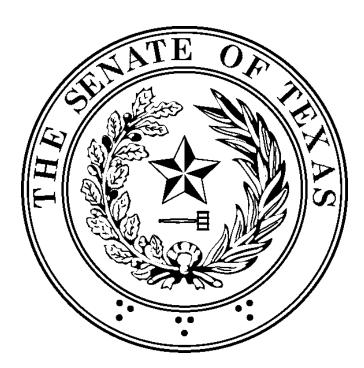
# SENATE COMMITTEE ON Administration

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# THE PREVALENCE OF TICK-BORNE ILLNESSES IN TEXAS

INTERIM REPORT 77th Legislature November 2000

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SENATOR CHRIS HARRIS CHAIRMAN SENATOR FRANK MADLA WE-CHAIRMAN SENATOR RODNEY ELLIS SENATOR FLORENCE SHAPIRO SENATOR JOHN WHITMIRE



MYRA J. SCHMITT COMMITTEE DIRECTOR

### SENATE COMMITTEE ON ADMINISTRATION

October 19,2000

The Honorable Rick Perry Lieutenant Governor, State of Texas Post Office Box 12068 Austin, Texas 78711

Dear Governor Perry:

The Senate Committee on Administration submits its Interim Report in accordance with the Interim Charges that were issued September 28, 1999. The committee was given the charge to study the effects of tick-borne illnesses on the citizen's of Texas. In order to gain a clear understanding of the issues, the Committee held public hearings in Austin and Fort Worth which included invited testimony from experts in the field, as well as testimony from the general public.

The Committee also organized a working group of several interested public and private entities to evaluate options for enhancing the state's prevention and education efforts. The goal was to develop a comprehensive strategy for educating the medical community and general public with regard to these types of illnesses.

The committee has developed several recommendations for education and prevention, as well as recommendations for further research and test development. These proposals are intended to provide a framework for improving the quality of information and raising awareness regarding tick-borne illnesses in Texas.

In compliance with your request, the Legislative Budget Board has performed a cost estimate analysis which is included herein.

Aukmitted. Chairman

Frank Madla

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### Rick Perry Lieutenant Governor of Texas

The Capitol Austin, Texas **7871** 1-2068 (512)463-0001

President of the Senate

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September 28,1999

The Honorable Chris Harris Chair, Senate Committee on Administration State Capitol Building, Room E 1.704 Austin, Texas 78701

Dear Senator Harris:

The following interim charge is issued to your committee:

Study the prevalence of tick-borne illnesses in Texas with a focus on issues relating to prevention and treatment. The study should consider the effectiveness of state education efforts to raise awareness within the medical community and among the general public about the threat of tick-borne illnesses. The study should also examine possible options to improve the type and amount of information available to health care practitioners and the general public in identifying symptoms of tick-borne illnesses and seeking or administering appropriate care.

I am asking your committee to submit a preliminary outline and plan of work to me at the earliest practical date; it should include the number of hearings to be held, the location of hearings, and a timeline for **final** disposition of the charge.

In accordance with Senate rules and tradition, any senator may participate in the activities of any committee, but voting will be limited to members of the committee.

All Senate committees will continue to manage their areas of continuing responsibility, in addition to addressing the interim charges.

Please keep me and my staff personally posted on your committee's progress in addressing this important matter.

Sincerely, lick Perry Lieutenant Governor

cc: Governor George W. Bush Speaker Pete Laney Mrs. Betty King, Secretary of the Senate Julie Valentine. Senate Research All Senators

## TABLE OF CONTENTS

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### SENATE COMMITTEE ON ADMINISTRATION

INTERIM REPORT 77TH LEGISLATURE NOVEMBER 2000

### **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	1
BACKGROUND	3
MEETINGS AND ACTIVITIES	6
<b>RECOMMENDATIONS</b> Education and Prevention Measures	10
<b>RECOMMENDATIONS</b> Research and Test Development	13
CONCLUSION	16
APPENDIX A - Acknowledgments	

APPENDIX B - LBB Cost Analysis

## **EXECUTIVE SUMMARY**

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Tick-borne illnesses have become a growing concern and source of controversy for the medical community and the general population of Texas. These diseases, which are acquired from the bite of a tick, include: Lyme disease, Rocky Mountain spotted fever, babesiosis, ehrlichiosis, and relapsing fever, among others. These maladies can be extremely debilitating, and have been known to be fatal.

Historically, the amount of useful information regarding the effective diagnosis and treatment of some tick-borne illnesses has been insufficient to foster a consensus within the scientific and medical communities. Compounding this problem has been the inability of these communities to develop and disseminate information which is specific to tick-borne illnesses in Texas. In fact, some health care providers are still unaware that many of these diseases actually exist in the State of Texas.

As a result, relatively little has been accomplished within the state with regard to prevention measures or educating the public about the existence and potential harm of these diseases. Research efforts have been slowed by the lack of fundamental knowledge of tick-borne illnesses, while prevention efforts have been hampered by budget limitations.

The Senate Committee on Administration was given the charge to study the impact of tickborne illnesses on the citizens of Texas. The goal of this study was to identify the issues and formulate recommendations for use in developing policy to minimize the effect of these potentially hazardous diseases. These recommendations include educational and preventive measures, as well as, development of useful diagnostic and treatment tools for combating tick-borne illnesses. These recommendations have been identified by the committee as the best course of action in achieving these goals.

This report is a compilation of the information gathered during the course of this study and includes: a brief overview of the history and status of tick-borne illnesses; an analysis of the related issues; summaries of testimony given during committee hearings; summary of findings and actions by the working group; and the Committee's conclusions based on these factors.

Accordingly, the Committee has developed the following areas of recommendation to address the deficiencies identified by the examination of tick-borne illnesses in the State of Texas.

#### **<u>RECOMMENDATIONS</u>** -- TICK-BORNE ILLNESS PREVENTION AND EDUCATION

Raise the awareness of the general public and the medical community to the issues surrounding tick-borne illnesses in Texas through the promotion of education and prevention measures. Recommend that existing efforts be expanded and continued and additional methods of information distribution be explored. Recommend that accurate tick-borne illness information be included in the curriculum of public medical and nursing schools, residency programs, and continuing medical education courses. Direct the Texas Board of Medical Examiners (BME) to develop review guidelines for doctors who provide medical care related to tick-borne illnesses.

#### **RECOMMENDATIONS** -- LYME DISEASE RESEARCH AND TEST DEVELOPMENT

Reliable laboratory tests for the diagnosis of Lyme disease have yet to be developed. Since early and accurate diagnosis is the key to effective treatment, recommend that the state develop a comprehensive diagnostic laboratory for tick-borne illnesses. Recommend that any components necessary for creating this laboratory, such as research groups and ecological studies, be administered by the appropriate agencies; also recommend that test development be overseen by the University of North Texas Health Science Center (UNTHSC). Responsibility for maintaining the laboratory will belong to UNTHSC, but will include collaborative efforts of several state agencies and private organizations when appropriate.

The successful integration of these recommendations should greatly diminish the effects of tick-borne illnesses on the citizens of the State of Texas.

## BACKGROUND

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A number of infectious diseases are transmitted by ticks. These illnesses are caused by infection of various types of pathogens and are distinguished by a wide array of symptoms and manifestations. Ticks are parasites that survive by attaching onto the host's skin and feeding on its blood. During the feeding process, tick-borne pathogens can be transmitted into the blood stream of the host and cause infection. Ticks are responsible for at least nine different diseases in humans, the most prevalent being Lyme disease. Most of these diseases are very difficult to diagnose, making treatment extremely challenging for medical care providers. The rate of occurrence of tick-borne illnesses in the U.S. has increased dramatically over the last few years. *This growth is second only to AIDS/HIV among infectious diseases*.

Precise diagnosis of these diseases becomes critical in finding effective treatments and cures. Several debates in the medical and scientific community have developed over the years, primarily regarding Lyme disease. These debates have been focused on methods of diagnosis, causes of persistent symptoms, and proper length of antibiotic treatment. The United States Center For Disease Control (CDC) has developed a case definition for reporting Lyme disease, but indicate that diagnosis must be made on a clinical determination. In a number of instances this case definition criteria has erroneously been used by physicians and third-party payors as a diagnostic guideline. Some scientists have also suggested that Lyme disease does not exist in Texas; instead they believe physicians should be diagnosing "Lyme-like" disease. However, no consensus has been reached with regard to the organisms responsible for Lyme-like disease, or whether these organisms are the same as those that cause classic Lyme disease. The lack of knowledge about these diseases within Texas' medical community has resulted in no clear established protocol in recognition or diagnosis of individuals who may have contracted a tick-borne illness. As a result, many who become infected are misdiagnosed; subjected to delayed, incorrect or contraindicated treatment; and are ultimately forced to seek treatment out of state, often at great cost and personal sacrifice.

Texas and surrounding areas have also suffered from a lack of sufficient information and scientific research for tick-borne illnesses which are contracted within these areas. Although many Texans contract these diseases while in other parts of the world, no collection of data has been assembled and no significant studies have been produced in several years which pertain to the diseases developed endemically.

In Texas there have been confirmed cases of Lyme disease, Rocky Mountain spotted fever,

ehrlichiosis, and relapsing fever. Each and every one of these diseases can have a significant impact on the lives of those who come into contact with them. The following is a brief description of the tick-borne illnesses which have been identified as existing in Texas.

#### LYME DISEASE

Lyme disease (LD) has become the most common tick-borne disease in the United States. LD is an infection caused by *Borrelia burgdorferi*, a type of bacterium called a spirochete that is carried by ticks. The bacterium travels through the bloodstream of the infected individual, establishes itself in various body tissues, and causes a number of symptoms. For the most part, these symptoms are not specific to LD. They can also be attributed to a host of other illnesses. This, coupled with the lack of accurate diagnostic tools, makes identification and treatment of LD problematic.

The illness pattern of LD is manifested in two clinical stages. Stage one (early LD) is associated with skin rashes and flu-like symptoms. Although these skin rashes are the symptom most identified with LD, they actually appear in less than half of the diagnosed cases. This illustrates the difficulty for physicians in diagnosing this disease. Many physicians do not consider other symptoms as indicative of LD without the appearance of these rashes. If LD is diagnosed during this stage, treatment is often successful. Stage two (late or disseminated LD) is distinguished by musculoskeletal, cardiac, and neurological symptoms such as joint inflammation, arthritis, irregular heartbeat, heart block, inability to concentrate, and memory loss. The severity and duration of symptoms vary widely in people with LD, but diagnosis during the later stage generally calls for prolonged treatment.

#### ROCKY MOUNTAIN SPOTTED FEVER

Rocky Mountain spotted fever (RMSF) is an infection resulting from the introduction of a rickettsial pathogen into the system of the victim through the bite of a tick. Symptoms include flu-like aches and pains, extremely high fever, headaches and chills, and confusion. This disease can be fatal if untreated. Fortunately, good diagnostic tests are available to ensure proper determination of RMSF. The problem lies in physicians being aware of the possibility of RMSF infection in Texas and ordering these tests.

#### **EHRLICHIOSIS**

Ehrlichiosis is a bacterial infection which invades and kills white blood cells. There are two types of the human ehrlichiosis: human granulocytic ehrlichiosis (HGE) and human monocytic ehrlichiosis (HME). Symptoms of ehrlichiosis can be extremely varied but most often include flu-like symptoms. Ehrlichiosis may range from mild to severe and can be fatal if not diagnosed and treated properly.

#### **RELAPSING FEVER**

Relapsing fever is an illness which, like Lyme disease, is caused by *Borrelia* bacterium. Patients display flu-like symptoms that will disappear only to recur over and over if the illness is not properly treated.

### MEETINGS AND ACTIVITIES

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### SENATE COMMITTEE ON ADMINISTRATION TICK-BORNE ILLNESS STUDY MEETINGS AND ACTIVITIES

During the course of the 76th Legislature, several constituent groups consisting of patients and patient advocates contacted legislators and the Lieutenant Governor's office. Their intent was to raise awareness in the legislature to the issues surrounding tick-borne illnesses and request an investigative body be formed to study the issues surrounding these mysterious and bewildering diseases.

Lieutenant Governor Rick Perry subsequently charged the Senate Committee on Administration, chaired by Senator Chris Harris, to initiate a comprehensive study related to the prevalence of these diseases in Texas with a focus on prevention and treatment. Because Senator Harris suffers from Lyme disease, and therefore is intimately familiar with the effects of this tick-borne illness, the Administration Committee was deemed the most practical body to undertake the study.

Due to the complex nature and shortage of readily available information about these diseases, the Committee held several public hearings and heard invited testimony in an effort to gather accurate information for use in formulating reasonable legislative mandates and proposals. Public testimony was also given, most often by patients and others whose lives have been deeply affected by tick-borne illnesses. Additionally, the Committee formed a working group consisting of staff of state agencies, trade organizations, and consumer groups. This group was organized to review and analyze potential collaboration and coordination of prevention and education efforts among the participating entities.

#### PUBLIC HEARINGS

The Committee on Administration held two public hearings to solicit expert testimony from medical doctors, epidemiologists, researchers, biologists, and several other parties with an identified and detailed understanding of the nature of these diseases. The committee also received guidance from experts with perspective on the causes of the countervailing theories and opinions related to diagnosis and treatment of these particular types of illnesses. Most importantly, the Committee learned of the profound effect on the lives of ordinary people and families who are unfortunate enough to be devastated by tick-borne illnesses and their loved ones followed the same pattern. These people became sick, went misdiagnosed or

undiagnosed for long periods of time, and sought help from multiple health care providers. Their lives have been permanently altered by these diseases.

The Administration Committee sent the Committee Director to the 13th International Scientific Conference on Lyme Disease and other Tick-Borne Disorders in Hartford, Connecticut. The conference was jointly sponsored by the College of Physicians and Surgeons of Columbia University and the Lyme Disease Foundation. The Committee Director also attended the Wilton Task Force on Lyme Disease "Dance the Lyme Away" fund raiser in Wilton, Connecticut, as a guest. Attendance of this conference resulted in a greater understanding of the issues related to tick-borne illnesses on the national level. It also helped clarify some of te testimony heard during the public hearings. At this conference there were two presentations from Texas doctors: Steve Norris, Ph.D. from the University of Texas Medical School at Houston and Jon Skare, Ph.D. from Texas A & M University System Health Science Center. Also serving as a board member on the Lyme Disease Foundation is Julie Rawlings, MPH, Epidemiologist, Texas Department of Health. The State of Texas is still far behind with regard to raising awareness within the medical community and the general public as to the existence of tick-borne diseases in the state.

The Committee has also scheduled a public information symposium, to be held later this Fall. This symposium will provide information regarding the status of tick-borne illnesses in the state, including the current efforts to combat these types of diseases. The hope is that this symposium will garner enough media attention to further raise the public's awareness about tick-borne illnesses.

#### WORKING GROUP EFFORTS

During the course of the first public hearing, the Committee asked several entities to gather and discuss possibilities in developing methods to increase awareness of tick-borne illnesses in the state. This group consisted of representatives from the following state agencies and private organizations.

SENATE COMMITTEE ON ADMINISTRATION TEXAS DEPARTMENT OF HEALTH TEXAS PARKS AND WILDLIFE DEPARTMENT TEXAS DEPARTMENT OF AGRICULTURE TEXAS DEPARTMENT OF INSURANCE TEXAS ANIMAL HEALTH COMMISSION TEXAS MEDICAL ASSOCIATION

#### TEXAS VETERINARY MEDICAL ASSOCIATION TEXAS WILDLIFE ASSOCIATION

Because of the lack of an accessible body of information available for use by state agencies and other interested parties, the working group undertook several initiatives to enhance the sharing of information and coordination of efforts among the group. The group also focused on increasing the amount of available information while making it more accessible to the general public. Several options were identified and have already been implemented.

The first endeavor was to develop a site on the World Wide Web dedicated to dispensing tick-borne illness information to the people of Texas. This website (www.Tick-Texas.org) is hosted and maintained by the Texas Parks and Wildlife Department, and contains contributions by the Texas Department of Health and several other working group participants.

The second initiative was to design, produce, and distribute print material to targeted population groups within the state. This led to the development of wallet sized cards which contain information regarding ticks and tick-borne illnesses. These cards, produced by the Texas Department of Health and the Parks and Wildlife Department, are being distributed to outdoor enthusiasts and medical care givers. Other groups are also being considered as potential recipients of these cards. These cards have been distributed through mediums such as:

- \* participating vendors along with the sale of hunting and fishing licenses
- \* All State Park headquarters and other TPWD facilities
- \* Texas Department of Health facilities
- \* Texas Department of Agriculture facilities and information display at the State Fair of Texas
- \* Senate and Senate Committee offices

Several state agencies have also produced educational material and advertisements for distribution through electronic media. These efforts include: a video series developed by Parks and Wildlife; public radio advertisements by Commissioner Susan Combs of the Department of Agriculture; and an interactive series on the website for children.

The working group continues to meet to discuss options for making beneficial information

readily available to anyone who may be potentially at risk.

#### **CONCLUSION**

Information compiled during the course of the public hearings and by the working group made it clear that past efforts to educate the healthcare community and the general public with regard to tick-borne illnesses have been ineffective, and often non-existent. The Department of Health and other agencies have had useful information available, but have had limited distribution capabilities. Based upon the information provided by these various resources, the Committee has determined that efforts to educate the medical community and general public must be increased. Diagnostic tools must also be identified, and research efforts to find effective treatments and cures for tick-borne illnesses must be initiated.

Since the Committee received this charge to examine the issues related to tick-borne illnesses, significant advances have been made in the efforts to provide accurate information to the general public and medical community. Many of the controversies surrounding these illnesses have been clarified during the course of this study. All participants should be commended for their efforts, but a substantial amount of work must continue for this study to be successful. The state must work to avoid the problems associated with these illnesses in other parts of the country. It is important that Texas take a proactive approach in achieving the goal of finding effective solutions for the prevention of these diseases and dealing with the issues surrounding them.

### **RECOMMENDATIONS EDUCATION AND PREVENTION MEASURES**

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#### **RECOMMENDATIONS** EDUCATION AND PREVENTION MEASURES

#### BACKGROUND

The state's efforts toward education and prevention of tick-borne illnesses has been deficient in the past. These efforts have been hampered by an absence of accurate information, as well as limited sharing of what information is available between public and private entities. This has led to increased potential risk to the citizens of the state. Two essential elements in the state's campaign against tick-borne illnesses are education and prevention measures aimed at the general public. Likewise, the medical community and healthcare coverage providers must be given appropriate information regarding tick-borne illnesses and the impact on patients so that proper treatment is available. The state has several options and resources available to maximize these efforts.

Several initiatives have already been accomplished as a result of the Committee's involvement in this study. A working group of stakeholders has been created to explore opportunities for making information available. As noted, a website has already been created which provides extensive educational information regarding tick-borne illnesses and methods of prevention. Texas Parks and Wildlife Department has also printed information cards for distribution with the sale of hunting and fishing licenses and in state parks and other facilities. An informational brochure is currently under development for distribution to the public through a multitude of sources. Despite all this, much more can be done to ensure the safety of the residents and visitors of the state of Texas.

#### **RECOMMENDATION ONE**

The Committee recommends that the working group continue to meet to coordinate efforts among participants. The working group should ensure the continuation of existing efforts while working to facilitate additional education and prevention efforts. Priority should be placed on identifying and utilizing additional mediums of information as well as expanding audience groups. Each entity, public or private, with a vested interest in minimizing the effects tick-borne illnesses should be involved.

#### **RECOMMENDATION TWO**

The Committee recommends that one entity be given responsibility on behalf of the state for distribution of prevention and educational material to the general public. This entity would collaborate with other state agencies and private organizations in the preparation of these materials and would serve only as a central source of information distribution. This would ensure that efforts of cooperating parties would not be duplicated and information would be shared effectively and communicated uniformly.

#### **RECOMMENDATION THREE**

The Committee recommends that Texas Parks and Wildlife Department, on behalf of the state, continue to host the website dedicated to tick-borne illness education and prevention. TPWD should include the cost of administering this website into the overall budget for the Department. The Committee also recommends that all entities currently participating in developing this website continue to do so, and any additional contributors be identified and utilized.

#### **RECOMMENDATION FOUR**

The Committee recommends that print materials such as the wallet cards and informational brochures continue to be produced. The designated administering entity (currently led by TPWD) should include any financial considerations into its overall budget. The channels by which these important resources are delivered should be expanded. This will ensure the optimum number of people receive this information.

#### **RECOMMENDATION FIVE**

The Committee recommends that providers of continuing medical education (CME) offer courses involving tick-borne illnesses with information on proper prevention, diagnosis and treatment. It was determined during the course of the study that some members of the medical community are uninformed to the issues of tick-borne illnesses in Texas. As noted earlier, physicians are using inappropriate methods such as the Center for Disease Control case definition criteria as diagnostic guidelines. This recommendation would furnish health care providers with the accurate information necessary to properly diagnose and treat these diseases.

#### **RECOMMENDATION SIX**

The Committee recommends that public medical and nursing schools include accurate information regarding tick-borne illnesses in their curriculum. This should include specific information on proper prevention, diagnosis, and treatment of tickborne illnesses. Likewise, the Committee recommends that hospitals and hospital districts include this same information in the course of study of their residency programs. This again would insure future medical providers have accurate information in diagnosing and treating these diseases.

#### **RECOMMENDATION SEVEN**

The Committee recommends that the Texas Board of Medical Examiners (BME) become involved in education efforts of doctors with regard to tick-borne illnesses. The focus of these efforts should be on providing doctors with information which will aid in the diagnosis and treatment of these types of diseases. It should be noted that BME has published information on tick-borne illnesses in the agency newsletter in the past. This effort should be augmented and continued since BME regulates the entire physician community and has the ability to disseminate useful information through several available conduits.

#### **RECOMMENDATION EIGHT**

The Committee recommends the Texas Board of Medical Examiners (BME) develop guidelines in the regulation of medical care providers when treatment of tick-borne illnesses is involved. Because so little is known about these diseases and the field of treatment is underdeveloped, the BME should provide fair and beneficial guidelines for treatment so that treating physicians are able to deliver optimal healthcare. This will ensure that doctors who treat these diseases may do so without fear of undue reprisal.

### **Recommendations Test Development**

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#### RECOMMENDATIONS RESEARCH AND DEVELOPMENT OF DIAGNOSTIC LABORATORY FOR LYME DISEASE AND OTHER TICK-BORNE ILLNESSES

#### BACKGROUND

One of the most troublesome aspects of tick-borne illnesses, Lyme disease in particular, are the debates which have hindered the development of useful diagnostic tools and methods of treatment. Lyme disease shares many of the same symptoms and manifestations as other illnesses and can often be overlooked as a possible explanation. Several serological tests for LD exist and several more are currently under development. But because so many variables can influence the diagnostic process and alter the outcome, the patient and treating physician are often more perplexed by the results than before the tests were performed. Tests can indicate false-positive or false-negative results. Antibiotics taken recently can invalidate results. And independent laboratory testing techniques can determine vastly dissimilar results. Because of the unreliability of diagnostic tests, the US Center for Disease Control (CDC) has determined that diagnosis must be made on a clinical basis and serological tests must only be relied upon to corroborate the determination.

This uncertainty has created a division within the medical and scientific community. Not only do opinions vary regarding diagnosis, but disputes have arisen over proper methods of treatment and whether or not long-term symptoms are a continuation of the initial infection or a result of the infection. To make matters worse for Texas, a debate has arisen over which organism is responsible for the infection and whether people are suffering from classic Lyme or "Lyme-like" disease.

The Committee has concluded from this study that insufficient information on how these diseases should be identified and managed over the long term exists for ANYONE to make a definitive determination of appropriate diagnostic or treatment guidelines. The state must take steps to instill consistency and uniformity in the diagnostic process. Finding an accurate diagnostic tool is the first step in containing Lyme and other tick-borne diseases, and should eventually lead to more effective means of treatment. Therefore, the Committee has determined that a comprehensive diagnostic laboratory must be developed to facilitate the creation of a precise and effective diagnostic test for Lyme and other tick-borne illnesses.

#### RECOMMENDATION NINE

The Committee recommends that the University of North Texas Health Science Center (UNTHSC) be given the directive to assume responsibility on behalf of the state to create a comprehensive diagnostic testing facility for tick-borne illnesses. UNTHSC is the logical choice for completing this task for several reasons. First, UNTHSC already fills a similar role for the state by providing paternity certification in child support disputes through their DNA laboratory. Therefore UNTHSC already has expertise in developing a laboratory with specific purposes. Secondly, UNTHSC is located in an area of the state where tick-borne illnesses appear to be most concentrated.

#### **RECOMMENDATION TEN**

The Committee recommends that research efforts begin to help facilitate the creation of a diagnostic laboratory, and that the appropriate state agencies be given directives to administer such research. The Committee recommends that University of North Texas Health Science Center (UNTHSC) enter into Memorandums of Understanding (MOU) with these entities, and that clear lines of responsibility be developed so that resources can be maximized. Specifically, the Committee recommends that an ecological study be performed and ticks gathered to identify the organisms that exist in Texas which are responsible for tick-borne illnesses. The information derived from this study would then be used to assist in the creation of appropriate diagnostic tests.

#### **RECOMMENDATION ELEVEN**

The Committee recommends that University of North Texas Health Science Center (UNTHSC) convene a group of leaders in the field of tick-borne illness research to share information and contribute to the development of a diagnostic laboratory.

#### **RECOMMENDATION TWELVE**

The Committee recommends that University of North Texas Health Science Center (UNTHSC) utilize staff experience in developing testing procedures as well as additional knowledge achieved from the collaborative research efforts to begin formal test development. The resulting laboratory should provide a first-rate, uniform set of diagnostic tests for Lyme and other illnesses to fulfill this vital necessity for the state.

#### **RECOMMENDATION THIRTEEN**

The Committee recommends that University of North Texas Health Science Center (UNTHSC) formulate and submit a strategic action plan which outlines the details of the process which must be undertaken in developing this laboratory. This strategic plan should include a detailed description of the required resources to create this type of laboratory. This plan should also include a complete list of anticipated cost projections for the entire undertaking. Additionally, a list of potential organizations with which UNTHSC would enter into partnerships or cooperative agreements should be submitted. Finally, any potential funding sources should be identified in this plan. These should include federal, state, public, and private resources which could be utilized and leveraged to finance this project. This information would provide the legislature with beneficial estimates to determine the scope of this project.

## CONCLUSION

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#### CONCLUSION

Tick-borne illnesses can be disastrous to the people they effect and places where they appear. In parts of the northeast United States these diseases have reached almost epidemic proportions. It is crucial for the State of Texas to employ every available effort to avoid these types of hardships. Unfortunately, some Texans have already suffered because of these diseases, and the Senate Committee on Administration has resolved to guard against any similar problems in the future. Implementation of the recommendations outlined in this report would be a positive first step to achieving this goal.

## **Appendix A**

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The Senate Committee on Administration appreciates the opportunity provided by Lt. Governor Rick Perry to study the effects of tick-borne illnesses and to make recommendations for developing strategies for combating these types of diseases.

This report reflects the successful cooperation of several state agencies and their representatives, including: The Texas Department of Health, Julie Rawlings; Texas Parks and Wildlife Department, Bryan Richards, Joseph Park, Walter Dabney, and Gary Graham; University of North Texas Health Science Center, Dr. Arthur Eisenberg, Dr. John Planz, and Dr. Benjamin Cohen, President; Texas Department of Agriculture, Commissioner Susan Combs, Trey Powers; Texas A & M University IBT Laboratory, Dr. Eric Brown; Texas Department of Insurance, Blake Broderson, Cady Crismon; and Texas Animal Health Commission, Rick Nabors.

The Committee would also like to thank the following individuals and organizations for their invaluable contributions and continued support: Dr. Joseph J. Burrascano; Lisa and David Johnson; Dr. Hamid Moayad; the Texas Lyme Coalition; the Texas Medical Association; Texas Wildlife Association; Texas Veterinary Medical Association; and the National Lyme Disease Foundation.

The Committee also wishes to recognize the support of Secretary of the Senate Betty King, Senate Sergeant-at-Arms Carleton Turner, and Senate Media Director Kathryn Staat and their staffs for helping to make the hearings during the interim possible.

And perhaps most importantly, the Committee would like to acknowledge the effort put forth by staff and others in completing this study and preparing this report.

## **Appendix B**

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#### Estimated Fiscal Impact of Report Recommendations from the Senate Committee on Administration

Charge	Recommendation	First Full Year Probable Savings/(Costs); Gains/(Losses)	Estimate Source	Comments
1	1. The working group of stakeholders continue to meet to coordinate efforts among stakeholders.	No Significant Fiscal Impact	LBB staff	Charge 1 relates to the prevalence of tick-borne illnesses in Texas with a focus on issues relating to prevention and treatment.
	2. One entity be given responsibility on behalf of the state for distribution of prevention and educational material to the general public	No Significant Fiscal Impact	LBB staff	
	3. Texas Parks and Wildlife Department (TPWD), on behalf of the state, continue to host the website dedicated to tick-borne illness education and prevention.	No Significant Fiscal Impact	TPWD	
	4. Print materials such as the wallet cards and informational brochures continue to be produced by a designated administering entity.	\$65,000	TPWD	TPWD is currently the designated administering entity. Cost estimate is the amount it cost TPWD to print and distribute print materials last year.
	5. Providers of continuing medical education offer courses involving tick-borne illnesses with information on proper prevention, diagnosis and treatment.	No Fiscal Impact	LBB staff	
	6. Public medical and nursing schools include accurate information regarding tick-borne illnesses in their curriculum.	No Significant Fiscal Impact	LBB staff	
	7. Texas Board of Medical Examiners become directly involved in education efforts of doctors and other care givers with regard to tick-borne illnesses.	No Significant Fiscal Impact	LBB staff	

8. Directs the Board of Medical Examiners to develop guidelines in reviewing and investigating medical care providers when treatment of tick-borne illnesses is involved.	No Significant Fiscal Impact	LBB staff	
9. The University of North Texas Health Science Center be given the directive to assume responsibility on behalf of the state to create a comprehensive diagnostic testing facility for tick-borne illnesses.	\$502,000	The University of North Texas Health Science Center	
10. Research efforts begin to help facilitate the creation of a diagnostic laboratory, and that the appropriate state agencies be given directives to administer such research.	No Significant Fiscal Impact	The University of North Texas Health Science Center	
11. The University of North Texas Health Science Center convene a group of leaders in the field of tick- borne illness research to share information and contribute to the development of a diagnostic laboratory.	No Significant Fiscal Impact	The University of North Texas Health Science Center	
12. The University of North Texas Health Science Center utilize staff experience in developing testing procedures as well as additional knowledge achieved from the collaborative research efforts to begin formal test developments.	No Significant Fiscal Impact	The University of North Texas Health Science Center	
13. The University of North Texas Health Science Center formulate and submit a strategic action plan which outlines the details of the process which must be undertaken in developing the laboratory.	No Significant Fiscal Impact	The University of North Texas Health Science Center	