receive hip replacement surgery similar to what humans have available to them. Degenerative arthritis is occasionally seen in older cats.

Urinary incontinence common in spayed female dogs

Urinary incontinence is particularly important in the elderly pet. It is most often caused by urethral sphincter ineffectiveness. Incontinence is most frequent in large breed, spayed female dogs. But it may occasionally be seen in intact females, male dogs, and cats.

Atherosclerosis common in people, but rare in animals

Atherosclerosis is the leading cause of human morbidity and mortality in the US and in the majority of Western countries. However, the arterial disease is not seen in most animals. An exception would be pet birds, particularly in psittacines. The disease is found in all parrot species, especially in African Grey parrots and Amazons. It is a disease of older birds that is seen in both males and females. The most frequent sign is sudden death. Research on atherosclerosis has been conducted in various domesticated birds, such as Japanese quail, chickens, and pigeons. These animals are susceptible to both spontaneous and diet-induced atherosclerosis.

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Physicians and Veterinarians Form “One-Health” Team

In 2007, the “One-Health” team was developed by the AMA and AVMA to create more educational and research collaborations between the two professions.

“One-health” is not a new idea. In fact, it is an organization that has existed for centuries. Previously coined “One-Medicine”, it aims to promote and implement via comparative biomedical research, meaningful collaboration and communication between human medical, veterinary and allied health professionals and scientists.

Many of the emerging infectious diseases, including those caused by bioterrorist agents, are zoonoses. Since zoonoses can infect both animals and humans, the medical and veterinary communities agreed to work closely together in clinical, public health, and research settings.

Of CDC’s Category A agents (those most likely to be used by terrorists), all but one are found in animals.

Closely connected in the 19th century, human and animal medicine became increasingly disconnected in the 20th century. Recent health emergencies (avian influenza, mad cow disease, monkeypox, WNV, SARS, etc.) have intermittently forced them back together.

There are over 800 animal diseases that can infect people. This represents 61% of the infectious diseases that can infect humans. In the urban environment, when we think of animals we tend to think of pets and various birds flying in our neighborhood. However, Los Angeles County also has wildlife, exotic animals, livestock and zoo animals.

Zoonoses are often thought of as unidirectional—going from animals to people. However, the reverse can occur. For example, human tuberculosis was detected in two circus elephants touring Los Angeles. Following their deaths, postmortem examinations revealed massive pulmonary tuberculosis due to *M. tuberculosis*.

Rubella (measles) infection acquired via human contact can assume epizootic proportions in non-human primates. The virus causes a rash on the chest and lower portions of the body; it may also cause interstitial giant-cell pneumonia, rhinitis, conjunctivitis, and particularly in New World

monkeys, gastroenteritis. There is no specific treatment, however vaccination of infant rhesus monkeys, other macaques, and marmosets with human measles vaccine is recommended.

Endocrine disorders seen in people may also occur in animals. For example, diabetes mellitus can be seen in animals as well.

Most cases of spontaneous diabetes occur in middle-aged dogs and cats. In dogs, females are affected twice as often as males. The incidence appears to be increased in certain small breeds, but any breed can be affected. In cats, males are more commonly affected than females. Treatment in pets involves a combination of weight reduction, diet, insulin, and possibly oral hypoglycemics.

The obesity epidemic seen in humans has a counterpart in animals, although not as dramatic. It is estimated that 40-50% of dogs and 20% of cats seen by veterinarians are overweight and that 25% of dogs and 5% of cats are obese. The principal cause in pets is excessive food intake combined with inadequate exercise. Like people, overweight pets run a higher risk of developing joint injuries, diabetes, heart disease, or other health problems.

The goal of “One-Health” is to hasten public health efficacy and advance health care options for humans and animals.

The challenges of the 21st century demand that human and veterinary medical professionals work together. The goal of “One-Health” is to improve the lives of all species - human and animal - through the integration of human and veterinary medicine.

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Animal Smuggling Big Business

The lucrative business of animal smuggling is a major public health concern. This fairly quiet but growing industry is expanding at ever increasing speeds and is positioned to pose a major health risk to humans and animals alike in this century.

Every year, more than 50 million animals – from tropical fish to elephants – are imported legally into the U.S. These animals are screened, quarantined as needed and receive proper medical care and attention. In contrast, illegally smuggled domestic pets and exotic animals captured in the wild are entering the nation on a daily basis with little or no screening for disease, leaving Americans vulnerable to potentially virulent diseases.

Smuggled animals bring a variety of community health risks with them. For example, animals have a host of various pox viruses. Many of us are familiar with monkeypox which affects monkeys, various rodents, and people. Monkeypox was reported in several people within the U.S. in 2003. Most of these people got ill after having contact with pet prairie dogs that were sick with monkeypox. This was the first time that there had been an outbreak of monkeypox in the United States. In another example, illegal birds smuggled into Los Angeles County were thought responsible for an epidemic of Exotic Newcastle Disease in 2002. Domestic poultry are very susceptible to this virus and mortality rates can be over 90%. The smuggled birds were used to fight to the death in the unlawful “blood sport”. The disease spread to surrounding counties and three other states.

Agencies In Charge

- The CDC is in charge of human health and the quarantine of imported monkeys
- The Agriculture Department has primary responsibility for livestock health and the quarantining of wild bird imports and wild cud-chewing animals.
- The Fish and Wildlife Service is charged with stopping smuggled wildlife and enforcing laws that protect exotic and endangered species.

The foreign animal disease resulted in the declaration of a national emergency to bring the outbreak under control. International air travel and smuggling represent major threats

Federal, State, and County governments have regulations regarding importing animals and in Los Angeles it is unlawful to import or transport diseased animals.

for spreading the H5N1 avian influenza virus worldwide and finally, the threat of imported rabies is well known.

The smuggling of wildlife is a low-risk, high-profit endeavor proving increasingly attractive to crime syndicates. Smuggling of animals into the country is second only to bringing in illegal drugs. For example, last fall 2007, approximately two dozen animal-control agencies converged at border checkpoints in an effort to stem the flow of puppies smuggled for sale in the U.S. Officials expected to encounter more than 1,000 sick or underage dogs bound for the U.S.

Airport scanners can theoretically detect the bones of animals. Despite this fact, smuggled animals are difficult to recognize because customs officers are essentially focused on metal objects. Smugglers are also becoming increasingly clever in their attempts to bring animals into the U.S. For example, smugglers have been known to tape small tubes filled with birds to their legs or to cut deep boxes in car seats to smuggle the birds through airports or across the U.S.-Mexican border.

Last year, LA International Airport Customs officials had an experience with two men trying to gain entry with undeclared animals. One had four exotic birds hidden in his suitcase and two pygmy monkeys concealed in his pants. His partner had two protected Asian leopard newborns hidden away in his backpack. Typically, the animals are drugged to keep them quiet.



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Animal Smuggling Big Business...*from page 9*

Federal, State, and County governments have regulations regarding importing animals and in Los Angeles it is unlawful to import or transport diseased animals. Additionally, as a response to this ever growing threat, government officials are responding with increased training and screening, increased personnel and specific methods for systematically detecting live animals (e.g., trained dogs) at airports and borders.

Animal smuggling is a major public health concern. It is a new phenomenon with which public health and animal-control organizations are struggling to catch up and control. Though the total number of animals smuggled in for sale is unknown, it is known that the industry continues to grow due to increasing demand. International airports are viewed as gateways to commerce by the businessperson, and doorways to disease by the person trained in public health.

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2. Van Borm SV, Thomas I, Hanquet G, Lambrecht B, Boschmans M, Dupont G, Decaestecker M, Snacken R, and van den Berg T: Highly Pathogenic H5N1 Influenza Virus in Smuggled Thai Eagles, Belgium. *Emerging Infectious Diseases*. Vol. 11, No. 5 May 2005 <http://www.cdc.gov/ncidod/eid/vol11no05/05-0211.htm>

Updated ACIP Human Rabies Prevention Recommendations

The revised human rabies prevention recommendations of the Advisory Committee on Immunization Practices are now available at <http://www.cdc.gov/mmwr/pdf/rr/rr57e507.pdf>. These recommendations update the 1999 version and 1) provide updated information on human and animal rabies epidemiology; 2) summarize the evidence regarding the effectiveness, immunogenicity, and safety of rabies biologics; 3) present cost-effectiveness of rabies postexposure prophylaxis; 4) present recommendations for rabies pre- and post-exposure prophylaxis; and 5) present information on treatment considerations for human rabies patients. Please also note that effective May 19th, 2008, Sanofi Pasteur maker of IMOVAX Rabies (Rabies Vaccine) will temporarily be available only for post-exposure prophylaxis. Additional information can be found at http://www.cdc.gov/rabies/news/2008-05-20_PreEVax.html. For more information about rabies prevention, please contact ACDC at 213-240-7941.

Skin Cancer Awareness



May was Skin Cancer Awareness Month but it's never too late to learn more about protecting your skin from excessive sun exposure. The Los Angeles County Department of Public Health would like to remind sun lovers that while it's great to spend time outdoors, it's even better to protect yourself against harmful rays.

"Enjoying the sunshine and all that the outdoors has to offer should be done in the most skin-healthy way possible," says Jonathan E. Fielding, MD, MPH, Director of Public Health and Health Officer. "Skin cancer is still the most common form of cancer diagnosed in the United States, so it's important for men, women, and children to protect themselves by applying a sunscreen with a minimum Sun Protection Factor (SPF) of 15, avoiding tanning and tanning beds, staying in the shade as much as possible, and avoiding the sun between the peak hours of 10:00 a.m. and 4:00 p.m."

Facts about skin cancer:

- Skin cancer is most common form of cancer in the United States. The two most common types of skin cancer, basal cell and squamous cell carcinomas, are highly curable. Melanoma, the third most common skin cancer, is more dangerous, especially for young people.
- Melanoma is the third most common cancer in women aged 20-39.
- In 2004, nearly 8,000 people in the U.S. died of melanomas of the skin and other skin cancers (not including basal cell and squamous cell carcinomas).
- More than 90% of all skin cancers are caused by sun exposure.
- A person's risk for skin cancer doubles if he or she has had five or more sunburns, especially if the sunburns occurred during childhood.

- Other risk factors include: light skin color, family and/or personal history of skin cancer, exposure to the sun through work and play, light colored eyes and hair, and having a large number of moles.

Prevention tips:

- Avoid the sun and stay in the shade between the hours of 10:00 a.m. and 4:00 p.m.
- Do not burn.
- Cover up with long sleeves and pants, and wear a wide-brimmed hat and UV-blocking sunglasses if you will be spending time in the sun.
- Avoid tanning and UV tanning booths. Use a sunless tanner instead.
- A sunscreen with an SPF of 15 or higher every day may reduce one's risk if used properly. The recommended amount to apply is one ounce for full-body coverage. Make sure to reapply sunscreen after outdoor activities, such as swimming, running, or gardening.
- Keep newborns out of the sun. Sunscreen should be used on babies over the age of six months.
- Do a skin self-check from head-to-toe every month. Make sure to check along your scalp, the back of your neck, and between your fingers and toes. Make note of any unusual spots or moles.
- See a dermatologist periodically for a professional skin exam.

For more information on skin cancer, what to look for, and prevention tips, check the Skin Cancer Foundation's website at <http://www.skincancer.org/>.

Sarah Kissell

Public Information Officer

Los Angeles County Department of Public Health

Physician Registry

Become a Member of the Health Alert Network

The Los Angeles County Department of Public Health urges all local physicians to register with the Health Alert Network (HAN). By joining, you will receive periodic email updates alerting you to the latest significant local public health information including emerging threats such as pandemic influenza. Membership is free. All physician information remains private and will not be distributed or used for commercial purposes.

Registration can be completed online at www.lahealthalert.org or by calling (323) 890-8377.

Be aware of public health emergencies! Enroll now!

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THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County



COUNTY OF LOS ANGELES

Public Health

313 North Figueroa Street, Room 806
Los Angeles, CA 90012

PRESORTED
STANDARD
U.S. POSTAGE
PAID
PERMIT NO. 55
ARCADIA CA

Selected Reportable Diseases (Cases)¹ — January 2008

| Disease | THIS PERIOD JAN 2008 | SAME PERIOD LAST YEAR JAN 2007 | YEAR TO DATE – DEC | | YEAR END TOTALS | | |
|---------------------------|----------------------------|--------------------------------------|--------------------|--------|-----------------|--------|--------|
| | | | 2007 | 2006 | 2005 | 2004 | 2003 |
| AIDS ¹ | 84 | 90 | 1,456 | 1,387 | 1,518 | 2,209 | 2,441 |
| Amebiasis | 13 | 5 | 122 | 94 | 114 | 114 | 121 |
| Campylobacteriosis | 69 | 52 | 827 | 775 | 725 | 884 | 1,100 |
| Chlamydial Infections | 4,008 | 3,710 | 40,943 | 39,876 | 38,862 | 38,464 | 36,593 |
| Encephalitis | 3 | 0 | 65 | 46 | 72 | 133 | 38 |
| Gonorrhea | 808 | 900 | 9,327 | 10,430 | 10,494 | 9,696 | 7,996 |
| Hepatitis Type A | 5 | 4 | 78 | 364 | 480 | 321 | 374 |
| Hepatitis Type B, acute | 1 | 2 | 52 | 62 | 57 | 72 | 73 |
| Hepatitis Type C, acute | 0 | 0 | 6 | 4 | 3 | 5 | 0 |
| Measles | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| Meningitis, viral/aseptic | 8 | 24 | 395 | 373 | 527 | 807 | 899 |
| Meningococcal Infect. | 5 | 2 | 24 | 46 | 37 | 28 | 32 |
| Mumps | 2 | 1 | 5 | 10 | 10 | 5 | 10 |
| Pertussis | 6 | 5 | 69 | 150 | 439 | 156 | 130 |
| Rubella | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Salmonellosis | 51 | 54 | 1,081 | 1,217 | 1,085 | 1,205 | 995 |
| Shigellosis | 16 | 16 | 463 | 524 | 710 | 625 | 669 |
| Syphilis (prim. and sec.) | 53 | 88 | 833 | 789 | 644 | 470 | 470 |
| Syphilis Early latent | 71 | 61 | 774 | 764 | 570 | 395 | 392 |
| Tuberculosis | 0 | 0 | 816 | 885 | 906 | 930 | 949 |
| Typhoid fever, Acute | 1 | 3 | 17 | 17 | 12 | 13 | 16 |

1. Case totals are provisional and may vary following periodic updates of the database.