NACCHO
National Association of County & City Health Officials

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2017 Model Practices

Applicant Information

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Model Practice Title

Please provide the name or title of your practice: *

Rabies Prevention: A Multijurisdictional Collaborative Between Public Health and Community Partners

Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select all the practice areas that apply.: *

- ☐ Access to Care
- ☑ Advocacy and Policy Making
- ☑ Animal Control
- ☑ Coalitions and Partnerships
- ☐ Communications/Public Relations
- ☑ Community Involvement
- ☐ Cultural Competence
- ☐ Emergency Preparedness
- ☑ Environmental Health
- ☐ Food Safety
- ☐ Global Climate Change
- ☐ Health Equity
- ☐ HIV/STI
- ☐ Immunization
- ☑ Infectious Disease
- ☐ Informatics
- ☐ Information Technology
- ☐ Injury and Violence Prevention
- ☐ Marketing and Promotion
- ☐ Maternal-Child and Adolescent Health
- ☑ Organizational Practices
- ☑ Other Infrastructure and Systems
- ☑ Organizational Practices
- ☐ Primary Care
- ☑ Quality Improvement
- ☐ Research and Evaluation
- ☐ Tobacco
- ☐ Vector Control
- ☐ Water Quality
- ☐ Workforce
- ☐ Conference Theme: Bridging Clinical Medicine and Population Health

Other::

Is this practice evidence based, if so please explain. :

Winnable Battles

To keep pace with emerging public health challenges and to address the leading causes of death and disability, CDC initiated an effort called Winnable Battles to achieve measurable impact quickly.Winnable Battles are public health priorities with large-scale impact on health and known effective strategies to address them. Does this practice address any CDC's seven Winnable Battles? If so, please choose from the following:: *

- ☐ Food Safety
- ☐ HIV in the U.S.
- ☐ Nutrition, Physical Activity, and Obesity
- ☐ Tobacco
- ☐ Healthcare-associated Infections
- ☐ Motor Vehicle Injuries
- ☐ Teen Pregnancy
- ☑ None

Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community
- Describe public health issue
- Goals and objectives of the proposed practice
- How was the practice implemented/activities
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
  - Were all of the objectives met?
  - What specific factors led to the success of this practice?
- Public Health impact of practice
- Website for your program, or LHD.

750 Word Maximum

Please use this portion to respond to the questions in the overview section. : *

Tri-County Health Department (TCHD) serves over 1.4 million people in Adams, Arapahoe and Douglas Counties in the Denver metropolitan area; our jurisdiction has urban, suburban, and rural areas. TCHD's jurisdiction includes 26 municipalities and 3 unincorporated counties, 15 school districts with more than 360 public schools, 12 acute care hospitals, 3 Federally Qualified Healthcare Centers, 3 community mental health service providers, and one Medicaid-supported Regional Collaborative Care Organization (Colorado Access). Our agency's mission is to promote, protect and improve the lifelong health of individuals and communities in Adams, Arapahoe and Douglas Counties through the effective use of data, evidence-based prevention strategies, leadership, advocacy, partnerships and the pursuit of health equity. Rabies prevention is an issue of growing concern. In 2007, skunk variant rabies was first identified in southeastern Colorado and has continually spread westward towards the Denver metropolitan area. In 2008, the first rabid skunks were found in TCHD's jurisdiction. In 2010, rabid skunks were found in urban areas of TCHD's region. This marked and persistent change in the epidemiology of skunk variant rabies increases the risk of exposure and transmission of rabies to people, pets, and livestock. TCHD Environmental Health and Communicable Disease staff work collaboratively with 21 animal control agencies and several state governmental agencies to control rabies. Working with numerous community partners on the skunk rabies epidemic led to problems with defining roles and responsibilities, miscommunication, duplication of effort, and unreliable data management. TCHD carried out a performance improvement project to improve processes, build efficiencies, and better coordinate rabies response with external partners. The performance improvement project provided an infrastructure to set targets, use data to measure and report progress, initiate efforts to improve quality and achieve a greater impact in rabies prevention. In November 2014, TCHD formed an internal rabies workgroup with seven TCHD field staff and managers. Our goal was to prevent rabies infection in people and domestic pets. Our objectives included: 1) prioritize TCHD's response to animal bites; 2) build consistent processes to respond to animal bites; 3) define roles and responsibilities of TCHD staff and external partners; 4) enhance relationships with external partners; 5) reduce occupational exposure to rabies; 6) increase efficiencies in rabies response; 7) evaluate surveillance for skunk rabies; and 8) incorporate new national guidelines from the 2016 Compendium of Animal Rabies Prevention and Control. All workgroup objectives were met by May 2016. Key accomplishments included: • Revised the TCHD Rabies Prevention and Control Manual, focusing on the steps of a rabies exposure investigation and roles and responsibilities of TCHD staff and community partners. The Manual also incorporated the new Rabies Compendium recommendations. • Defined high risk animal bite exposures for which TCHD would take primary responsibility to investigate. Defined lower risk animal bite exposures to be referred to local animal control. • Created detailed rabies exposure assessment forms to guide the investigation and facilitate proper documentation. • Designed customized algorithms for the steps of a rabies exposure assessment. • Developed an interim database for tracking animal bites and rabies testing while making system enhancements to the agency's permanent data system. • Defined the infection control measures for animal decapitation for rabies testing. • Developed guidance for animal control officers on when to notify public health for a high risk rabies exposure. • Evaluated an animal surveillance system using Google maps to track the progression of skunk rabies across our region. The public health impact of these changes has been far-reaching. Since January 1, 2016, TCHD now focuses rabies prevention efforts on high-risk human and pet exposures with rabies reservoir species while ensuring low risk domestic pet (dog and cat) to human bites are appropriately referred to and managed by animal control. Data entry of routine domestic pet to human bites was minimized to improve efficiency. Animal control officers refer high risk bites to TCHD and consult with public health when problems arise with pets in quarantine. By October 2016, 441 routine domestic pet to human bites were managed by animal control, saving an estimated 294 hours (approximately 40 minutes per bite investigation) of public health work! Trainings kept staff informed about skunk rabies epidemiology. Using the updated TCHD Rabies Manual, forms, and algorithms streamlined our internal response, improved coordination between Environmental Health and Communicable Disease, and reduced duplication of efforts. TCHD promoted safe animal decapitation practices. Relationships with external partners have improved by enhanced communication and clarity of roles. Information on the rabies program at TCHD is located at: www.tchd.org/396/Animal-Bites-Rabies.

Responsiveness and Innovation

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be (1) **new to the field of public health (and not just new to your health department)** OR **(2) a creative use of an existing tool or practice**, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.

- Statement of the problem/public health issue
- What target population is affected by problem (please include relevant demographics)
    - What is the target population size?
    - What percentage did you reach?
- What has been done in the past to address the problem?
- Why is the current/proposed practice better?
- Is current practice innovative? How so/explain?
    - Is it new to the field of public health
      OR
    - Is it a creative use of existing tool or practice:
      What tool or practice did you use in an original way to create your practice? (e.g., APC development tool, The Guide to Community Preventive Services, HP 2020, MAPP, PACE EH, a tool from NACCHO's Toolbox etc.)

- Is the current practice evidence-based? If yes, provide references (Examples of evidence-based guidelines include the Guide to Community Preventive Services, MMWR Recommendations and Reports, National Guideline Clearinghouses, and the USPSTF Recommendations.)

2000 Word Maximum

Please state the Responsiveness and Innovation of your practice (2000 Word Maximum) : *

Tri-County Health Department (TCHD) serves approximately 1.4 million people in Adams, Arapahoe, and Douglas counties of the Denver metropolitan area. This region contains geographic areas that are urban, suburban, and rural. In 2007, skunk variant rabies was first identified in southeastern Colorado. Within several years, rabies in skunks spread widely throughout the rural, eastern regions of the state and eventually began progressing westward towards the Denver metropolitan area. Since 2010, rabid skunks have increasingly been found in urban areas in TCHD's jurisdiction. In 2011, there was one positive skunk compared to 15 positive skunks in 2015 (2012=0, 2013=3, 2014=4, 2016 through November=14). Skunks are tested for rabies if there is a potential rabies exposure to people or pets or for surveillance purposes if a suspect rabid skunk is found in an area where no rabid skunks have ever been found. In 2010, 14 skunks tested positive for rabies under surveillance criteria. In 2016, we had our first rabid skunks in the densely populated, urban city of Aurora. Spillover infections have also been documented, meaning skunk rabies variant was spread from skunks to other mammals including foxes, coyotes, cows, horses, and cats. This marked and persistent change in the epidemiology of skunk variant rabies increases the risk of exposure and transmission of rabies. Rabies prevention is an issue of growing concern that impacts all residents of our jurisdiction, their pets and livestock. Colorado statutes require that animal bites from domestic pets, rabies reservoir species, and other wild mammals are reported to public health. TCHD assesses the risk for rabies exposure, coordinates testing at the state public health lab, recommends rabies post-exposure prophylaxis for exposed persons, and works with animal control agencies to enforce pet quarantine. TCHD Environmental Health and Communicable Disease Specialists work in four office locations to respond to rabies exposures in our jurisdiction. We must work collaboratively with 21 animal control agencies across our three counties. Our staff consult with the Colorado Department of Public Health and Environment (CDPHE), the Colorado Department of Agriculture, and Colorado Parks and Wildlife to control the spread of rabies. Prior to the implementation of the rabies workgroup collaborative, there was a duplication of efforts between TCHD Environmental Health and Communicable Disease Programs and with animal control agencies. Roles and responsibilities in management of rabies exposures were ill defined and inconsistent within our agency and across our jurisdiction and miscommunication occurred. Data collection was unreliable, making tracking investigations difficult. Change was necessary to improve processes, build efficiencies, and better coordinate rabies response with external partners. TCHD carried out a performance improvement project to address the challenges of the public health response to skunk variant rabies. The purpose of the performance improvement project was to provide an infrastructure to set targets, measure progress toward those targets using evidence-based data, report progress toward the targets, and initiate efforts to improve quality. It involved a change whereby TCHD assessed the current level of organizational performance, generated ideas, and executed steps for modifying behavior (and/or infrastructure) to achieve a greater impact in rabies prevention. To successfully complete the performance improvement project (PLAN – DO – STUDY – ACT), TCHD formed an internal rabies workgroup in November. The performance improvement process began by mapping the status quo of pet and human rabies investigations at TCHD and how we worked with community partners. A review of current practices and processed revealed: • A need for consistency in managing routine bites. • A need to utilize rabies exposure risk assessment to prioritize the role TCHD had in responding to animal bites. • A need to improve the understanding and interpretation of local and state statutes, ordinances, and legal requirements for managing animal bites. • A need to re-revaluate animal bite surveillance protocols and reporting of data. • A need to update data collection forms and what data should be tracked. To identify potential solutions, the workgroup brainstormed ideas and approaches where an impact could be made to meet needs and fill gaps in rabies prevention. The workgroup also recognized the need to incorporate new recommendations that were forthcoming from the to-be-published 2016 Compendium of Animal Rabies Prevention and Control. The TCHD rabies workgroup served as the backbone organization for broader rabies prevention collaborative with local animal control and state agencies. The overarching goal set for the rabies prevention collaborative was to prevent rabies infection in humans and domestic animals. Our rabies workgroup objectives were to: 1) prioritize TCHD's response to animal bites; 2) build consistency in TCHD's process to respond to animal bites; 3) define roles and responsibilities of TCHD staff and external partners; 4) enhance relationships with external partners; 5) reduce occupational exposure to rabies; 6) increase efficiencies in rabies response; 7) evaluate surveillance for skunk rabies; and 8) incorporate new national guidelines from the 2016 Compendium of Animal Rabies Prevention and Control. The rabies workgroup completed the performance improvement project during the second quarter of 2016. Quality improvement around rabies response has been realized. Relationships and communication with animal control and state agencies have improved and the burden of rabies investigations is evenly distributed between agencies responsible for rabies prevention. In March 2016, the updated Rabies Compendium was released (http://nasphv.org/documentsCompendia.html). Through the continued efforts of the rabies workgroup at TCHD and our community collaboration, we quickly revised our protocol for animal management and were the first public health agency in Colorado to implement the new recommendations in May 2016. Management of animals potentially exposed to rabies has improved by applying evidence-based practices from the Compendium for managing these pets and instituting quarantine and rabies vaccination following an exposure. The type of rabies exposure and pet vaccination status determines post-exposure management. Data analyzed from May-October 2016 showed that 37% of pets with known or possible contact with a rabies reservoir species were managed differently in accordance with the 2016 Compendium. The changes from the new Compendium guidelines for dogs and cats exposed to rabies are: 1. Unvaccinated pets are placed in a shorter, 4-month strict quarantine rather than a 6-month strict quarantine; 2. Pets overdue for a rabies vaccine booster are placed in a 45-day home observation (or 4-month home observation if the booster is received more than 96 hours after the exposure) instead of a 90-day home quarantine (quarantine is more restrictive than home observation); 3. Pets overdue for a rabies booster receive one rabies vaccine booster instead of two rabies boosters; and 4. Pets overdue for a rabies booster without documentation of rabies vaccine history can undergo prospective serologic monitoring to determine rabies vaccine status. No pets placed under observation or quarantine experienced rabies after the exposure. These new management techniques have reduced the amount of time animals are quarantined and the number of rabies boosters required after exposure to rabies. Successful outcomes were achieved using less stringent requirements for home observation or quarantine in accordance with the Compendium and reduced the number of pets euthanized. Improved communication through the workgroup collaborative allowed us to quickly train animal control and TCHD staff on the new protocols.

LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broad-based involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
    - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice
- Were other stakeholders involved? What was their role in the planning and implementation process?
    - What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)
- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

5000 words maximum

Enter the LHD and Community Collaboration related to your practice (5000 words maximum): *

The TCHD rabies workgroup served as the backbone organization for a broader rabies prevention collaborative with local animal control and state agencies. The overarching goal set for the rabies prevention collaborative was to prevent rabies infection in humans and domestic animals. Our objectives were to: 1) prioritize TCHD's response to animal bites; 2) build consistency in TCHD's process to respond to animal bites; 3) define roles and responsibilities of TCHD staff and external partners; 4) enhance relationships with external partners; 5) reduce occupational exposure to rabies; 6) increase efficiencies in rabies response; 7) evaluate surveillance for skunk rabies; and 8) incorporate new national guidelines from the 2016 Compendium of Animal Rabies Prevention and Control. To successfully complete the performance improvement project (PLAN – DO – STUDY – ACT), TCHD formed an internal rabies workgroup in November 2014 consisting of seven permanent members: three Environmental Health staff, two Communicable Disease staff, a Medical Epidemiologist, and an Administrative Assistant. Both field staff and managers were included to ensure adequate representation and a diverse perspective. Our workgroup met for more than 378 hours over the course of 22 months to evaluate and update our TCHD Rabies Prevention and Control Manual; define roles and responsibilities of TCHD Environmental Health and Communicable Disease staff as well as animal control staff in responding to rabies exposures; create annual trainings for all staff; and evaluate the epidemiology of rabies surveillance in our jurisdiction. TCHD held two stakeholder meetings with local animal control agencies to identify the issues and needs of our partners gain consensus on roles and responsibilities, avoid duplication of efforts, and improve communication channels between our respective agencies. The stakeholders represented a diverse cross-section of our jurisdiction. The TCHD workgroup trained Environmental Health and Communicable Disease staff and our external partners (animal control officers, Colorado Parks and Wildlife staff, veterinarians) on the state and local protocol, roles and responsibilities and rabies prevention. Trainings were held in summer 2015 and summer 2016 for animal control agencies. The meetings were held at different locations for animal control and TCHD staff responding to rabies incidents. These trainings will be held annually to ensure new staff are trained and existing staff receive annual updates on our rabies prevention program. In order to reduce occupational exposures to rabies, TCHD instituted three fee-for-service contracts with two local veterinarians and one animal control agency to provide decapitation, euthanasia, and specimen packaging in areas were these services do not already exist. The contracts range in price from $50-$100 per specimen and include euthanasia, if needed, decapitation and specimen packaging. Supplies for proper packaging are provide by TCHD. TCHD also reduced the number of staff needing rabies pre-exposure vaccine by limiting contact with specimens to bat euthanasia only and eliminating the need for packaging specimens by TCHD staff. TCHD provided trainings and consultation to animal control and vets on proper infection control processes for decapitation and specimen handling.

Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are **process** and **outcome**. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
    - List any primary data sources, who collected the data, and how (if applicable)
    - List any secondary data sources used (if applicable)
    - List performance measures used. Include process and outcome measures as appropriate.
    - Describe how results were analyzed

- Were any modifications made to the practice as a result of the data findings?

2000 Words Maximum

Please enter the evaluation results of your practice (2000 Words Maximum): *

The TCHD rabies workgroup served as the backbone organization for a broader rabies prevention collaborative with local animal control and state agencies. The overarching goal set for the rabies prevention collaborative was to prevent rabies infection in humans and domestic animals. Our objectives were to: 1) prioritize TCHD's response to animal bites; 2) build consistency in TCHD's process to respond to animal bites; 3) define roles and responsibilities of TCHD staff and external partners; 4) enhance relationships with external partners; 5) reduce occupational exposure to rabies; 6) increase efficiencies in rabies response; 7) evaluate surveillance for skunk rabies; and 8) incorporate new national guidelines from the 2016 Compendium of Animal Rabies Prevention and Control. Over the course of 22 months, the workgroup met for over 378 hours. This does not include all the time workgroup members spent on preparation, updates, documentation and research. All workgroup objectives were met by May 2016. The results of these objectives were: 1. We prioritized our response to animal bites in the following order from high to low risk: human or pet exposure to rabies reservoir species (RRS), exposure to other wild mammals, or to wolf hybrids; human exposures to stray or feral domestic pets; domestic pets exposures/bites from unknown animals. This prioritization helps us to clearly manage those bites that are highest risk in situations when we have multiple incidents reported at the same time. 2. Through staff and external partner trainings with animal control, veterinarians, and other state animal agencies, we have built consistency in the response to rabies exposures in our region. Our protocols are clearly written in our TCHD Rabies Prevention and Control Manual, which outlines steps to be taken in an investigation and provides all the necessary forms and guidelines to respond. The Manual includes intake and exposure assessment forms, algorithms for managing people and pets potentially exposed to rabies, and clearly define the roles and responsibilities of public health and animal control. 3. Annual trainings with animal control, veterinarians and other external partners were led by public health experts to define roles and responsibilities between agencies. In 2015, two trainings were attended by 16 animal control officers from seven animal control agencies. In 2016, three trainings were attended by 47 animal control officers representing 15 agencies. Annual training for TCHD Environmental Health and Communicable Disease staff also defined internal roles in rabies investigations. Human and pet management algorithms clearly outlined who can and should handle certain aspects of the investigation between animal control and TCHD Environmental Health and Communicable Disease staff. TCHD developed and provided guidance for animal control officers on when to notify public health for a high risk rabies exposure. 4. Maximizing external relationships with animal control and veterinarians reduces overlap and duplication of efforts. Animal Control agencies handle all routine domestic pet bites to people and implement 10-day confinements for pets when indicated. TCHD handles all pet and human exposures to wildlife and some domestic pet bites that require assessment of rabies risk (for example, if 10-day confinement cannot be completed). 5. We reduced occupational exposures to rabies by limiting the number of TCHD staff who receive rabies pre-exposure prophylaxis in order to perform bat euthanasia and specimen packaging when contractors were not available. Fee-for-service contracts with two veterinarians and one animal control agency to perform euthanasia, decapitation, and specimen packaging were used if services did not already exist through local animal control. These contracts allowed TCHD to train and educate providers on these services to ensure safe handling practices. 6. From January 1-September 2, 2016, TCHD referred 329 domestic pet bites to people to animal control for management that resulted in a time savings of an estimated 220 hours. Prior to implementing the new protocols, TCHD Environmental Health and Communicable Disease staff would have managed these exposures internally and taken time to enter these low risk rabies exposures into a TCHD database for tracking. Now only high risk rabies exposures managed by TCHD are tracked in our database, reducing the burden of data entry. We developed an interim database for tracking animal bites and rabies testing while making system enhancements to the agency's permanent data system (to be implemented in January 2017). 7. Either a TCHD Environmental Health or Communicable Disease staff can confidently manage any incident up to the point of rabies testing, allowing workload to be more equitably distributed within the agency. Once a specimen tests positive for rabies or an incident is assessed as a high risk exposure when testing is not possible, the case is transferred to Communicable Disease staff who are responsible for arranging for pet quarantine and/or human post-exposure prophylaxis. 8. Surveillance for skunk rabies is done through the state health department and the public health laboratory. TCHD maintains a Google map of all terrestrial specimens testing positive in order to more accurately identify new geographic areas with skunk rabies. Surveillance testing (i.e., no known exposure) is only performed if terrestrial rabies has not been identified in that area. Some areas in the western portion of the TCHD's jurisdiction have still not reported skunk rabies, although counties further to the north and west have skunk rabies present. We anticipate the epidemic to spread and broadly impact our 3-county region. These animal surveillance systems are adequate for TCHD to track the progression of rabies across our region. To demonstrate outcomes from the rabies prevention performance improvement project, TCHD analyzed the following data from human and pet exposures: • Improved data management and sharing of roles and responsibilities with local animal control agencies: During January 1 and October 30, 2016, 441 routine domestic pet to human bites that were initially reported to TCHD were promptly referred to and managed by local animal control. This process saved an estimated 294 hours of public health FTE work (approximately 40 minutes per bite investigation)! Data entry of routine domestic pet to human bites was minimized to improve efficiency. o 423 (96%) referrals from TCHD to animal control were routine domestic pet bites to humans, which is precisely what the new protocols dictate. o Rather than handling routine domestic pet to human bites, TCHD staff focused efforts on 98 human exposures to rabies reservoir species or other wild mammals. o As a historical comparison, during 2015 there were 224 human exposures to domestic pets reported to TCHD with sufficient data for analysis. One hundred and eighty (80%) were deemed as routine bites that would have met criteria in 2016 with the new rabies protocols to immediately refer to animal control. Thirty-seven (16%) domestic pet to human bites were higher risk and managed by TCHD because they involved rabies testing, which is always coordinated by public health. • Enhanced response for potential human rabies exposures: From January 2014 – October 30, 2016, the burden of human exposures to rabies reservoir species (bat, skunk, fox, raccoon) has increased annually as reflected by the number of potential exposures reported to TCHD. In 2014, TCHD had 30 exposures reported; in 2015 there were 50 reports; and between January 1 and October 30, 2016 TCHD assessed 89 human exposures to rabies reservoir species. • Impact of implementing the 2016 Rabies Compendium: Ninety-nine potential pet rabies exposures occurred during May–October 2016; 37 (37%) events were excluded based on negative rabies test results. Among the remaining 62 pets, management under

the new Compendium differed for 23 (37%) pets with known or possible contact with a rabies reservoir species and no rabies testing to confirm exposure. o Four of 23 (17%) pets were unvaccinated and placed in a 4-month strict quarantine, compared with the prior recommendation to enforce a 6-month strict quarantine or euthanasia. o The remaining 19 (83%) were classified as overdue for a rabies vaccine booster and placed in a 45-day (n = 16) or 4-month (n = 3) home observation. In comparison, prior to May 2016, TCHD would have implemented a 90-day home quarantine for these 19 overdue pets. o Management of 39 (63%) of 62 pets did not change with the new Compendium, including: pets exposed to a laboratory-confirmed rabid animal (45-day home observation for vaccinated or euthanasia for unvaccinated pets, n = 13); and pets exposed to a rabies reservoir species but up-to-date on rabies vaccination (45-day home observation, n = 22), unvaccinated (euthanasia, n = 3), or overdue for rabies booster vaccination (euthanasia, n = 1). No pets placed under observation or quarantine experienced rabies after the exposure. Early adoption of the 2016 Rabies Compendium recommendations notably changed TCHD management of pets potentially exposed to rabies. Successful outcomes were achieved using less stringent requirements for home observation or quarantine in accordance with the Compendium and reduced the number of pets euthanized.

Sustainability

Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders are invested in its maintenance and to ensure it is sustained after initial development (*NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation*.)

- Lessons learned in relation to practice
- Lessons learned in relation to partner collaboration (if applicable)
- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?
    - Describe sustainability plans

1500 Words Maximum

Please enter the sustainability of your practice (2000 Words Maximum): *

The positive outcomes from this performance improvement project are sustainable and have fostered greater community stakeholder investment in rabies prevention. After the initial FTE time commitment for the TCHD rabies workgroup, there has been far less cost to TCHD to continue following our 2016 rabies investigation protocols and procedures. Rather, we have achieved significant time savings (e.g., 441 routine domestic pet to human bites referred to local animal control). Animal Control agencies have full ownership over routine domestic pet bites to people while TCHD investigates all high risk exposures to rabies reservoir species, wild mammals, or other highly suspect animals. Creating this division of responsibility has reduced the number of hours TCHD staff spend on rabies investigations and reduced if not eliminated duplication of effort around animal bite investigations between TCHD programs and animal control. Beginning in 2017, the rabies workgroup plans to meet annually to review the Manual and discuss if updates or changes are necessary. The annual training planned for TCHD Environmental Health and Communicable Disease staff is critical to sustaining these efforts. Annual training for animal control officers is also necessary to maintain consistency, foster communications and referrals, and ensure there are adequately trained professionals in rabies prevention working in our communities. Safe animal decapitation practices are in place as TCHD now uses contractors to perform decapitation or bat euthanasia when those services are not readily available through local animal control; in 2016 TCHD incurred costs of $610 for these services. We continue to benefit from this collaboration on rabies prevention both internally at TCHD and with our external partners. TCHD, animal control agencies and other external partners are committed to rabies prevention in our jurisdiction and understand their roles and responsibilities in prevention. By working together, we are creating a safer, healthier community for our residents.

Additional Information

How did you hear about the Model Practices Program:: *

- ☐ I am a previous Model Practices applicant
- ☐ At a Conference
- ☐ NACCHO Website
- ☐ Public Health Dispatch
- ☑ Colleague in my LHD
- ☐ Model Practices brochure
- ☐ NACCHO Exhibit Booth
- ☐ NACCHO Connect
- ☐ Colleague from another public health agency
- ☑ E-Mail from NACCHO
- ☐ NACCHO Exchange