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Clinical Veterinarians Can Help Protect the Public's Health

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Veterinarians, a trusted source of information on pet selection, animal care and husbandry play a critical role in protecting both the health of their patients and their patient's families. Recent national outbreaks of zoonotic *Salmonella enterica* infections have been linked to non-traditional pets, highlighting the critical role veterinarians and their staff can play in preventing disease through client education.

In August 2013, JAVMA published an article discussing the need for veterinarians to be comfortable with providing care for backyard poultry, which are increasingly being regarded as pets and family members rather than production animals.¹ At the same time, an increasing number of human *Salmonella enterica* outbreaks have been linked to contact with chicks, ducklings, and other live poultry.² From 2012–2013, 12 national outbreaks were investigated, resulting in 1,096 illnesses, 182 hospitalizations, and 3 deaths. For the majority of people with *Salmonella* infections, they are in for an unpleasant couple of days of abdominal cramps and watery diarrhea. However, certain people, such as young children, seniors, pregnant women, and immunocompromised individuals, are at increased risk for developing severe illness with potentially deadly complications including septicemia, joint infections, and meningitis. This is especially relevant for families with young children because the majority of reported illnesses in enteric zoonotic outbreaks are among children <10 years old. Other recent outbreaks of human *Salmonella* infections have been linked to contact with African dwarf frogs, hedgehogs, guinea pigs, hamsters, small turtles, and even frozen feeder rodents used to feed reptiles.

Pet turtles remain an important source of human illnesses. They have been linked to 13 multistate *Salmonella enterica* outbreaks since 2006 with eight outbreaks involving 473 illnesses, and 78 hospitalizations reported in 2012 alone.^{3,4} The majority of exposures were to small turtles with shell lengths <4 inches. Although a federal ban on the sale of small turtles was enacted in 1975⁵, these popular pets remain available for sale from a variety of sources such as street vendors, flea markets, and beach souvenir shops.

As veterinarians, we do not want to dissuade people from the rewarding experience of owning pets. Although there is a right pet out there for everyone, not all pets are right for all people. Clinical veterinarians have the opportunity to educate people about health risks associated with pets and other animals. Healthy animals can still harbor bacteria that can make humans sick, but simple steps can be taken to reduce the risk of illness from enteric zoonoses: wash hands thoroughly after touching animals or their environments; do not let young children interact with animals without supervision; do not allow animals on or around

food preparation areas and sinks; and do not keep chickens inside the house. Additionally children 5 years old and other high risk individuals should not handle reptiles, amphibians, or live poultry because they are at higher risk for serious illness. Free educational materials are available at <http://www.cdc.gov/zoonotic/gi>.⁶ Together, clinical and public health veterinarians can ensure pet owners are educated about animal-associated health risks and how they can enjoy their pets without getting sick.

References

1. Kaiser, J. [Accessed March 3, 2014] Chickens are moving from the henhouse to the backyard and looking for veterinary care. Available at: <https://www.avma.org/News/JAVMANews/Pages/130815a.aspx>
2. Barton Behravesh, C.; Brinson, D.; Hopkins, B., et al. [Accessed March 3, 2014] Backyard Poultry Flocks and Salmonellosis: A Recurring, Yet Preventable Public Health Challenge. *Clin Infect Dis*. 2014. Available at <http://cid.oxfordjournals.org/content/early/2014/02/20/cid.ciu067.full.pdf+html>
3. National Association of State Public Health Veterinarians Animal Contact Compendium Committee 2013. Compendium of Measures to Prevent Disease Associated with Animals in Public Settings, 2011. *JAVMA*. 2013; 243:1270–1288. [PubMed: 24134577]
4. [Accessed March 3, 2014] Eight Multistate Outbreaks of Human Salmonella Infections Linked to Small Turtles (Final Update). Available at: <http://www.cdc.gov/Salmonella/small-turtles-03-12/index.html>
5. CPG Sec. [Accessed March 3, 2014] 170.100 Turtles – Ban on Interstate and Intrastate Sales and Distribution. Available at: <http://www.fda.gov/ICECI/ComplianceManuals/CompliancePolicyGuidanceManual/ucm073858.htm>
6. The Centers for Disease Control and Prevention: Gastrointestinal (Enteric) Diseases from Animals website. <http://www.cdc.gov/zoonotic/gi/>