Coastal Carolina University CCU Digital Commons

Honors Theses

HTC Honors College

Summer 8-5-2022

Organizational Effectiveness of Rabies Division of South Carolina DHEC

Camden Daniel Sasfai Coastal Carolina University, cdsasfai@coastal.edu

Follow this and additional works at: https://digitalcommons.coastal.edu/honors-theses

Part of the Business Administration, Management, and Operations Commons

Recommended Citation

Sasfai, Camden Daniel, "Organizational Effectiveness of Rabies Division of South Carolina DHEC" (2022). Honors Theses. 481.

https://digitalcommons.coastal.edu/honors-theses/481

This Thesis is brought to you for free and open access by the HTC Honors College at CCU Digital Commons. It has been accepted for inclusion in Honors Theses by an authorized administrator of CCU Digital Commons. For more information, please contact commons@coastal.edu.

Organizational Effectiveness of Rabies Division of South Carolina DHEC

By

Camden Sasfai,

Management Major

Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science In the HTC Honors College at Coastal Carolina University

Summer 2022

Louis E. Keiner Director of Honors HTC Honors College Ellen E. Hayward Director of Career Services & Professional Development Wall College of Business

Table of Contents

Abstract	3
Introduction	5
Literature Review	8
Methods	12
Discussion	15
Conclusions	22
References	24

Abstract

There are two types of rabies, known as furious and paralytic, that are both spread mostly through saliva of wild or domesticated animals via scratches and bites. Both types can ultimately result in death of the human victim, yet both are vaccine-preventable diseases. Transmission of the rabies disease to humans is usually found following a deep bite or scratch from an infected animal, and transmission to humans by rabid dogs accounts for up to 99% of human infection cases, though bats are now an increasing source of human death due to rabies as well. Surprisingly enough, human deaths following exposure to rabies from foxes, raccoons, skunks, jackals, mongooses and other wild carnivore host species are very rare, and bites from rodents are not known to transmit rabies.

Because rabies is a vaccine-preventable disease spread predominantly by infected dogs, the act of vaccinating dogs is the most effective strategy for preventing the spread of rabies to people. Unfortunately, infection rates worldwide reach tens of thousands each year and the population most affected are children under the age of fifteen. That being said, according to the World Health Organization (WHO), "education on dog behavior and bite prevention for both children and adults is found to be an essential extension of a rabies vaccination programme and can decrease both the incidence of human rabies and the financial burden of treating dog bites. Increasing awareness of rabies prevention and control in communities includes education and information on responsible pet ownership, how to prevent dog bites, and immediate care measures after a bite. Engagement and ownership of the programme at the community level increases reach and uptake of key messages" (WHO, *Rabies*, para. 5).

Furthermore, it is stated by the WHO that "although effective human vaccines and immunoglobulins exist for rabies, they are not readily available or accessible to those in need, so this increases the importance of vaccination for prevention at the animal level" (WHO, *Rabies*, para. 2). Altogether, more than 29 million people worldwide receive a post-bite vaccination annually, which prevents hundreds of thousands of rabies deaths per year. According to WHO, "Globally, the economic burden of dog-mediated rabies is estimated at US\$ 8.6 billion per year" (WHO, *Rabies*, para. 3).

The key to the eradication of rabies in the United States is the collaborative effort of organizations like DHEC and the community to spread the knowledge needed to fight this fatal disease. DHEC could be even more effective in spreading awareness and preventing rabies transmission by tightening up its in-house operations, starting with the onboarding process for its employees.

Introduction

In the Greenville DHEC office, all types of animals pass through for testing for rabies, though the majority that are tested are bats and domestic cats and dogs. The procedure at DHEC of Greenville is to immediately quarantine the animal that bit or scratched the human. This is done in order to watch for symptoms of rabies to appear. The incubation period for rabies is typically between two and three months, but may vary from 1 week to 1 year depending upon factors such as the location of virus entry and the viral load. According to WHO, "the initial symptoms of rabies include a fever with pain and unusual or unexplained tingling, pricking, or burning sensation (paraesthesia) at the wound site. As the virus spreads to the central nervous system, progressive and fatal inflammation of the brain and spinal cord develops" (WHO, Rabies, para. 8). Each case is looked at individually but also uniformly; individually in that each case has its own set of variables. For example, when a service dog is involved in a case there are no standard operating procedures (SOP) on whether the dog is required to be quarantined from its owner. There should be an established SOP in place for something as important as a Veteran and his or her service animal. In this example, workers and supervisors are forced to look at the case individually to determine if a quarantine is in fact necessary, or if it would hinder the service dog's ability to perform its necessary tasks for its accompanying human. On the other hand, procedures are uniform in the way that the cases are processed. I was able to witness these things first hand while I completed an internship as a rabies team member with the Greenville DHEC office this summer.

When arriving to work each Monday, the main focus of team members is to enter all cases into our filing system (ABRIS), where each case is subsequently assigned a number. After entering all the new cases, rabies coordinators are then able to begin their investigations on a

case-by-case basis, as stated previously. The ability to decipher between cases is the responsibility of the investigator, and actually includes many variables. For instance, one case consisted of a service dog and his Veteran owner that were approached in public by a bite victim, and they are now facing the issue of balancing the owner's right to the dog's service with the proper quarantine time. In this particular case, the most important factor was how to keep the dog with his owner and not interrupt its crucial service. This type of decision-making needs proper training, and that is something I noticed was lacking during the onboarding process for a rabies investigator at Greenville's DHEC office.

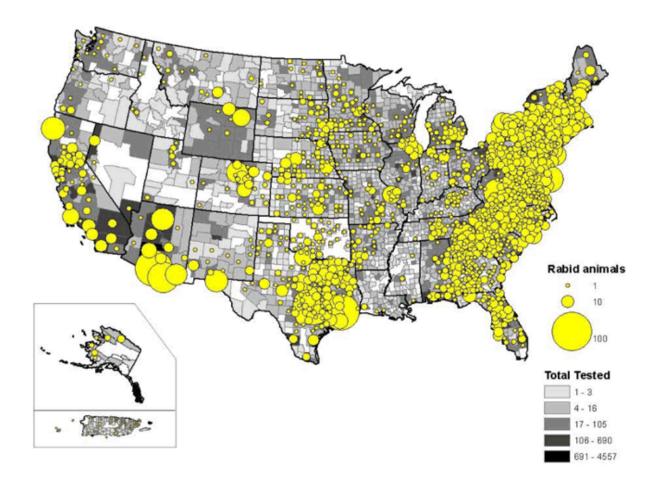
It could be said that the DHEC office of Greenville is doing a disservice to the greater community by not thoroughly training their employees on the guidelines and knowledge needed to conduct their jobs properly, including how to make important and controversial decisions about how and when to follow specific protocols. This type of knowledge sharing should begin with the initial onboarding process so that employees are properly prepared to complete their daily tasks in a standardized fashion. By not adequately training employees on common "gray areas" within the SOP, confusion often arises among the investigators, which is further exacerbated by the lack of clarification and support offered by supervisors. During my experience in the Greenville office this summer, I regularly witnessed employees having to selftrain and rely on limited knowledge to find answers to questions that should have been addressed in the training process, or even by a simple procedure manual for the position of a rabies team member. The Standard Operating Procedure (SOP) that is currently handed out during the onboarding process is both out of date and very vague, therefore offering little benefit to new employees. Simply updating the SOP to meet current standards would enhance the department's ability to effectively serve the community in terms of rabies prevention and education.

Another example of a common "gray area" is that there are no standard procedures in place for a repeat offender (or potentially aggressive animal), so the typical ten-day quarantine is just started all over again on each occurrence, which will continue to happen until a bite victim chooses to get legal counsel involved. At that point, the situation becomes even more tenuous in that the DHEC employee may have to go to court for a dog's defense. Amendments need to be made to the SOP that include situations such as these so that the organization's effort is more targeted at the ultimate goals of rabies eradication and public safety. After all, that is really what the rabies team is doing - advocating for the animal and protecting humans from the threat of disease. This is an important job and can directly impact the local community, and therefore it should have a standardized and more thorough training process in place that both educates and guides the rabies specialists in making tough decisions.

Literature Review

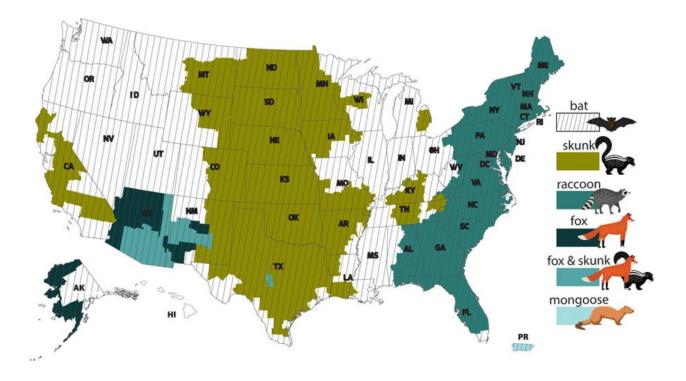
In a research study into the past, present and future of the rabies disease, and with a focus on the vaccine side of things, Fu explains that "despite [these] continuing problems, there has been tremendous progress in the control of rabies. Vaccination of stray dogs could lead to the eradication of rabies in countries where dog rabies is the sole source of human exposure" (Fu, 1997). He continues by stating that "traditionally, reliance upon long-term, widespread, government-supported programmes aimed at population reduction of animals at risk has been unsuccessful as the sole means of rabies control, based in part upon economical, ecological and ethical grounds. In contrast, immunization of domestic dogs with traditional veterinary vaccines by the parenteral route led to the virtual extinction of canine-transmitted rabies in developed countries" (Fu, 1997). Fu's ideas coincide with those of DHEC's rabies unit and the goal of the organization, which is to limit the exposure of a possibly rabid animal infecting anyone. The vision for South Carolina's DHEC is "Healthy people living in healthy communities," and their mission is "to improve the quality of life for all South Carolinians by protecting and promoting the health of the public and the environment" (DHEC, n.d.).

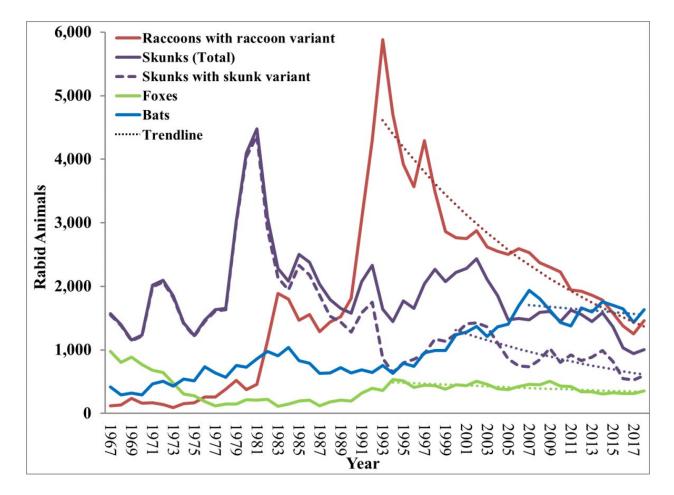
Further supporting the need for rabies vaccinations as a preventative effort, Rupprecht et al. (2008) collaboratively determined that "historically, substantial technical progress throughout the 20th century led to the development of safe, affordable and efficacious animal and human vaccines, resulting in declining disease burdens in selected developed and developing countries" (Rupprecht et al., 2008). This type of technological advancement should and can aid in the eradication of rabies. The graphic below from the Centers for Disease Control and Prevention (CDC) shows the extent to which the rabies disease can infect vast geographical regions, in this case throughout the United States (CDC, 2018).



Additionally, the following CDC map and chart show rabies trends across the United States over the past fifty years, in animals other than domesticated dogs. Both the image and the data table show the location and the amount of rabies cases related to that particular animal group (CDC, 2020).

Sasfai 9





Rupprecht et al. continue by saying, "Regional and local disease resurgence occurs, due in part to a combination of political and economic instability, environmental perturbations, and shifting government priorities. Society must recall that despite the recent recognition of other important emerging infectious diseases, none exceed the case fatality rate of rabies" (Rupprecht et al., 2008). For the first time, four leading organizations - the World Health Organization (WHO), the World Organization for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO) and the Global Alliance for Rabies Control (GARC) - have joined forces to form the *United Against Rabies* collaboration, which is ultimately determined to reach the 2030 goal of no human deaths due to rabies transmission from dogs. According to the joint coalition's initiative, they will "leverage existing tools and expertise in a coordinated way to empower, engage and enable countries to save human lives from this preventable disease" (WHO, *Zero by 30*, para. 6). This international attention and effort, coupled with the work DHEC does domestically, should help to reach the goal of zero human deaths from rabies.

Methods

Organizations like #Rabies360Challange assist government-run agencies like DHEC to spread awareness of the disease, as well as steps for prevention and solutions to solve spikes in transmission. According to *Emergence*, an awareness subsidiary of MSD Animal Health and Merck, which is dedicated to the prevention, control and eventual elimination of emerging diseases, "by vaccinating dogs, we prevent the spread of rabies to people. Time and again we have shown that once 70% of dog populations are protected through vaccination, we stop human deaths, and awareness is key. By raising awareness of this disease, dog behavior, bite prevention and vaccination we can make a difference" (Nowak, 2022). Therefore, the more people who are aware of and talk about rabies, the more action can then be taken to stop it.

Furthermore, there are multiple internal, operational changes that county organizations such as DHEC could implement that would improve the productivity and effectiveness of the rabies team workers, and ultimately the success rate of controlling the spread of rabies in the local community. The first thing that should be examined is the ratio of staff they have assigned to each department. Greenville's DHEC organization is unbalanced, in that there are far too many people in some departments, while not nearly enough in others. Specifically, there are more than three times the amount of personnel that work in testing water samples than there are at testing rabies samples. This imbalance was especially evident during my time there when I witnessed some employees without tasks to occupy their time, yet I saw the rabies team working so hard on cases without the ability to even take a lunch break. A potential solution to this, other than rebalancing the workforce, would be cross-training and job sharing. That way, when the rabies team is overwhelmed on cases, the water team could lend a hand (and vice versa).

Another strategy to improve the work environment at the Greenville DHEC office would be to create thorough and standardized online training classes. This could help new employees in learning the knowledge necessary to do their jobs, in addition to being able to easily access SOPs, protocols and FAQs as needed for special cases. As noted by Indeed, "As technology advances and workplace strategies evolve, there comes a need for professionals to align with these changes in terms of knowledge and skills. One of the best ways to enhance knowledge and skills is through training. Providing employees with relevant and consistent training can help improve performance and efficiency in the workplace" (Indeed Career Guide, 2022). I feel that if DHEC's training for the rabies team were updated and made accessible, it would be more informative and useful for building the necessary knowledge for employees to conduct their jobs effectively and efficiently.

A third strategy to address that would improve the flow of bringing on new employees would be to have a set system in place for the distribution of tools necessary to do the job. For the first three weeks of my internship, both my team member and I were having to use our cell phones for all business-related calls. Being required to make phone calls on our personal devices to complete Incident Reports regarding potential rabies exposure didn't seem right. The supervisors were supposedly trying to get us setup with phones, but we were never given a specific time frame by the office manager, and instead were continuously told "we hope you will get them soon." When we finally did receive work phones to use, we were required to switch the accounts over ourselves from our iPhones to the new devices, which I also believe is not a best practice for any organization. I would recommend that someone be designated to oversee the phone setup to make sure it's done appropriately on all devices, but also that there be a point

person for the entire onboarding process to make sure that there is consistency in training and information among all employees.

One final area that DHEC of Greenville could improve that would help increase the productivity of its employees would be to eliminate repetitive work. Although our training only consisted of shadowing existing employees, after a week we were tossed into a full workload with knowledge only of what we had observed other people do. I feel that my biggest challenge in this internship was keeping up with the workload, despite any formal training. My colleague and I were working non-stop, having to teach ourselves the best way to complete tasks successfully within the time constraints and guidelines provided, but spent a lot of time reentering the same information into four different places/databases. This process was repetitive and an extremely inefficient use of time. In fact, I noticed several redundant processes currently in place that could use reform at DHEC of Greenville. As another example, there are three systems I have to upload the same information to: the ABRIS, Sharepoint, and an Excel based rabies log. The simplest solution for this is to only use ABRIS, as the most information is stored in this program and it has a very easy user interface to find specific cases and details quickly. By reducing unnecessary operating procedures such as this, employee productivity would increase.

In summary, there are multiple methods DHEC of Greenville could employ to increase employee productivity and organizational outcomes, including promoting public awareness campaigns, implementing better onboarding of employees, cross-training between departments, and eliminating repetitive processes. Improving these practices would ultimately help the organization to better serve the community in its goal of slowing of the transmission of rabies, and hopefully eradicating the disease one day.

Discussion

My internship at DHEC of Greenville was in the rabies division and it was my job to open, investigate, and close cases in a timely manner. The Greenville South Carolina DHEC has records indicating that rabies prevention is not showing much improvement in the amount of positive cases over the progression of recent years. Below are internal DHEC charts showing the statistics of rabies cases by species in Greenville County for the past three years. Note the number of cases from year to year, which shows a good effort to slow, but not necessarily eradicate the disease.

Table 1 (2021)

Month	Dog	Cat	Other_Dom	Skunk	Fox	Bat	Raccoon	Rodent	Other-wild	Monkey	Monthly Positives	Disclaimers
January	0	0	0	0	0	0	3	0	1	0	4	3
February	0	1	0	3	1	0	2	0	0	0	7	0
March	0	0	0	0	0	1	5	0	0	0	6	3
April	0	0	0	3	1	1	2	0	0	0	7	4
May	0	0	0	0	3	5	1	0	0	0	9	1
June	0	1	0	2	2	0	1	0	0	0	6	4
July	1	0	0	1	4	1	4	0	0	0	11	13
August	1	2	0	1	1	3	4	0	0	0	12	9
September	0	1	0	2	1	8	1	0	0	0	13	7
October	0	0	0	5	0	2	0	0	0	0	7	3
November	0	1	1	5	1	0	4	0	0	0	12	5
December	0	0	0	0	0	0	1	0	0	0	1	0
Totals	2	6	1	22	14	21	28	0	1	0	95	52

NAME	DOG	CAT	OTHER_DOME	SKUNK	FOX	BAT	RACCOON	RODENT	OTHER_WILD	TOTAL	1	
Abbeville		1	-	1		1	1		_	4	1	
Aiken	_	1				3	2			6	1	
Allendale										0	1	
Anderson		1		3		1	1			6	1	
Bamberg						1				1	1	
Barnwell	_									0	1	
Beaufort					1	1	5			7	1	
Berkeley	_						2			2	1	
Calhoun										0	1	
Charleston		1			1	3	40			45	1	
Cherokee						-				0	1	
Chester	_	_		1	1					2	1	
Chesterfield										0	1	
Clarendon	_									0	1	
Colleton							3			3	1	
Darlington										0	1	
Dillon						1				1	1	
Dorchester	_				_	-	2			2	1	
Edgefield					1		_			1	1	
Fairfield		_			-					0	1	
Florence						1			1	3	Coyote	Bobcat
Georgetown									-	0		
Greenville		1				1	3			5	1	
Greenwood		1			_	-	2			3	1	
Hampton							-			0	1	
Horry	_	1			1					2	1	
Jasper		-			-		1			1	1	
Kershaw		1			1	2	6			11	Bobcat	
Lancaster				2		-	1			3		
Laurens	_			2	_		2			4	1	
Lee				-			1			1	1	
Lexington		_			3	4	6		1	14	Bobcat	
Marion							1		1	2	Bobcat	
Marlboro							-		-	0		
McCormick	-						1			1	1	
Newberry		1	1	9	_	1	1			13	cow	
Oconee		1	-	4			-			5		
Orangeburg	_	-			1					1	1	
Pickens				1	-	1				2	1	
Richland				-		4	4			8	1	
Saluda				2			1			3	1	
Spartanburg		1		3						4	1	
Sumter										0	1	
Union										0	1	
Williamsburg										0	1	
York		1		1						2	1	
Total	0	12	1	29	10	25	86	0	3	168	1	
		-			10					100		
Other Domestic	:: Cow		1					12/16/20	20			
Other Wild: Co		bcat (4)	1					20, 20, 20	9:20 AM	4		
	and full no	~~~~[1]							STED PH			

Table 2 (2020)

DHEC/BEHS/

*-last county/animal updated from daily tracking

d	DOG	САТ	OTHER DOMESTIC	SKUNK	FOX	BAT	RACCOON	OTHER WILD	ΤΟΤΑΙ
Abbeville				3					3
Aiken	1	2				1	6		9
Allendale									0
Anderson	2	1	1	4			3		11
Bamberg				1					1
Barnwell	1	1							1
Beaufort							4		4
Berkeley					1		1		2
Calhoun									0
Charleston	1	3			2		14		19
Cherokee	1								0
Chester					1		1		2
Chesterfield					1	1			2
Clarendon	1								0
Colleton									0
Darlington							1		1
Dillon							1		1
Dorchester	1						3		4
Edgefield							3		3
Fairfield				2					2
Florence				-			1		1
Georgetown						_	1		1
Greenville		1		1		1	1		4
Greenwood		-		2	1	1	1		5
Hampton					1	_			1
Horry					-	1	8		9
lasper		1				-	1		2
Kershaw	_	-			_		1		1
Lancaster	-						1		1
Laurens				1		1	1		3
Lee	-			1		1	1		0
Lee Lexington	-	1		2	2	1	10	1	17
Marion	-	1				-	10	1	0
Marlboro									0
McCormick									0
Newberry	-	1		3			1		5
Oconee	-	1		3			5		10
		1		4			5		
Orangeburg Pickens				1	1				0
Pickens Richland				1	1	- 1	5	1	7
				4		1	2	1	7
Saluda				4	1		_		
Spartanburg							1		1
Sumter					1				1
Union					1				1
Williamsburg									0
York		1		1	1		1		4
Total	3	13	1	29	14	8	78	2	148

Table 3 (2019)

Comparison and analysis on these three tables shows that for the 2-year period from 2019 to 2021, the number of positive cases of dogs and cats with rabies declined, though in the 1-year period from 2019 to 2020 the total number of confirmed positive cases actually increased by 20.

This could possibly be due to poor messaging about the importance of rabies vaccination in the community, and pulls into question whether the rabies department of Greenville DHEC is operating at its full potential. That is not the only potential cause, however, since racoons are consistently the overwhelming majority of the positive rabies cases in South Carolina, and not necessarily domesticated pets. Through the years there is a consistent mix of the different species where racoons account for roughly half of the year's total positive rabies cases. This suggests that the majority of positive rabies cases in South Carolina are from wild animals, not the domesticated animals that DHEC is able to quarantine or observe. DHEC does, however, have procedures to quarantine domesticated animals that have potentially been exposed to rabies via a wild animal. These specific quarantines last either 45 days, if the domesticated animal has previously been vaccinated, or last 180 days for domesticated animals who have not been previously vaccinated.

Despite the statistics showing that unobservable wild animals account for a lot of the rabies cases in the local community, proper training is still an essential start to working at any business because it sets the groundwork for the work a person will perform. The overwhelming weak point in the Greenville DHEC office is rooted in the poor onboarding process that's currently in place. As stated by current and former federal government managers in the free training resource GovLeaders.org, "organizations that are deliberate and strategic about the onboarding process are able to start earning the loyalty of new employees from the beginning while building on the enthusiasm and sense of purpose that brought them to public service in the first place" (*Onboarding New Employees*, n.d.). DHEC of Greenville is, unfortunately, neither strategic nor deliberate during the onboarding process. This particular office of DHEC is lacking one of the key components of the organization's established five strategic focus areas, indicated

in the graphic below, which are "the imperatives that unite our teams, align our work, and enable our Agency to move forward in our ambitious mission" (DHEC, para. 8). As stated previously, DHEC's overarching mission is "to improve the quality of life for all South Carolinians by protecting and promoting the health of the public and the environment" (DHEC, n.d.).



Unfortunately, the training process in place at the Greenville location is not keeping up with the organization's goals. Currently, the onboarding process consists of much less than is detailed in the organization's strategic plan, and the failure to implement these strategies is resulting in frustration on behalf of the newly onboarded employees and interns, myself included.

In a study called *Hit the Ground Running: Establishing A Model Executive Onboarding Program,* it is stated that "the best onboarding strategies provide a fast track to meaningful, productive work and strong employee relationships. Onboarding programs need to be tailored specifically to the needs of the organization and individuals" (United States Office of Personnel Management, 2011). With the research pointing toward promoting a strong start out of the gate, onboarding excellence is imperative for an organization and its workforce to succeed.

SWOT Analysis

<u>Strengths</u>

What makes your service the top tool for addressing consumer needs? What are your cutting-edge features, your novel capabilities that set your company apart?

- Accessibility to Government Resources
- Support groups within departments
- Expertise in Government Departments
- DHEC Permits required by contractors

Opportunities

What are consumers craving? What does your community need? What skills, knowledge, and tools does your company have to extend to individuals, businesses, or organizations?

- Departments merging

- More variety in Standard Operating Procedures
- Unfulfilled/open niches not served by other programs
- Upcoming changes to status quo (regulatory, political, social, etc.)

<u>Weaknesses</u>

What aspect of your company has room for growth? What part of your business could be improved to strengthen your services? What elements have prompted feedback?

- Shortage of consultants at operating level
- Lack of legal authority/enforcement
- Onboarding process
- Intermittent online systems

<u>Threats</u>

What obstacles do you foresee challenging your company's success? Which competitors have the potential to threaten your business? Is your consumer market evolving in a way that poses a risk to your company's future?

- Negative press/media coverage
- Outbreak of new virus/disease
- Environmental Factors
- Upcoming changes to status quo (regulatory, political, social, etc.)

Indicated above in the SWOT analysis I personally conducted, DHEC of Greenville shows weakness mainly in the areas of its onboarding process and its lack of legal authority. DHEC, more specifically in the Rabies department of Greenville County, lacks a foundational onboarding process, causing employees to lose trust and enthusiasm toward the company. In my experience, there was no outline for the onboarding process; we were allowed to shadow existing employees conducting work in the Rabies department, but were given no concrete material other than the Rabies Standard Operating Procedures (SOP). The SOP itself is not only outdated, but it does not explain how one should conduct investigations in certain situations. This leaves the employee lost and having to make personal decisions using judgement that should really be made according to established standards.

The opportunities that DHEC has available could be great for the organization. As stated in the SWOT analysis, the merging of departments (Greenville and Spartanburg) would allow for greater communication between members in the same departments. Currently, Greenville DHEC and Spartanburg DHEC are separated, causing mild confusion on overlapping territories and the disbursement of caseloads. If the organizations were able to work more closely together, either physically or metaphorically, DHEC in the upstate of South Carolina as a whole would be able to accomplish more, in less time, and with the same amount of resources.

Conclusions

Rabies is a serious and life-threatening disease, and should be talked about in the community with the same amount of attention as other fatal illnesses. This is achieved partly by the engagement and collaboration of community education and awareness programs, and more formal, organization-backed vaccination campaigns that are critical to spreading the word. This is one key area that could use reform at DHEC by simply building more awareness with community members, and then their education can aid in prevention of the spread of rabies to humans by word of mouth. Looking to the future, WHO leads the collective United Against *Rabies* collaboration to drive progress towards "Zero human deaths from dog-mediated rabies by 2030" (WHO, Zero by 30, 2018). This goal is set for only eight years from now, so people should be seeing more educational tools pop up, such as ads to help spread awareness. As DHEC states, "avoiding wild animals, particularly ones that appear to be injured or tame, and teaching your children to do the same is also a great way to protect your family from rabies. Encourage children to tell an adult if they have been bitten or scratched by any animal, especially a wild animal, and praise them for telling you" (SCDHEC, 2019). Also important to note is what DHEC states about wildlife: "If you see a wild animal that appears sick, contact your local animal control office, police/sheriff's department, wildlife control operator, or wildlife rescue/rehabilitation group for help" (SCDHEC, para. 3). Often people don't think to report these types of things, but it could be of great benefit to slowing the spread and eventual eradication of rabies.

Another area for improvement, especially at the Greenville South Carolina DHEC office, is in the onboarding process of new employees. Even though the DHEC organization as a whole seems to have a strategic plan in place for employee onboarding, the plan is not being followed

at every office. Therefore, the simplest solution is to follow up with implementation at the individual department level where things can make a difference. It is noted by the SHRM Foundation that "an important way leaders can combat [these] challenges is to implement a robust employee onboarding program. Onboarding helps new hires adjust to the social and performance aspects of their jobs so they can quickly become productive, contributing members of the organization" (Maurer, 2021). By standardizing and streamlining training across all DHEC divisions, future employees will hopefully feel more knowledgeable, prepared and empowered to do their jobs and ultimately make a positive impact in the fight against rabies.

References

- Centers for Disease Control and Prevention. (2020, April 6). *Wild animals*. Centers for Disease Control and Prevention. Retrieved July 28, 2022, from https://www.cdc.gov/rabies/location/usa/surveillance/wild_animals.html
- Centers for Disease Control and Prevention. (2018). *Rabies surveillance in the United States* [Dataset]. CDC.gov.

https://www.cdc.gov/rabies/resources/publications/index.html#surveillance

- Fu, ZF. (1997). Rabies and Rabies Research: Past, Present and Future. Vaccine. U.S. National Library of Medicine, https://pubmed.ncbi.nlm.nih.gov/9218287/
- The importance of training employees: 11 benefits. Indeed Career Guide. (2022, May 24). Retrieved July 21, 2022, from https://www.indeed.com/career-advice/careerdevelopment/importance-of-training
- Maurer, R. (2021, July 14). *New employee onboarding guide*. SHRM. Retrieved July 21, 2022, from https://www.shrm.org/resourcesandtools/hr-topics/talent-acquisition/pages/new-employee-onboarding-guide.aspx
- Nowak, Marta. (2022, July 28). #rabies360challenge raise awareness with US and help eliminate rabies! Emergence. Retrieved August 3, 2022, from https://www.emergencemsd-animal-health.com/general-article/join-rabies360challenge-raise-awareness-with-usand-help-eliminate-

rabies/#:~:text=Taking%20place%20throughout%20September%20in,mediated%20rabies %20deaths%20by%202030

- Onboarding New Employees. GovLeaders. (n.d.). Retrieved July 29, 2022, from https://govleaders.org/categories/onboarding.htm
- Rupprecht, C. E., Barrett, J., Briggs, D., et al. (2008). *Can rabies be eradicated?* Developments in Biologicals. Retrieved July 21, 2022, from https://pubmed.ncbi.nlm.nih.gov/18634470/
- SCDHEC. World Rabies Day. (2019). Retrieved July 29, 2022, from https://scdhec.gov/health/diseases-conditions/insect-or-animal-borne-disease/rabies/worldrabies-day
- United States Office of Personnel Management. (2011, October). *Hit the Ground Running: Establishing a Model Executive Onboarding Program*. Retrieved July 21, 2022, from https://www.opm.gov/wiki/uploads/docs/wiki/opm/training/hit_the_ground_running_establ ishing_a_model_executive_onboarding_framework_2011.pdf
- Vision. DHEC. (n.d.). Retrieved July 28, 2022, from https://scdhec.gov/sites/default/files/assets/sp/index.html
- World Health Organization. (2021, May 17). *Rabies*. World Health Organization. Retrieved July 29, 2022, from https://www.who.int/news-room/fact-sheets/detail/rabies
- World Health Organization. (2018, June 3). Zero by 30: The global strategic plan to end human deaths from dog-mediated rabies by 2030. World Health Organization. Retrieved July 29, 2022, from https://www.who.int/publications/i/item/9789241513838