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Laws and Regulations Governing Backyard Poultry in the United States

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Introduction

When a veterinarian is presented with the task of caring for a client's backyard flock, many daunting obstacles will eventually become evident, including questions of legal and regulatory requirements and obligations. While the appropriateness of whether to extend your professional services to these clients is a personal choice, legal requirements of the veterinarian and your client are mandatory. Violations of law may have criminal consequences, and regulatory violations may carry punishments of fines and/or reprimands. It is even possible for a client to have their backyard flock depopulated and/or quarantined against their will. As in almost every area of modern veterinary practice, civil liability is always a threat.

For the veterinarian, there is no substantial legal requirement specific to practicing on poultry other than state licensure. Providing standard of care to backyard poultry is the primary issue of concern, and this determination falls squarely within each state's veterinary licensing body. While backyard flocks are gaining in popularity with a concurrent rise in the number of veterinarians seeing such patients, these relationships are still relatively

rare within a given practice area, even in major metropolitan cities. If a standard of care complaint is lodged with a state licensing board, its members must decide whose standards you will be held against. For instance, if a small flock under your care succumbs to Marek disease, any commercial poultry veterinarian would consider it standard practice to have had a vaccination protocol in place. While it would seem unreasonable to hold a veterinarian who occasionally practices on small flocks to such a standard, it is not an impossible scenario. Even if the licensing authority dismisses such a complaint, a client is still free to sue for civil damages. This sort of risk is ever present in modern society, however, and hopefully will not dissuade those inclined to enter this new and growing area of veterinary medicine.

It might also be helpful for the veterinarian to know exactly who would be defined as a specialist, or expert, in poultry, backyard or otherwise. Unquestionably, boarded members of the American College of Poultry Veterinarians are considered veterinary poultry specialists, and most members spend their careers managing poultry. They work in academia, government, industry, and the private sector. Most of these veterinarians are also

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members of the American Association of Avian Pathologists. Because most of these veterinarians are working with large, commercial flocks, they may not be readily accessible to most backyard poultry enthusiasts. Many veterinarians working with the occasional backyard chicken may not even be aware of their existence. It is obvious that their assistance, when sought, can be invaluable.

The American Board of Veterinary Practitioners (ABVP) also board certifies specialists in the field of avian medicine and surgery. These veterinarians are bona fide experts for all avian species, including chickens. Veterinarians who are ABVP (avian) boarded specialists are largely found in private practices devoted to companion animal care, although they are certainly also found in academia, government, and industry.

The largest veterinary avian community (by membership) is the Association of Avian Veterinarians (AAV). Its membership is primarily composed of veterinarians working with companion birds but is by no means confined to it. In fact, there is no avian family that is excluded by AAV. Historically, psittacine birds have comprised a very large percentage of the species seen by AAV members, but members have always worked with passerines (finches, canaries), ratites (ostriches), Columbiformes (pigeons), and others. Backyard chicken care is a rapidly growing topic within the AAV.

The more common legal issues for the practitioner involves our role as an advisor to our clients, informing them of their own legal responsibilities. Many clients will enthusiastically and quickly form their own backyard flock and invest a substantial amount of time and financial resources into their new hobby without a moment's thought that they may have already grossly violated the law. To the best of our ability, it is our professional duty to at least provide them with some guidance on applicable laws, much as we inform clients of leash laws and local ordinances that may forbid certain types of pets.

Homeowners and Neighborhood Associations

Covenants, conditions, and restrictions (CC&Rs) are limitations and rules placed on a group of homes by a builder, developer, neighborhood association, or homeowners association (HOA). Most established neighborhoods and subdivisions and practically all townhomes and condominiums have CC&Rs. This is the first place for a prospective backyard poultry client to look for obstacles. When clients purchase a home in a covenant-protected community, they enter into a contract with the HOA or neighborhood association. The owner agrees to be bound by the restrictions contained in the community's governing documents, which include the declaration of CC&Rs that are recorded with the clerk's office of the county in which that community is located. Those restrictions are legally binding on all property owners in the community.

Even when a town, city, or county adopts an ordinance allowing backyard flocks, such permissiveness does NOT negate the contractual agreement between the owner and the association. So even if your client lives in a city that expressly allows (even encourages!) small backyard flocks, a prohibiting clause within the client's CC&Rs will take precedence and the client will not be able to proceed with establishing their flock. The more restrictive rule applies, and HOAs can and do exist in rural settings, even within land zoned for agricultural use. Also, if the homeowner is seeking to build a coop, they must first comply with requirements for preapproval of construction of enclosures with the HOA before obtaining any necessary building permits from the city or county.

Some HOAs are extremely active, whereas others seem to be almost nonexistent in reality. These neighborhood associations usually have no real policing powers but can appeal to civil courts to force compliance on an uncooperative member. Monetary penalties can show up as a lien when a property is sold. On the other hand, HOA rules can be the easiest and least

complicated to amend or create. A simple appeal directly to the HOA board or a letter of support from the neighbors bordering a potential small coop is often all that is needed to gain permission. Another common tactic is for homeowners to get themselves elected to the HOA board, which can be surprisingly easy to accomplish. Once elected, it is a simple matter to add poultry issues to the agenda and only a majority of the existing board members need be convinced of the need for a rule change.

Renters should also note that although their lease may not specifically prohibit chickens, the owner of the property is bound by any such agreement and subsequently anyone occupying the property is bound by the same. Even a willing and accepting landlord may not be aware of such restrictions and a renter should ask for a copy of HOA rules rather than risk the demolition of a newly constructed coop and re-homing of just-bought chicks.

Are Backyard Chickens Pets or Farm Animals?

Because many municipal officials and members of HOA's lack agricultural knowledge, they lack a basis for understanding whether chickens can peacefully coexist with their constituents in a cosmopolitan area [1]. Few things excite people as greatly as the goings-on in their neighborhood. It is often the case that the set of rules that apply to backyard chickens is determined by whether chickens are defined as pets or livestock, as some may believe that chicken raising and other agricultural practices involving animals simply have no place in the modern city. Some cities define chickens as domestic animals or pets and thus subject them to the same enclosure and nuisance regulations as other domestic animals like cats and dogs [2]. Other cities specifically define poultry as farm animals [3], and hence they are subject to the same laws and regulations that apply to cattle and swine. Some owners may be shocked to find that their hometown outlaws chickens as

dangerous animals, placing them in the same category as lions, tigers, bears, and sharks [4]. A novel way to address the issue is to treat chickens as a separate category of animal, giving homeowners, city inspectors, and animal control officers clear guidelines on how to approach and handle personal flocks [5]. In at least one instance, a city allowed a homeowner to keep her chickens because the owner herself considered them to be pets and the chickens did not create a nuisance [6].

Once the HOA/neighborhood association hurdle is cleared, the next step is to review city codes and ordinances. Internet access to city records is now almost universal even in small towns, and although this has simplified access, it can be bewildering to find the appropriate and applicable ordinances. Interestingly, most large American cities have at least some provision that allows for backyard poultry, and smaller jurisdictions seem to be the most restrictive [7].

In one report, the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS), while conducting a survey of backyard/small production flocks in the United States, defined a backyard flock as being less than 1000 birds and those with 1000 or more birds as being a commercial poultry operation [8].

Navigating City Charters and Ordinances

Zoning and the law of local government often are regarded as subjects that are arcane and parochial. It is best to avoid projecting what you expect to find (and where) and simply be open to acquiring local knowledge [9]. A simple Internet search for "City of" usually yields the entire charter, ordinances, zoning, permitting regulations, and health codes. Once the documentation is retrieved, the process of finding pertinent material can begin as regulations may be placed in different areas of a city's codified ordinances. The first and

most logical place to look is under an Animals/Animal Control heading or subsection. If chickens are addressed under a city's animal control ordinances, then further regulations concerning lot size, setbacks, or coop requirements may be conveniently located here. As noted, it may be unclear as to whether backyard poultry are considered pets or livestock. If such a distinction is not clear, the opinion of the city clerk or the city's legal counsel may be sought. If an animal control department exists, then the advice of the department should be sought, as they are very likely the people who actually have policing authority. In many cities, this function is carried out by the police department (or sheriff if county laws are applicable).

Another place to investigate will be health codes. Features such as cleanliness, sanitation, and noise control can often be contained in the health code, although the latter may be codified under a "Nuisance" section. The problem of free roaming birds may also be addressed as a public health issue, and owners should be particularly concerned about containing their birds as this can be especially disturbing to neighbors and may spark complaints that could result in uninvited scrutiny. At least two cities consider escaped chickens to be illegal trespassers if they enter your neighbor's property [10]. Fly and rodent control may figure prominently in local health codes, with some cities mandating the use of insecticides [11] and others requiring fly-proof enclosures designed to "prevent the entry therein or the escape therefrom of any bee, moth or fly" [12]. The cities that mention rat control usually just mandate that the coop be free of rats, although others specify the methods used to control rodents such as placing food in rat-proof containers or specifying that coops be designed to be rat-proof. Coop hygiene is another area that pops up frequently, and codes may stipulate how often coops must be cleaned, while most expressly prohibit odors or offensive odors.

The issue of slaughter may also be contained in city charters and vary widely in restrictions.

Most often, the slaughter of individual birds will have no state or federal inspection requirements if the meat is consumed on premises by the immediate family. However, some cities have outright bans [12] on slaughter or restrict it to a building or other structure [13], presumably so that neighbors or their children are not damaged by witnessing such actions (one city seems to be concerned about the negative effects of chickens witnessing their brethren succumb to such an end and requires that slaughter occur in an entirely separate room than the one that fowl occupy) [14]. Owners should also be aware that if backyard chickens are regarded as pets, then slaughter may run afoul of local animal cruelty laws or draw the attention of animal rights groups even if the practice is completely legal. It should also be pointed out that some jurisdictions specifically prohibit the slaughter of chickens for religious purposes, "applicable to any cult that kills (sacrifices) animals for any type of ritual, regardless of whether or not the flesh or blood of the animal is to be consumed" [15], but exempting Kosher slaughter. At least one city expressly allows slaughter for both food and religious purposes [16], whereas another bans slaughter for food purposes but allows it for religious purposes [17].

There is another issue involving carcass disposal if a bird has not been slaughtered specifically for consumption. Many jurisdictions have rules pertaining to burial of dead animals and may not allow for burial within city limits. Cremations often have legal requirements and if present may not allow for simple burning (actually, many cities and counties specifically prohibit burning of waste, which would presumably include incineration of animal waste including bodies). Obviously, veterinarians will have arrangements for carcass disposal that chicken owners can use. Even submitting a whole bird for necropsy can have unforeseen consequences. Diagnostic laboratories have specific rules pertaining to reportable diseases that are diagnosed on necropsy or other diagnostic testing. This may trigger the involvement

of state or federal authorities who may dictate disposal of subsequent poultry deaths from the client's flock, either by natural death, euthanasia, or depopulation.

Roosters can present legal issues on several fronts. First, their presence may be specifically prohibited in a jurisdiction or the number of roosters allowed may be regulated [18]. There is the obvious noise problem, and clients may not be aware that roosters can and do crow at any time of day or night and do not restrict their vocalizations to daybreak. Rooster crowing may trigger a noise violation, even if a city specifically allows for roosters to be kept. Some clients may also mistakenly believe that a rooster is necessary for egg production, and it may be helpful to point out that almost all commercial laying hens never encounter a rooster once they have left the hatchery. The other problem with roosters is their mere presence if an owner is only interested in egg production and has no interest in chickens for the grill or soup pot. If an owner is keeping a rooster to allow at least some fertilized eggs to replenish the flock, then half of the chicks will have no place in an egg-producing flock. While many owners are successful in finding "homes" for these birds, few farmers are interested in accepting rooster "pets" and, unfortunately, many of these birds will end up at the local shelter (if one exists). A veterinarian may be presented with healthy rooster culls for euthanasia. Another potential legal problem exists with "rescue organizations" that claim to provide a no-kill option for unwanted chickens. While many of these operations do precisely what they claim, others are fronts for people who are hoarding animals. While hoarding increasingly appears to have a deep psychological basis, many jurisdictions are beginning to address the problem through legal prohibitions and interventions.

Zoning

Perhaps one of the most difficult areas in a municipal charter for laymen to navigate is zoning laws, as zoning cases are considered

legally idiosyncratic and thus not subject to generalization [19]. Cities that regulate chickens through their zoning laws are much more likely to substantially restrict raising hens [20]. Generally, zoning regulations are designed and written for experts in the areas of land development and building construction, and while the language contained therein may be perfectly understandable for someone in those businesses, it may seem impenetrable to an outsider. A client must determine what zone his/her property falls within and whether that zone allows for backyard chickens. To compound the problem, the municipal employees responsible for interpreting and enforcing these codes are working with developers and builders on a daily basis and may struggle to explain the process to laypeople.

Local zoning boards serve as the forum where conflicting preferences over land use are articulated, disputed, and sometimes accommodated [21]. After all, zoning is "the primary legal mechanism through which the community attempts to influence the evolution of its physical structure. The community as a whole attempts to preserve that which it values, plan for that which it desires, and discourage or eradicate that which it dislikes" [22]. If a city's zoning laws only allow for chickens on land zoned for agricultural use, then most urban/suburban dwellers will have no options other than requesting a zoning variance or attempt to change the law itself. Zoning laws change in response to changing community values, and the community's cultural values are affected by the structures that an earlier era first permitted and then discouraged [23]. Under the Standard Zoning Enabling Act, any community that engages in zoning must set up a zoning board that serves the function of granting variances. In its simplest form, the zoning board is authorized to grant variances from zoning regulations only when (i) the impact of the regulations constitutes an unnecessary hardship on the petitioner, (ii) granting the variance will not harm the public welfare, and (iii) the situation is unique [24].

Coop Construction

Many cities will regulate how a coop should be built and maintained, specifying the dimensions of the coop, how it must be built, and exactly how it must be cleaned. Although some city's building requirements are specific to chicken coops, many are not particular to chickens and cover any structure meant to house animals. Some HOAs and municipalities will have requirements and permits that must be obtained prior to the construction of ANY unattached structure on a property.

The most common requirement concerns the amount of space allotted to the chickens. Again, there is wide variability, but it is usually calculated on the amount of square footage available per bird: anywhere between 2ft² per bird [25] to 15ft² per bird [26]. Rather than set a particular amount of space per bird, one city requires that the space be twice as big as the bird [27]. A relatively recent shift in animal welfare measurement focuses on welfare outcomes rather than setting engineering standards. These requirements can be so vague as to require that the chickens not be cramped or overcrowded [28] or they may be more specific, requiring that birds have space to stand, turn around, and lie down [29] or that they must be able to move freely [30]. A few cities have requirements designed to ensure that birds are protected from the environment. These standards range from specific protection from the sun or extreme temperatures [31] to simply requiring that enclosures protect the animals from inclement weather [32]. Some ordinances are downright peculiar, requiring windows if possible [33] or prohibiting keeping chickens in cellars [34]. Some cities will also restrict how large the coop may be, capping either total square feet or a maximum height for the structure.

Lot Size

Many cities restrict raising chickens based on the lot size of the property. Some cities require a lot of an acre or more in size [35] before allow-

ing the presence of any chickens at all. Such a requirement effectively bans backyard chickens for most people in an urban or suburban setting. Another twist is that while some cities will not have a specific requirement for the size of the lot, the lot size is used to determine the maximum number of chickens allowed. Like most local codes, the specific ordinances can vary greatly. Some cities allow for a maximum number of chickens for properties of a certain size (and under), then allow for more birds as the property size increases. This kind of step system can become somewhat intricate and be based on number of birds per square foot, per acre or division of acre, and may allow for a mixture of chickens and other animals. On the other hand, some cities appear to be very lenient in lot requirements, allowing up to 30 chickens per 240ft² [36] (about the size of a modern bedroom). Yet one more way to regulate is to determine the number of chickens allowed based on zoning, for example, allowing a certain number of birds on property not zoned agricultural [37]. A simple, albeit arbitrary, way to limit flock size is to limit the number of chickens any household can keep, no matter the size of the property. Of the cities that use this simple method, the number of birds allowed varies from 2 [38] to 50 [39] chickens. Still other cities set a maximum number of chickens that can be owned before requiring the owner to apply for a permit [40].

Setbacks

Setbacks are an extremely common way for cities to regulate chickens, especially requirements that chickens and/or coops be kept a certain distance away from other residences or neighboring buildings. These setbacks can range from 10ft [41] to 500ft [42] and may be mixed with zoning requirements and/or lot size. Some cities will relax setback requirements if the client is granted permission from surrounding neighbors [43]. This can be especially useful in multifamily residences and densely constructed neighborhoods such as

zero-lot-line houses in which the structure comes up to or very near to the edge of a property line (in other words, an exterior wall of one home is the lot line of the other person's property). Some cities may cite specific setbacks from the owner's own home, while others exclude any such restriction [44]. As an example of how variable such codes can be, at least two major cities frame the setback not from the structure itself, but specifically to a door or window of the structure [45]. Setbacks from structures may also not be confined to residences, but from schools, hospitals, or businesses. Grand Rapids, Michigan, places a 100-ft setback from any "dwelling unit, well, spring, stream, drainage ditch or drain" [46]. Very few clients would find themselves able to escape from such tight restrictions.

More restrictive may be setbacks from property lines, no matter if a dwelling is much further away. Property line setbacks may vary from just inches [47] to many hundreds of feet [48]. As in the case with other setbacks, the rule may be relaxed if permission is granted by neighbors. In an effort to prevent direct visualization of chicken coops or possibly contain escapees, a city may prohibit coops in front yards or corner lots [49] or have a setback from the street.

Permits

Many cities will require a permit or license to keep chickens. As is always the case with local laws, the permitting authority is highly variable. It may reside within a city's public health department, animal control office, inspections department, or even the city clerk. For what must truly be the ultimate in frustration, some cities do not even specify in their ordinances by what means a person actually procures a permit. Permitting fees will also vary widely as will the term of the permit; some will require annual renewals, others biennial, still others may only need to renew every 5 years. A few municipalities appear to have open-ended terms, either not specifying the term or being valid unless revoked. Some cities

will issue a permit only with the consent of all or a percentage of neighbors that either border on the property or within a prescribed radius [50]. The permitting process may only apply to flocks of a certain size or if roosters will be present. Many of the permitting/licensing requirements appear to address concerns over potential complaints from neighborhood residents.

It must be noted that municipal codes and ordinances sometimes conflict with each other, creating confusion and frustration for an owner trying to be fully compliant. Animal control codes may conflict with zoning laws or with health codes [51]. This kind of discordance may pit different city departments against each other or even put into question whether a city's board of health has precedence over the zoning board. These conflicts may need to be resolved by the full city council and obviously may not be a priority for a busy council. At best, it will likely not be resolved quickly. As an example of the kind of confusion that can drive a client to frustration, the animal section of one city's code allowed chickens if the zoning ordinance permitted it. The zoning ordinance allowed chickens if the animal code permitted it. The city clerk resolved this vicious loop by interpreting the provisions to ban chickens entirely [52]. The contradictions that occur in local government are simply more visible and by no means preclude their presence in statewide or national forums.

Perhaps in retaliation for clients to have to navigate such a labyrinth of local laws, some homeowners are simply refusing to cooperate, or more constructively, are organizing local and regional movements to create or amend local ordinances. Commonly referred to as the "Poultry Underground" or "Chicken Underground," the movement gained momentum and publicity after some citizens convinced the Madison, Wisconsin, City Council to legalize backyard coops and resulted in the production of a documentary, "Mad City Chickens" [52]. Another dispute in Augusta County, Virginia, began with a ban on backyard poultry and eventually culminated in the

county board of supervisors approving to update the county code to keep small numbers of chickens in residentially zoned neighborhoods. Websites and T-shirts frequently display slogans such as “When Chickens Are Outlawed, Only Outlaws Will Have Chickens.”

State and National Laws and Regulations

Once your client has cleared the local hurdles (HOA, municipal and county), then the next set of rules and regulations will come from state and federal authorities. It is important to realize that rules and regulations at this level are designed for commercial poultry operations and protection of public health, whereas local ordinances are also concerned with property values, odor, noise, and other “nuisance” factors. As far as the extent of involvement of state and federal authorities, if a backyard enthusiast obtains their starter chicks legally and consumes either the eggs or the meat themselves, within their own household, then it would be rare and unique for them to have any contact or problems. Even if they are breeding their own birds, as long as the chickens they produce essentially live and die on premises, there are really no state or federal entanglements to ensnare them. But if birds (live or dead) or eggs move off their property, then an entire series of hurdles must be cleared. The penalty for non-compliance can be severe— including fines and depopulation of the flock.

A backyard enthusiast must realize that the commercial poultry industry can take a very cautious view of small flocks of chickens. The problem is not a shrinking market share—at least in the United States, eggs and meat produced by a household for their own consumption has a negligible financial impact on industry, insofar as regards lost revenue from egg or meat sales at supermarkets and restaurants. The real problem is the danger of a commercial operation being quarantined or even being depopulated because a small group of

chickens has been diagnosed with a highly contagious disease a few miles down the road in someone’s backyard. If faced with the choice of depopulating a dozen chickens in a backyard flock versus the loss of millions of dollars of revenue because eggs or poultry cannot be transported away from the commercial operation, state and federal regulators may show little hesitation in their decision. This kind of situation is not simply an economic decision; a few backyard layers could potentially threaten the health and lives of hundreds of thousands of chickens living in commercial housing. Commercial producers are highly protective of their very large and very expensive investment, and small flocks of chickens present a credible and ever-present danger to their livelihood and the lives of their birds.

Matters become even more fraught when public health is at stake. The state has a responsibility to protect its’ citizens and the state takes this matter seriously. Even though there has not been a single human case of avian influenza within the United States, you would be hard pressed to find any American who has not heard of the disease. Many millions of dollars and thousands of hours of work are expended to prevent and control the entry of Avian Influenza into the United States. While these efforts understandably focus on large commercial operations, officials are acutely aware of the dangers that small backyard flocks present.

Movement of Live Poultry to a Backyard Flock

A client must obtain starter birds from somewhere, and that somewhere must be from a neighbor, another backyard enthusiast, a feed store, a farmers market, a local hatchery, or mail-order. It is recommended to purchase chicks from hatcheries or breeders that participate in the National Poultry Improvement Plan (NPIP), which will be described shortly. It is important for both the veterinarian and client to at least have some awareness of what the

NPPI is, what it does, and why. The danger of entry of contagious diseases such as *Salmonella pullorum*-Typhoid or avian influenza is a real threat, not just to your client's personal flock or their family's health but also to public health and the commercial poultry industry. Beyond satisfying legal requirements, it is the duty of a small flock owner and the veterinarian as an advisor to prevent the entry of disease into small flocks and spread of disease to other small flocks and commercial flocks as well as protecting human health.

National Poultry Improvement Program

The NPPI [53] was established in the early 1930s to provide a cooperative industry, state, and federal program through which new diagnostic technology could be effectively applied to the improvement of poultry and poultry products throughout the country. The development of the NPPI was initiated to eliminate Pullorum disease caused by *S. pullorum*, which was rampant in poultry and could cause upward of 80% mortality in baby poultry. The program was later extended and refined to include testing and monitoring for *Salmonella typhoid*, *Salmonella enteritidis*, *Mycoplasma gallisepticum*, *Mycoplasma synoviae*, *Mycoplasma meleagridis*, and low pathogenic avian influenza. In addition, the NPPI currently includes commercial poultry, turkeys, waterfowl, exhibition poultry, backyard poultry, and game birds.

The NPPI is a voluntary program, and although a particular focus is the registration of breeder flocks to ensure disease-free chicks, the guidelines set up by the NPPI are particularly important when birds are being transported. All states (with the exception of Hawaii) will require that poultry being imported across their state border come from flocks that either participate in the NPPI or follow the guidelines set forth for participation in the NPPI. Further, many states will require that birds being transported *within* a state originate from an NPPI-registered flock or follow the guidelines set forth for participation in the

NPPI. The practical consequences of the establishment of the NPPI are simply this: although it is *possible* for a backyard enthusiast to have poultry that have never been subject to NPPI guidelines, it is not advisable as this will be the safest source for starter or replacement birds. Perhaps even more importantly, if your client is going to be moving birds off their premises to be sold, traded, or exhibited, then it is highly likely that your client must either be a participant in, or follow the guidelines of, the NPPI. Although the NPPI program is voluntary, every state (except Hawaii) has chosen to use NPPI guidelines in some shape or form to regulate movement of poultry into and within their state.

The technical and management provisions of the NPPI have been developed jointly by Industry members and state and federal officials. These criteria have established standards for the evaluation of poultry with respect to freedom from NPPI diseases. Each state runs its own NPPI program; the federal government (USDA) only manages and coordinates state efforts. The NPPI website has direct links to the official state agencies [54] in each state (Hawaii is the only state that does not participate in the NPPI). All of the regulations for the NPPI are detailed in Title 9 of the Code of Federal Regulations (CFRs) [55]. Each official state agency that implements the NPPI must follow the Plan as stated in the CFR, but they may have their own rules and can adopt rules that are more stringent than those in the NPPI.

Sources of Starter or Replacement Birds

Neighbors, Friends, or Other Backyard Hobbyists

The supplier has the responsibility to ensure that all applicable laws have been followed before delivery of live birds. While a health certificate or similar documentation may be required for the purchaser to transport the birds to their home, these requirements are typically fulfilled by the seller. It is important to note that states have the authority to restrict not only import of animals into their state but

also transport of animals within the state. Therefore, it is conceivable that your state may have rules that restrict the movement of birds even within your own neighborhood. It would be prudent to contact your state's animal control office to be sure that there are no state requirements. Identifying the appropriate state agency is the difficult part, as jurisdiction varies widely and often falls across several different agencies or departments.

Feed Stores, Flea Markets, and Roadside Stands

These sources very often have legal requirements, although it is not uncommon for these vendors to be completely unaware of such and they can be in gross violation of existing rules. Again, it is the responsibility of the seller, not the purchaser, to be in compliance with all applicable laws and regulations, although it would be wise for the purchaser to know if health certificates or similar documentation is required while transporting the birds from the source to their home (this applies to both intra-state and interstate transport). Pragmatically and realistically, however, it is virtually impossible for state regulators to oversee and enforce rules with every possible outlet or source. These sellers have very small batches of birds, often from myriad sources, and almost always have transient supplies. Most of the year, these sources will have no animals available at all. An aspiring backyard enthusiast will have no luck acquiring birds from these sources in deep winter, only to see a glut in the spring. "Chick Days" at feed stores and flea markets are common throughout the country.

One final note must be made regarding acquiring birds from the above-mentioned local sources that has nothing to do with laws or regulations. First, your client may have no assurance that they are buying a specific breed of chicken. In fact, there is no assurance that the available chicks are even egg layers as opposed to meat-type birds (referred to as broilers within the poultry industry). Often, these chicks are hybrids. Second, except for some

breeds with sex-linked traits, your client will also have no idea whether they are buying pullets or roosters. Finally, it must be pointed out that this is the simplest way of introducing severe disease into a starter flock or, more importantly, into an established flock. A much safer way to acquire new birds is from the following sources.

Commercial Hatcheries and Hobby Farm Breeders

Virtually all commercial hatcheries and the majority of hobby farm breeders will be participants in the NPIP. There are several advantages to this for the backyard enthusiast. First and foremost, these sources will be certified free from *S. pullorum*-Typhoid. Additionally, they may also be certified free from mycoplasma and avian influenza. It is absurdly easy to find out if these sources participate in the NPIP program—just ask. Most hatcheries and breeders prominently display their participation in the program; in fact, if they are transporting birds across state lines they will be required to do so. Even transportation within a state will probably have rules either requiring participation in NPIP or have rules modeled on NPIP guidelines.

There is another advantage for obtaining birds from NPIP participants regarding legal movement (transportation). Birds that are shipped from an NPIP hatchery or breeder may use a form (specifically called the VS Form 9-3) *in lieu* of a health certificate for transportation [56]. To the author's knowledge, poultry are the only species that have such an exemption from health certificates. The hatchery or breeder will typically include this form along with the chicks. As far as means of transportation for small numbers of chicks from these suppliers, the most common (and inexpensive) will be through the United States Postal Service (USPS). The USPS does not assume responsibility for ensuring that shipped birds have required documentation—that responsibility lies with the shipper. The USPS does, however, have very specific mailing and packaging requirements [57] that can be

accessed from their website [58]. Of course, if a breeder or hatchery is within driving distance, your clients can simply pick up the birds themselves, although it would still be advisable to receive the VS Form 9-3. A client may be frustrated to learn that they may not be allowed to inspect the premises or meander within a commercial hatchery to observe first-hand the conditions under which chickens are raised. This has little to do with concealing practices and everything to do with biosecurity. All commercial operations are either private or corporate entities, and they have every reason and authority to restrict entry onto their premises.

One final note is to point out that fertilized eggs are treated legally in the same fashion as live birds.

Transportation of Poultry from a Backyard Flock

While discussing acquiring starter or replacement birds into your client's backyard flock, it becomes apparent that state and federal authorities highly regulate the movement of poultry, both when crossing a border into a state and during movement within a state. Again, these regulations are designed to protect both the public health (as in the case of avian influenza) and the health of commercial flocks (as in the case of virulent Newcastle disease). These laws and regulations may cover movement of live birds (including fertilized eggs), unfertilized eggs for consumption, and bird carcasses (meat) intended for consumption. In fact, a state may have entirely different agencies that control each separate kind of chicken or chicken product. For example, in the State of Texas, the Texas Animal Health Commission regulates the movement of live birds. At least two (possibly three depending on the venue and destination of the meat) different groups within the Texas Department of State Health Services are in charge of poultry meat. Both the Texas Department of Agriculture and the Department of State Health Services regulate eggs. Remember, these regulations are in addition to

any restrictions that are placed at the municipal or county level. Large cities especially will usually have their own requirements that often are in the jurisdiction of their respective health departments.

The transport of live birds falls squarely within most state regulations, and every state has rules and regulations governing such movement. It is not wise to assume that even giving a few birds to a neighbor for them to start a new backyard flock has no legal restrictions. In some states it will not matter whether a financial transaction has occurred; it is the movement itself that is regulated. Depending on the state, the rules may vary from non-existent to very stringently regulated. Often, it is the presence or absence of large commercial flocks within the state that dictate the degree of regulation and severity of penalties.

If your client is transporting live poultry on an airline, they must be aware that each individual airline will have requirements that may or may not coincide with federal and state requirements for transport. Often, these requirements will be in addition to whatever governmental regulations are applicable. In addition to their own paperwork, they will also have stringent rules on the types of containers that must be used, food and water instructions, the number and types of birds allowed, or other requirements. Individual airlines have their own set of rules that may not be applicable on another airline. Most commercial air carriers have a division that specifically handles live animals.

Health Certificates/Veterinary Accreditation

In 1921, the USDA established the veterinary accreditation program so that private practitioners could assist federal veterinarians in controlling animal diseases. In 1992, the APHIS of the USDA began managing the program nationally, but authorization of veterinarians continued on a state-by-state basis. Every state

has an area office that can easily be obtained at the veterinary accreditation website [59]. Any veterinarian writing health certificates since this time has been familiar with the program.

In 2010, the program was enhanced due to threats of emerging disease; in the case of birds, this has included an epizootic of exotic Newcastle disease (END) and epizootics of West Nile virus. In the vast majority of these incursions, these epizootics have successfully been eliminated with the veterinary practitioner being the first line of defense against such catastrophic disease events [60]. The enhanced program strengthens the accredited veterinarians' understanding of the program and increases their knowledge on current animal health issues. It also allows for the administration of a consistent and uniform program.

The program now has two accreditation categories (Category I and Category II) in place of a single category. Category I accreditation is designed primarily for companion animal practitioners and includes such species as dogs, cats, laboratory animals (rats, mice, gerbils, hamsters), ferrets, reptiles, and even native nonruminant wildlife. Category II accreditation includes all animals including food and fiber species. Accredited veterinarians who wish to write health certificates for any type of bird must obtain a Category II accreditation. All birds within the Class Aves are included, whether they are poultry intended for food, parrots intended for human companionship, or wild birds. As many veterinarians who are seeing backyard poultry are primarily companion animal veterinarians, it is important to either apply, renew, or reinstate for the Category II classification if you wish to be able to write health certificates for your client's birds. USDA-APHIS has an easily navigable website [61] that details requirements for accredited veterinarians and first-time applicants, as well as general information for the public.

All veterinarians who were accredited before the enactment of the enhanced program have (or will have) chosen that category they wish to

continue being accredited in and have (or will have) completed supplemental training. Initial training will be required for all newly accredited veterinarians or those previously accredited veterinarians who did not renew before the deadline. All accredited veterinarians within the new, enhanced program will be required to renew their accreditation every 3 years to maintain the program as the core of veterinary preparedness and response. Although provisions were also made for accreditation specializations, such specific rules do not exist at the time of publication.

As small backyard flocks increase in number, some clients may become interested in competing in shows and fairs. Transporting poultry to a destination where birds of differing origin are congregating compounds the possibility of dispersing disease. Therefore, almost every state will have stringent rules regarding such movement and clients should be advised as such. Mandatory testing of individual birds for avian influenza is extremely common. Once more, the rules and the enforcing agency will differ state by state, but the state veterinarian's office should be the first place to contact. The organizers of such exhibitions are generally experienced and many of these events (such as county fairs) have been held for decades; therefore, the requirements and rules for registering show animals are distributed to participants well in advance. Regarding shows, fairs, and other exhibitions, there is another consideration to keep in mind: the Animal Welfare Act (AWA).

The AWA was signed into law in 1966. It is the only federal law in the United States that regulates the care and housing of animals in research, exhibition, transport, and breeding for wholesale and by dealers. Other laws, policies, and guidelines may include additional species coverage or specifications for animal care and use, but all refer to the AWA as the minimum acceptable standard. The Act is enforced by the USDA-APHIS Animal Care Program. While animals intended for food are specifically excluded from the AWA, animals

that are exhibited are covered and therefore chickens that are entered in fairs, shows, and exhibitions are covered by its provisions. The AWA was amended in 2002 to include birds not bred for use in research; however, the regulations have not yet been released at the time of publication, so facilities with birds used for purposes described in the AWA are not subject to enforcement action. An overview of the AWA and specific provisions are accessible on the USDA-APHIS Animal Care website [62].

Slaughter, Processing, and Distribution of Poultry

The overarching law that applies to poultry slaughter and processing is the Poultry Products Inspection Act (PPIA) [63], which is administered by the Food Safety and Inspection Service (FSIS) of the USDA. The PPIA was passed by Congress to ensure that only wholesome poultry that is not adulterated and not misbranded enters interstate or foreign commerce, but it has been amended to extend the mandate for federal inspection to all businesses or persons that slaughter or process poultry within a state, when the state does not enforce requirements at least equal to the inspection requirements of the PPIA. Therefore, any business in any state that slaughters or processes poultry for use as human food is required to do so under federal or state inspection, unless the slaughter or processing operations at the business meets certain exemption criteria in the Act.

Twenty-seven states have their own meat inspection program (for intrastate sales), which will meet or exceed standards set forth in the PPIA. Inspection programs in states that do not have their own program are managed by USDA, specifically the Office of Policy Evaluation and Enforcement Review [64]. Although a backyard flock may be exempt from inspection, it may be necessary for your client to apply for an exemption or follow specific criteria to satisfy the exemption.

Exemption requirements vary but will often require a minimum level of sanitation or other requirements. In any case, if an exemption is granted, then the rules that the owner must comply with will be clearly spelled out by the regulatory agency requiring it.

Although it was not the intent of Congress to mandate federal or state inspection of an owner's private holdings of poultry or to mandate inspections of small numbers of poultry, even owners who operate under an exemption are not exempt from all requirements of the Act. USDA-FSIS has developed a flowchart [65] to help owners determine if they qualify for an exemption, but please note that this guide only applies to poultry and not to other kinds of livestock (cattle, sheep, goats, etc.), as they fall under the requirements of the Federal Meat Inspection Act and not the PPIA. Generally, if the client is not engaged in selling poultry meat, there are no federal requirements under the PPIA. Importantly, if your client slaughters and processes less than 1000 birds a year or if they are for personal or private use, they may qualify for either a Personal Use or a Producer/Grower-1000 Limit exemption.

If your client qualifies for an exemption, then they may slaughter and process poultry without the benefit of federal inspection. However, the Act does not exempt any person slaughtering or processing poultry from the provisions requiring the manufacturing of poultry products that are not adulterated and not misbranded. Therefore, poultry must be slaughtered and processed under sanitary conditions and using procedures that produce sound, clean poultry products fit for human consumption. Specific sanitary practices are described in FSIS's Sanitation Performance Standards Compliance Guide, dated October 13, 1999 [66]. The specific sanitary practices in the document are not requirements; however, establishments that follow the guidance can be fairly certain that they comply with the requirements in the Act.

The regulations in the PPIA require that poultry products transported or distributed in

commerce bear specific information. Poultry products inspected and passed under USDA inspection at official USDA establishments must bear the official inspection legend and meet specific labeling requirements prescribed in the regulation. However, exempt poultry products cannot bear the official mark of inspection. In addition, there is specific labeling or identification requirements for exempt product to meet in lieu of bearing all required elements of a label. The information that packages of exempt poultry products must bear varies depending on the exemption and on each state's regulations. In addition to labeling and packaging, states usually also have storage requirements, particularly refrigeration standards.

But even clients who qualify for both federal and state exemptions cannot donate the meat for use as human food outside of their immediate household in many states without meeting explicit criteria. In other words, your client is often not legally allowed to give away unlabeled, uninspected poultry meat to their neighbors or food pantries, although it is permissible for the neighbors to consume poultry that the client has slaughtered and processed (under sanitary conditions) on their own premises, as long as the neighbors consume the meat on the client's premises and the client does not receive money or any other type of compensation for the meal. Even then, if a family member or guest becomes ill from the meal, the owner may soon find themselves under the scrutiny of health officials.

Eggs for Consumption

If selling or even giving away poultry meat seemed complicated, then the rules that may apply to eggs will seem even more so. Starting at the federal level, egg regulations will fall across several departments and agencies.

Food and Drug Administration

Egg wholesomeness and safety will fall under the authority of the Food and Drug Administration (FDA) (Department of Health

and Human Services). The FDA obtains its authority through both the Food, Drug, and Cosmetic Act and the Public Health Service Act and regulations will be found in Title 21 of the CFRs. Safety requirements, particularly regarding *S. enteritidis*, are exempted at the federal level for backyard flocks of less than 3000 birds [67]. However, refrigeration requirements, specifically that stored eggs be kept below 45°F, are not exempted for any operation; not even for very small flocks or distribution from the owner's homestead [68]. It does not appear to matter whether commerce is involved in the transfer of eggs from the owner to another person—only that food is being provided for human consumption.

Likewise, there is a labeling requirement [69] under the authority of the FDA that seems to apply to all shell eggs, which is that all shell eggs bear the following statement: "*SAFE HANDLING INSTRUCTIONS: To prevent illness from bacteria: keep eggs refrigerated, cook eggs until yolks are firm, and cook foods containing eggs thoroughly.*" As with the refrigeration requirement, this rule appears to have no exemptions or exceptions.

Agricultural Marketing Services

Ensuring egg quality is the responsibility of this agency, which is in the USDA and derives its authority from the Egg Products Inspection Act and whose regulations can be found in Title 7 of the CFRs. USDA-Agricultural Marketing Services (AMS) surveys egg distribution to ensure that only eggs fit for human consumption (acceptable and unadulterated) are used for such purposes. This function is enforced under the AMS Shell Egg Surveillance Program, which involves quarterly inspections and sampling at egg-processing facilities. There are exemptions from these requirements, specifically for producers who sell directly to consumers from their own flock, sell less than 30 dozen eggs, and have fewer than 3000 hens. Such eggs to be sold must not contain any more loss or leakers than allowed in the official standards for Grade B shell

eggs [70]. These exemptions do not apply to restricted eggs when prohibited by state law.

Additionally, the AMS provides for uniform standards, grades, and weight classes for shell eggs through its Voluntary Grading Program [71]. This is familiar to consumers as weight classes (Jumbo, Extra Large, Large, Medium, Small, Peewee) and consumer grades (AA, A, and B). It is important to note that although this is a voluntary program of the federal government, it is a requirement in some shape or form in every state. It should not be surprising that state requirements vary wildly. For small, backyard flocks, some states will not allow for the sale of ungraded eggs under any circumstances, even when sold directly from the owner to the consumer from their own home. Other states have extremely lax requirements or no requirements for grading at all if sold directly from the owner to the consumer. Eggs must generally be graded for eggs to be used in restaurants and retail food establishments. Most states have a mixture of requirements such as allowing for ungraded eggs to be sold in certain circumstances as long as the eggs are prominently displayed and labeled as being ungraded.

Some states do not allow eggs to be resold in used egg crates or cartons collected from friends or neighbors. In states that do allow this, there are almost always requirements to obliterate markings such as USDA grade shields, expiration dates, distributor information, and any other certification logos.

Food Safety and Inspection Services

This is another division of the USDA, and it also derives its authority from the Egg Products Inspection Act. Its regulations can be found in Title 9 of the CFR. While the FSIS has broad authority over poultry meat (under the Poultry Products Inspection Act described earlier), the bulk of its regulatory capacity with eggs involves egg products. Egg products are those that contain dried, frozen, or liquid eggs—essentially eggs that are intended for human consumption that have been broken. While most backyard enthusiasts will not be engaged in this sort of

activity, it is noteworthy to realize that these types of egg products have their own set of regulatory requirements that are separate and distinct from whole shell eggs. Oddly enough, the FSIS also has refrigeration requirements for whole shell eggs [72], and although there is an exemption for personal use, the FDA requirement (which is the same, i.e., that eggs be maintained below 45°F) has no known exemptions.

Sanitation

Finally, there may be sanitation requirements for washing or otherwise cleaning or sanitizing the eggs and these requirements can be very specific, such as a three-compartment sink necessary to wash, rinse, and sanitize equipment and eggs (with a separate sink for hand washing). Wastewater must be disposed of properly. When using a municipal sewage system you may need the utility provider to sign off, certifying that the provider is approved by state and/or local authorities. Onsite sewage disposal systems (e.g. septic tanks) are usually regulated by the county health department, which is responsible for approving this step of the process. A residential septic system may not be suitable; your local department of health will determine if an additional tank is required for the processing facility. Be sure to communicate the small-scale size of the operation to the inspector.

Roadside Sales and Farmer's Markets

Anyone considering selling their eggs or poultry meat onsite (on the owners own premises), at a roadside stand, flea market or farmers market should consult with their state officials to determine whether there are any inspection, storage, or labeling requirements related to their sale. Typically, the state's department of agriculture is the best place to start asking questions although rules may also be found within a state's department of health, environmental safety, or consumer safety divisions. Unfortunately, jurisdictions often overlap. Some farmers markets are highly regulated by

either the state or local authorities, and even sale from the home may require a roadside vendor's permit. Additional permitting may be required such as a retail food establishment or food manufacturer's license. Flock registration for small, backyard flocks is not yet universal, but more and more states are requiring this if birds (live or dead) or eggs will be leaving the owner's property, regardless of the size of the flock. If selling eggs, an additional egg license may be required by the state. Misleading advertising may be considered an offense at national and state levels. Owners should be extremely careful when using such words as "fresh," "selected," "cage-free," etc. Use of the word "organic" has very specific legal meanings and unfortunately the definition will vary depending on the state and the product.

Live bird markets and auctions are increasingly coming under the scrutiny of both state and local health officials and the trend is to require that the birds come from NPIP-certified flocks (or follow NPIP guidelines for *S. pullorum*-Typhoid testing), be avian influenza tested, be from a flock registered with the state, and have record-keeping requirements. Many states are conducting regular inspections at markets and other venues to conduct surveillance testing and to ensure compliance with all existing regulations.

Transitioning from Hobby to Commercial Operation

If a veterinarian has a client with a rapidly growing backyard flock and is becoming concerned that they are flirting with crossing the line from a hobbyist to a commercial (albeit specialty) producer, the 3000-bird threshold would appear to be at least an easily quantified red line. Engaging in commerce itself (i.e. exchanging money for birds, live or deceased, or eggs), does not in itself define a commercial producer, not even if the birds or eggs are specifically intended for consumption. Direct sales to customers, either privately or in a farmers market, is exempted from food safety

rules except as regulated locally through state, county, or local health codes.

Each state has its own department of agriculture that sets regulations regarding poultry, whether commercial or backyard, and a quick check on your state's website will generally yield state-specific laws and rules. In addition, each state will have a state veterinarian who should be considered as a primary reference when in doubt. The state veterinarian also often directs, manages, or is affiliated with a state animal health commission or board. The state veterinarian will be primarily involved in areas of both animal health and increasingly animal welfare.

Some states will require registration or permitting if a client is selling even small numbers of live birds, even at a roadside stand or feed store. These rules specifically target disease control, especially those diseases that could affect commercial poultry producers. Laws and regulations governing transportation of poultry are largely concerned with the same health issues—that is, the health not of humans but of the larger commercial chicken population. Following are the diseases that are of gravest concern to state and federal officials:

***Salmonella*-Associated Pullorum and Typhoid Diseases**

These conditions are caused by two very closely related organisms that were once thought to be different species but have recently been classified as biovars of *Salmonella enterica* subsp. *enterica*. Pullorum disease is usually symptomatic only in young birds. The mortality rate varies, but it can be as high as 100%. Fowl typhoid resembles Pullorum disease in young birds, but it is also a serious concern in growing and adult poultry. The control of these diseases is complicated by vertical transmission: hens can become subclinically infected carriers and pass the infections to their embryos in the egg. Fowl typhoid and Pullorum disease have been eradicated from commercial poultry in many developed countries, including the United States and Canada,

but they may persist in backyard poultry flocks and game birds.

Avian Influenza

State and federal officials closely monitor two types of avian influenza based on their ability to cause disease in poultry: low pathogenicity avian influenza (LPAI) and high pathogenicity avian influenza (HPAI). LPAI naturally occurs in wild birds and can spread to domestic poultry. These strains pose little threat to human health, but the mere potential to mutate into more highly pathogenic forms has led the USDA to closely monitor both LPAI H5 and H7 strains. Broad public concerns about highly pathogenic H5N1 virus has resulted in USDA efforts to very quickly respond to and eradicate HPAI. It is important to note that HPAI has been detected a handful of times in US poultry: in 1924, 1983, 2004, and 2014–2017. While more than 200 human cases have been reported since 2004, no strain of avian influenza that have been detected in US poultry, either HPAI or LPAI, have caused any human illness. (See Avian Influenza and Exotic Newcastle Disease Chapter and the Biosecurity Chapter for more detail.)

Virulent Newcastle Disease

END, also known as virulent Newcastle disease, is a contagious and fatal viral disease affecting all species of birds. END is so virulent that many birds die without having developed any clinical signs. END can infect and cause death even in vaccinated poultry. Mortality is up to 90% of exposed birds. The USDA APHIS

is the federal agency that takes the lead in excluding END from the United States and responding to any END outbreaks that do occur. (See the Avian Influenza and Exotic Newcastle Disease chapter and the Biosecurity chapter for more details.)

Be Cautious, Not Afraid

It is difficult not to be so intimidated by the labyrinth of laws, regulations, restrictions, and exemptions discussed in this chapter that you want to throw up your hands in confusion and fear. And in fact it is possible for a well-meaning but uninformed client to find themselves in either serious trouble or face the tragedy of having their flock depopulated against their will. These rules were never intended primarily to quash backyard flocks; rather they are designed to accomplish some very simple goals:

- Be a good neighbor
- Protect our poultry industry
- Protect human health

These are worthy objectives even though it may be burdensome or even impossible for your clients to engage in their desire for a backyard flock and simultaneously fulfill their ethical and legal duties. At the very least, people should be aware and become at least minimally educated instead of pursuing such an endeavor on a whim. Stewardship of living creatures always carries responsibilities, and as veterinary professionals we should proudly carry that responsibility and pass it on to our clients.

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