

Vector Control Patch Program



Goal:
Work with Girl Scouts Greater Los Angeles to make a difference in their communities.



Mission:
Promote environmental sustainability & management of vectors and vector-borne diseases.



Purpose:
Teach troop members about a range of vector-related topics: Ecology, public health, management, etc.

Vector Control Districts around Los Angeles County need your help! They do all they can to prevent mosquitoes from reproducing, biting, and making people sick but can't do it alone. By learning and completing activities in the **VECTOR CONTROL PATCH**, you will gain knowledge about mosquitoes and understand why controlling them around your neighborhoods really matters. Sharing what you have learned will increase mosquito awareness and protect friends and family members in your communities, and help us *fight the bite*.

After the Patch program is complete, you will:



- Know how to keep mosquitoes out of your community
- Understand how pollution and dirty water can impact public health
- Become familiar with mosquito anatomy/ecology and identify the life stages of mosquitoes
- Understand why mosquitoes suck blood
- Know how to protect yourself from mosquito bites
- Recognize the differences between the two major species of mosquitoes
- Be empowered to make a difference

Program Requirements

The Girl Scout troops will work together and with their local mosquito & vector control district to study the ecology of mosquitoes in the urban environment. Using problem solving and scientific reasoning skills, Scouts will come to appreciate the complexity of the mosquito anatomy, life and disease transmission cycles, and how their individual actions and behaviors can make a positive change.

All ages must complete these activities:

- 1) Learn about the biology of mosquitoes and complete all of the activities at <https://www.mosquitolab.org/3rd-4th-grade-programs>
- 2) Complete the Mosquito Ecology Quiz after watching the Wild Kratz “Mosquito Dragon” episode. Visit <https://www.youtube.com/watch?v=H4E9zDi10i8> for a link to the video. Quiz yourself after the video here: <https://www.mosquitolab.org/girl-scout-patch-program> (Activity A)
- 3) Find the local vector control district that serves your area, read more about them on the internet, and share the information with your family (visit SoCalMosquito.org for help)

Additional activities required based on grade level:

- ✱ Daisy and Brownie: select 2 from list below
- ✱ Junior and Cadette: select 3 from list below
- ✱ Senior and Ambassadors: select 4 from below

Daisies/Brownies:

- Do a mosquito craft to help you learn about mosquito anatomy. Discuss what each body part does while you are making it. Visit: <https://www.mosquitolab.org/girl-scout-patch-program> (Activity B) for ideas.
- Create a skit or song about controlling mosquitoes around your home, and present it to your troop or family.
- Create a poster or artwork that showcases the mosquito lifecycle and teaches people to *dump out standing water* every week!
- Write a creative story about how to prevent mosquito bites.
- Complete all online activities and earn one of the Mosquito 3-D trading cards
- Create a piece of art that details the mosquito ecology and the four life-cycle stages
- Take a walk around your neighborhood or meeting area with an adult. Identify places where mosquitoes might breed, and do what you can to prevent this (i.e. tell an adult, throw away trash, dump out the water).

Juniors/Cadettes:

- Research 3 different types of mosquito-transmitted diseases, list three important facts about each, and summarize how these diseases and the mosquitoes that transmit them can impact lives.
- Express through art, music or creative writing the ecology of mosquitoes and showcase the importance of controlling mosquito breeding sites around the home.
- Define “vector” and provide a summary for three different species of vectors that reside in Southern California.

- Learn the difference between the *Aedes* and *Culex* species and then conduct a breeding source hunt with the activity sheet provided online at: <https://www.mosquitolab.org/girl-scout-patch-program> (Activity C & E)
- Remove/correct mosquito breeding sites you can, and report those you cannot correct to your local vector control district.
- Using what you have learned, develop a community service project or activity that will help educate and protect your neighborhood/city.
- Create and design a “Vector Inspector” wrist band that caters to mosquito prevention. See sample page here:
- Design and build your own “Vector Inspector” board game. The point of the game should include bite prevention and breeding source reduction.
- Curate your own education poster that reaches out to the public. This poster should include these three points: **Source reduction, bite prevention and mosquito awareness**. Sample here:
- Learn about mosquito repellents. Visit a governmental or scientific web site to verify your findings, and present what you have learned to your troop.
- Produce a short 30 second video for the community called a PSA. Help us spread the word here: <https://www.mosquitolab.org/6th-8th-grade-psa-project> (Activity D)

Seniors/Ambassadors:

- Research and be able to identify common mosquito-breeding sites in urban areas. How does pollution, water waste, and bad habits contribute to mosquito problems and disease risk? Work with your troop or a Junior troop to develop a presentation, skit, song, game, or piece of art that tells the story and share it with younger scouts.
- Research the top 3 mosquito-transmitted diseases around the world. List three important facts about each, and summarize how these diseases and the mosquitoes that transmit them affect lives and economies around the world. Identify why vector-borne disease risks are increasing, and what can be done about it. Share what you have learned with your troop
- Produce a short video PSA (public service announcement) or a social media campaign (images and information) illustrating or explaining the following:
 - How to prevent breeding sources
 - How to ‘fight the bite’
 - Why mosquitoes are the “World’s Most Dangerous animal”
- Visit a City Council meeting in your city, and provide a 5-minute presentation during the Public Comments section about what you have learned.
- Call or visit your local vector control district and interview a supervisor. Ask them about their responsibilities and professional journey. Explore vector control career pathways and why they are important:
 - Community Affairs
 - Operations
 - Fleet Management
 - Entomology/Microbiology Lab
- Develop and implement a community service project with another troop designed to both educate and make a difference in the long term. Identify a target audience (senior citizens, youth, business owners, public officials) and develop your project that is most relevant to them (i.e. mosquito-free gardens, community cleanup day, poster distribution, etc.) Evaluate the success of your program, and report your successes and challenges with this project.

