COMMUNITY NOISE COUNSELING PROGRAM

SEE Program for Noise Abatement

EPA Grant # CS 807416-02

FINAL REPORT

1/7/81 - 4/29/83
FINAL REPORT

COMMUNITY NOISE COUNSELING PROGRAM
S.E.E. PROGRAM FOR NOISE ABATEMENT

EPA CONTRACT # CS-807416-02
1/7/82 - 4/29/83

Submitted by: John Hart, National Coordinator
Special Programs
American Association of Retired Persons

Submitted to: Cathleen Sheehan,
United States Environmental Protection Agency
Office of Noise Abatement and Control

GP3221 (783)
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Introduction

The Community Noise Counseling Program sponsored by the American Association of Retired Persons (AARP) was initiated September 22, 1978, with funding provided by the Environmental Protection Agency, Office of Noise Abatement and Control.

The program administration was the responsibility of the Association's Senior Community Service Employment Program, SCSEP, Special Programs Office; and from the start, the program was carried out in conjunction with the older worker employment program as a cooperative effort.

The Senior Community Service Employment Program is funded by Title V of the Older Americans Act, administered by the U.S. Department of Labor, and sponsored by the American Association of Retired Persons as grantee.

SCSEP eligible enrollees were recruited and assigned to the Community Noise Counselors Program by Project Directors in local project offices where needs were identified and the site selection was made and approved by EPA Noise Program officials. Also, in some instances where sites were selected and no local SCSEP project existed, Noise Counselors were recruited as Special Program enrollees, and were paid on a part-time basis from EPA grant funds.

Several volunteers were also recruited to act as Noise Counselors. These volunteers, located in four states, were given formal training and individual instruction in Community Noise Abatement projects.
A Volunteer Noise Counselors handbook, "Sound Advice", was developed, and a volunteer organizers handbook prepared for volunteer leaders, and an 8 minute slide/tape presentation was developed to recruit volunteers.

To perpetuate the all volunteer program for Community Noise Counselors, the AARP Program Department has prepared a proposal for funding to support training and volunteer leaders travel necessary to establish the program on a national basis. Supportive noise materials have been developed for use and may be reproduced in quantity for the volunteers use, given funding.

Attached as a part of this report are A Volunteer Noise Counselor's Guide and A Volunteer Organizer's Guide, developed by the AARP Program Department for A Volunteer Noise Abatement Program entitled Sound Advice.
Overview

The Community Noise Counselors Program was a continuation of the initial Community Noise Counselors Program, which began in September, 1978*. The period covered under the current Cooperative Agreement grant # CS 807416-02 is from June 6, 1981 through March 31, 1983.

As in the first Noise Counselors Program, the purpose was to provide training and administrative support for up to 25 Community Noise Counselors nationwide; to recruit and assign additional SCSEP Program enrollees, and to provide training and supervision for program activities, and to provide for payment of job related travel and expenses. In addition to SCSEP sponsored Noise Counselors, funds were included to hire, as Special Programs enrollees, up to seven additional part-time persons, where SCSEP positions were not available.

Training and Administration

One national training session was held to develop community noise abatement strategies, and to update training and use of noise measurement equipment. Individual training and monitoring visits were made to 27 sites during this grant period. Training was provided for six new Noise Counselors on an individual basis.

Training and Administration (cont'd).

A full-time coordinator for the State of Florida was assigned since seven noise counselors and one volunteer were from Florida communities. He was able to provide continuous contact with the Florida Counselors and the Program Coordinator.

The Program Coordinator convened a Volunteer Noise Counselor program workshop with five experienced Noise Counselors to develop a training program and a volunteer manual for future use.

Additional meetings and training workshops attended by the Project Coordinator included:

- The National Urban League Noise Counselors Program training; the Buy-Quiet Seminar presented by EPA Office of Noise Abatement and Control; the National Association of Noise Control Officials (NANCO) meeting, held in conjunction with the Buy Quiet seminar; the Washington Tri-Cities conference on Noise; and the AARP-SCSEP National Conference.

Additionally, the National Program Coordinator attended EPA sponsored meetings with the National League of Cities, ECHO Program Conference; and the Conference for State Noise Program officials.

In September, 1982, as the program was in the final stages, AARP Community Noise Counselors and ONAC officials met to develop strategies for an all-volunteer Community Noise Counseling Program, since funding to continue to support Noise Counselors was no longer available.
Training and Administration (cont'd).

In May, 1982, the Program Coordinator resigned her position and the task of administering the program was taken over by the Special Programs National Coordinator, with assistance from the Special Programs staff.

With the de-funding of the Office of Noise Abatement and Control at EPA, plans were made to phase out the Community Noise Counselors Program in the present form. The decision was made to continue the Noise Counselors activities without additional EPA funding for training and support. SCSEP Program enrollees could continue to work in Noise Abatement activities as long as a suitable host agency was developed and supervision provided. Local travel and miscellaneous expenses could not be provided by SCSEP.

The Community Noise Counselors program ended September 30, 1982. A request was made to EPA Office of Noise Abatement and Control to use the balance of funds to develop the all-volunteer Noise Counselors Program. The request was approved and a no-cost extension was granted until March 31, 1983.

Volunteer Noise Counselors Project
Effective September 30, 1982, all AARP Noise Counselors ceased operations as grant paid enrollees. Several enrollees terminated as of September 30, 1982.
Volunteer Noise Counselors Project (cont'd).

The SCSEP supported Noise Counselors continued to function as Noise Counselors on an interim basis. Since funding provided for training, National Office supervision, local travel and job related expenses was discontinued, most SCSEP Noise Counselors could not effectively continue their community activities. Those SCSEP Noise Counselors who were assigned to Environmental or Health agencies for in-office assistance (no travel or expenses), were able to continue as counselors.

Also effective September 30, 1982, the AARP Program Department began a project to develop an all-volunteer Community Noise Counselor Program similar to other volunteer programs sponsored by the Association.

The Association's Volunteer Programs have been highly successful, such as the AARP Tax Aide Program. Although funded partially by IRS, 15,000 volunteers provide tax assistance to elderly tax payers. An additional 3,000 persons volunteer to provide Defensive Driving Course instruction to elderly persons. The widowed persons program enlists an additional 4,000 volunteers.

Considering the capabilities of the Program Department and the enthusiasm with which AARP Community Noise Counselors have developed Noise Abatement Programs in their communities, we were convinced that volunteers throughout the nation would be able to take up the challenge.
PROGRAM RESULTS

Community Awareness Activities

As evidenced by the attached quarterly activity report summaries, the Noise Counselors have received numerous requests to respond to complaints and to make group presentations concerning noise. Generally speaking, once the Noise Counselor became known in the community, requests increased markedly.

In most cases, communities without adequate noise enforcement programs had no official complaint center. Once the availability of a Noise Counselor and a local phone number was publicized, noise complaints and activity increased, demonstrating an awareness of noise problems where before, no complaint channel had existed. Armed with evidence of numbers of complaints, noise counselors were able to persuade local police and Health Department officials to more effectively deal with noise complaints.

In Dubuque, Iowa, the Noise Counselor was able to convince City officials to post "Noise Ordinance enforced" signs along major thoroughfares. Noise posters were displayed in city busses, and public service advertisements were aired over radio and television. This was typical of results achieved and activities accomplished in each Community Noise Counselor's area.

Ordinance Development

In most areas, where no local noise ordinance existed, Community
Ordinance Development (cont'd).

Noise Counselors were able to initiate serious attempts on the part of local officials to develop a noise ordinance. Attitudinal noise surveys were carried out in Salem, Massachusetts, and Norfolk, Virginia. Various traffic level and site specific noise measurements were also carried out by the counselors in conjunction with local officials in preparation for development of a local noise ordinance.

General Activities

Activities to promote public awareness and to help solve noise problems in general, have been developed by the Noise Counselors: Barking Dog Clinics were presented by Noise Counselors in St. Petersburg and Gainesville, Florida. In cooperation with local Health Department officials, the Noise Counselor and several Senior Community Service Employment Program enrollees carried out hearing tests for elementary school children in Naples, Florida.

Every Noise Counselor has been involved in Health fairs, State and Local fairs, and exhibits where noise information has been distributed to citizens.

The attached quarterly reports describe individual accomplishments of the Noise Counselors, and generally, the reports indicate an increased level of noise awareness, as well as an increase in support from local officials.
General Activities (cont'd).

Also attached is a list of AARP Community Noise Counselors effective as of September, 1982, and a compilation of statistical results reported by the Noise Counselors for the program year.
Statistical Results

Reported by Noise Counselors for the period July 1, 1981 to September 30, 1982.

Incoming Calls:  Phone  3,988  
                 Letter  622  
                 Other  1,257

Questions and Information Requests:  3,350

Complaints Handled:  2,108

Self-Initiated Contacts:  Phone  2,398  
                        Letter  1,438  
                        Other  518

Presentations:  812 to estimated 26,200 persons

Special Event Participation:

Health Fairs:  18
Exhibits:  7
Festivals:  4
Noise Seminars:  7
Noise Training Workshops:  2
Noise Surveys:  2
State Fairs:  3

Media Coverage:  
Television:  39  
Radio:  49  
Newspapers:  29  
Newsletters:  150  
Other (special materials distribution): over 5,000
Posters: extensive
Appendix A

NRTA-AARP COMMUNITY NOISE COUNSELORS

John Albanese  
c/o Ms. Beverly Levitt-Narcisco  
AARP-SCSEP  
Regency East Box 6  
1 Jackson Walkway  
Providence, Rhode Island 02903  
401-778-0500 ext. 249

John Berdrow  
AARP-SCSEP  
2639 9th Street, North  
St. Petersburg, Florida 33704  
813-898-6333

Delyle Compton  
P.O. Box 1761  
Fayetteville, Arkansas 72701  
501-521-1070

Kashous E. Conine  
c/o Harold Schendell  
AARP-SCSEP  
P.O. Box 1453  
Tampa, Florida 33601  
813/253-0909

Lucy Connor  
3256 Hillcrest, Apt. #4  
Dubuque, Iowa 52001  
319/583-2533

Pat Croce  
AARP-SCSEP  
700 Arlington Road  
Jacksonville, Florida 32211  
904-725-6055

Joyce Daugherty  
AARP-SCSEP  
402 S. Jefferson Street, Rm. 209  
Pensacola, Florida 32501  
904-433-5070 or -5079

LaVaun Eve  
1 El Vedado Lane #4  
Santa Barbara, California 93105  
805-967-5764
Eileen Halverson  
City Health Environmentalists  
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Sioux Falls, South Dakota 57105  
605-339-7079

Helen Johnson  
Citizens Against Noise  
P.O. Box 27705  
Honolulu, Hawaii 96827  
808-735-3506

May May  
c/o Charles Peers  
AARP-SCSEP  
1 North Orange Avenue, Suite 708  
Orlando, Florida 32801

Gladys McDonald  
AARP-SCSEP  
355 "F" 5th Avenue, So.  
Naples, Florida 33940  
813-774-0378

Joseph McMullen  
Environmental Health  
Box 1293, City Hall  
Albuquerque, New Mexico 87103  
505-766-7434

Cecilia Metzger  
Columbus Health Department  
181 Washington Blvd.  
Columbus, Ohio 43215

Blanche Parker  
Alachua County Pollution  
825 NW 23rd Avenue  
Suite G  
Gainesville, Florida 32601  
904-373-8509

Fred Richardson  
Community Noise Counselor  
Pasco County Health Department  
610 Forest Avenue  
New Port Richey, Florida 33552  
813-847-6922

Elizabeth Stroster  
401 Colley Avenue  
Norfolk, Virginia  
804-446-4709

Dorothy Potter  
P.O. Box 3342  
West Palm Beach, Florida 33402  
305-833-7243
July 23, 1982

Ms. Sylvia Jones  
United States Environmental Protection Agency  
Office of Noise Abatement and Control  
Crystal Mall Building #2  11th Floor  
1921 Jefferson Davis Highway  
Washington, D.C. 20460

Dear Sylvia:

Enclosed please find the quarterly report for April 1, 1982 to June 30, 1982 for the AARP Noise Counseling Program.

Sincerely,

[Signature]

John Hart  
National Coordinator  
Special Programs

cc: Glenn Northup  
    I. Copas

Attachment - Quarterly Report
AARP COMMUNITY NOISE COUNSELOR PROGRAM

EPA Cooperative Agreement #CS807415-02

QUARTERLY REPORT
4/1/82 - 6/30/82

Submitted by: John E. Hart, National Coordinator
American Association of Retired Persons

Submitted to: Sylvia Jones, Program Officer
U.S. EPA
AARP COMMUNITY NOISE COUNSELOR PROGRAM

QUARTERLY REPORT

PROGRAM ADMINISTRATION

The Florida Field Assistant is continuing to monitor the Noise Counselors' activities in that state. He has attended both state and local meetings concerning the Noise Program in Florida. He maintains frequent telephone contacts and has instituted a newsletter which informs everyone of the interesting and noteworthy activities of all the Florida counselors on a monthly basis. He is also available to assist any Florida counselor whenever necessary.

The Program Coordinator spent most of April and May finalizing a workbook for the training of volunteers. She resigned her position during the month of May.

During the quarter, meetings were held at the AARP Volunteers Programs Department to initiate an all volunteer program for Community Noise. The Program Department plans to develop a consumer workbook, and a "how to" volunteer package for use in their communities. This proposed project will allow for a continuation of counselor activities on a volunteer basis in their community.

The Special Programs staff has assumed the duties of the Program Coordinator through the ending of the project period. The staff will continue to work with the Noise Counselors and provide assistance for the AARP Program development.

COUNSELOR ACTIVITIES

Four more Florida Noise Counselors are now certified to make official sound level meter readings which are acceptable in court. They were certified at a training session at the Center for Research and Education for Environmental Occupations (TREE), University of Florida at Gainesville.

The Community Noise Counselor in Rhode Island has continued to present programs to school children all around the state. He has instructed over 15,000 students on the hazardous effects of noise. He has included, as a part of his presentation, activities which school children can participate in to make their world a quieter place in which to live.
The Community Noise Counselor in Norfolk, Virginia has designed and implemented an attitude noise survey for that city. A Special Programs staff person assisted the counselor in presenting a training session for Title V enrollees in conducting the actual interviews. The survey is now nearly half completed. The final results will be used by the Noise Officer for that city to assist him in his efforts to obtain a noise ordinance for the City of Norfolk.

The Noise Counselor in Phoenix, Arizona has been heavily involved in preparing and presenting Noise Seminars and Workshops for local officials.

Many Counselors have continued to disseminate information regarding noise through local health fairs and other public functions by maintaining noise booths whenever possible.

STATISTICAL RESULTS

Incoming Calls: Phone: 797  Letters: 130  Other: 43

Questions and Information Requests: 451

Complaints handled: 408

Self-Initiated Contacts: Phone 389  Letters: 180  Other: 115

Presentations: 161 to approximately 4,700 persons

Special Events:  
- Health Fairs: 4
- Exhibitions: 1
- Festivals: 1
- Noise Seminars: 1
- Noise Workshops: 1
- Attitudinal Noise Survey: 1
April 21, 1982

Ms. Sylvia Jones
United States Environmental Protection Agency
Office of Noise Abatement and Control
Crystal Mall Building #2 11th Floor
1921 Jefferson Davis Highway
Washington, D.C. 20460

Dear Sylvia:

Enclosed please find the quarterly report for January 1, 1982 to March 31, 1982 for the NRTA-AARP Noise Counseling Program.

Sincerely,

John Hart
National Coordinator
Special Programs

JH/jem

ccs: G. Northup
I. Copes

Attachment - Quarterly Report
Quarterly
NRTA-AARP COMMUNITY NOISE COUNSELOR PROGRAM

QUARTERLY REPORT
01/01/81 - 03/31/82

PROGRAM ADMINISTRATION

The Florida Field Assistant is now handling most of the routine site visits in that state. During this time period he carried out all but one such visit. He is also continuing the monthly newsletter covering information about each site and any information he has from the National or State Noise Programs. He communicated with each of the counselors frequently by phone and has helped them with questions they would otherwise not have had a chance to discuss. Very often this will clarify options possible for the solving of problems.

The Program Coordinator took part in a program in the state of Washington. This was a multi-faceted event with the symphony, the local humanities organization and the local Retired Teachers Association providing many special events in a 3-week period. This was in the Tri-City area of Kennewick, Pasco and Richland and the mayors from each of these cities signed a proclamation declaring the first week as "Sound Awareness Week." The Retired Teachers Association hosted a luncheon which was very well attended. The Program Coordinator was a speaker at the luncheon and the mood of the audience seemed to show a real interest in the many problems of noise and the need of educating others.

Another event during the Program Coordinator's visit was a meeting with teachers from these three cities. Since that time, we have already heard from two of the teachers in attendance.

We were also able to provide a display, with brochures people could pick up, in the Science Center. This is located in the Federal building, and is a large and well-done exhibit area that is very popular and can boast of many attending this daily.
Much of the Program Coordinator's time was spent in Washington this quarter. Most of her time was devoted to researching, designing and putting together a unit that can be used by volunteers.

COUNSELOR ACTIVITIES

The National Highway Institute on Traffic held a conference in Las Vegas during one week in February. This was an in-depth training session in the use of various equipment in vehicular surveys, also addressing methods and different types of the vehicular survey.

The Community Noise Counselor in Fayetteville, AR has worked with residents around the small municipal airport for several months. She has also worked closely with city officials to reach a compromise with as few hard feelings as possible. A grant was received from FAA and through this, outside consultants were brought in for noise measurements and recommendations. The consultant asked the noise counselor to help take the readings and assist him in the study, which she did to the compilation of data. She felt she had learned a lot, and he was impressed and pleased with her ability.

The Community Noise Counselor in Gainesville has been assisting the University of Florida's TREEO Center and the State of Florida's Department of Environmental Regulation in the initial arrangements for a program being held in April. This is a certification program for Community Noise Control Officers. The course will be a technician training institute on the technical aspects of noise monitoring and will include a certification exam. Along with the Gainesville Counselor, the Florida State Assistant, although he has already received certification in the state, will be attending not only for re-certification, but also provide assistance in any way necessary to other counselors attending. Other counselors attending will be from Jacksonville, Pensacola, and Naples.
## STATISTICAL RESULTS

### Incoming Calls:

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<tr>
<td>Letter</td>
<td>102</td>
</tr>
<tr>
<td>Other</td>
<td>42</td>
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### Questions and Information Requests: 542

### Complaints Handled: 603

### Self-Initiated Contacts:

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<tr>
<td>Letter</td>
<td>157</td>
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<tr>
<td>Other</td>
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### Presentations: 226 to approximately 8200 persons

### Special Events Participation:

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<tr>
<td>Job Marts</td>
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<tr>
<td>Exhibitions</td>
<td>2</td>
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<tr>
<td>Sr. Citizen Showcase</td>
<td>1</td>
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<tr>
<td>Science Fair Judge</td>
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</tr>
<tr>
<td>Walls</td>
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</table>
January 25, 1982

Ms. Sylvia Jones
United States Environmental Protection Agency
Office of Noise Abatement and Control
Crystal Mall Building #2 11th Floor
1921 Jefferson Davis Highway
Washington, D.C. 20460

Dear Sylvia:

Enclosed please find the quarterly report for October 1, 1981 to December 31, 1981 for the NRTA-AARP Noise Counseling Program.

Sincerely,

John Hart
National Coordinator
Special Programs

JH/mf

ccs: G. Northup
     I. Copes

Attachment - Quarterly Report

File Quarterly Reports
NRDA-AARP COMMUNITY NOISE COUNSELOR PROGRAM

EPA Cooperative Agreement #CS807416-02

QUARTERLY REPORT
10/1/81 - 12/31/81

Submitted by: Linda Scott, Program Coordinator
National Retired Teachers Association-
American Association of Retired Persons

Submitted to: Sylvia Jones, Program Officer
NRDA-AARP COMMUNITY NOISE COUNSELOR PROGRAM

QUARTERLY REPORT

10/1/81 - 12/31/81

PROGRAM ADMINISTRATION

Two meetings, one held by E.P.A. Office of Noise Abatement and Control, and the other by the National Association of Noise Control Officials, were held in Washington, D.C. in October. The Program Coordinator attended both to maintain an awareness of what is going on in the field of Noise abatement, as well as establishing new contacts and re-establishing others. The general feeling was one of helping each other in order to allow viable noise programs to continue.

During this quarter we lost six Community Noise Counselors through the country. The reasons were varied, but the general change of emphasis on noise control was a factor in most of them. The Program Coordinator assisted in the site closure in some of these, the others were small enough for the Counselor to simply return their equipment and supplies by shipping.

The Program Coordinator made eight routine site monitoring visits this quarter. The Florida Field Assistant accompanied her on four of these visits to make sure his duties were clearly understood.

Visits were also made by the Program Coordinator, accompanied by the Florida Field Assistant to Tallahassee and Fort Walton Beach, Florida, so he would have the opportunity to meet State officials and NACCO personnel. This gave him an opportunity to understand the resources available to him as well as development of good working relationships.

Another member of the Special Programs staff met with three Community Noise Counselors, including the two newest. This meeting was to introduce them and give more in-depth training for their specific region.

\*· \* Signature Block

President NATA
Chief AARP
Executive Director
The Program Coordinator spent one week at the SCSEP Project Directors annual conference in Miami, Florida.

A visit was made by the Program Coordinator to the regional AARP office to discuss volunteer program possibilities.

Three weeks including the week of the noise meetings discussed above, were spent by the Program Coordinator in Washington on routine program administration.

COUNSELOR ACTIVITIES

This quarter is always slow, with the two holidays, and this shows in the statistics. It is interesting to note however, the one statistic that increased significantly was the number of presentations and the number of people to hear them. This appears to be mainly due to the increased number of schools to request presentations from Community Noise Counselors.

Most of the counselors took advantage of this slow period to distribute information in places they had not previously been to, and check other places to make sure there was an adequate supply.

The Community Noise Counselors reported helping six college students on school projects during this quarter.

Our counselor in St. Petersburg reports that since holding a "Barking Dog Clinic" in January, 1981 through October, 1981, he has received 314 complaints that he can relate specifically to that clinic.

The Fayetteville counselor worked with the Department of Public Safety who has jurisdiction for university problems. They developed a plan prior to the fall semester to take sound level readings and explain the problems of noise, and how they might be avoided to several university groups, especially to fraternities. They felt this was very successful, much improved from previous years.

One of our Community Noise Counselors from the Santa Barbara-Galeta area was appointed to represent the Goleta Chamber of Commerce and the Citizens Committee on Noise Abatement in the Santa Barbara Airport Noise Abatement Committee.

Statistics for media coverage cannot be given in a meaningful manner, so they have been excluded from this report. The reason we feel these are not valid is that a talk show or a PSA or a newspaper article, as well as other means of the media, may be a one-time occurrence or may be shown many times. We know there is a lot, but too many to even estimate.
STATISTICAL RESULTS

Incoming Calls
Phone: 520
Letter: 94
Other: 49

Questions and Information Requests: 426
Complaints Handled: 259

Self-Initiated Contacts
Phone: 383
Letter: 342
Other: 111

Presentations: 252 to more than 10,000 persons

Special Events Participation
State Fairs 2
Health Fairs 3
Library Displays 2
Vehicular Survey 1

REGIONAL NOISE SEE STAFF

The Senior Environmental Employment Staff spent this quarter on a phasing-out program. This is now complete and only Region VII will continue a limited noise program budgeted by that region.

EVALUATION

The placement of a Field Assistant in Florida appears to be working out quite well. The Florida Community Noise Counselors appear comfortable with him in communication and requesting his assistance. The newsletter he originated keeps them aware of other activities in the state, and definitely seems to be a morale booster. He seems at ease in this position, and able to sort out what he can handle and what to refer to the Program Coordinator, keeping her informed frequently of all activities.

We are concentrating more of our energy and efforts in our stronger sites, consequently, we do not plan to fill vacant positions when they occur in many of our areas.

Our current counselors are working at a high level with the extensive roles they must fill within their job scope. Their morale is high, and they are doing an excellent job.
October 26, 1981

Ms. Sylvia Jones
United States Environmental Protection Agency
Office of Noise Abatement and Control
Crystal Mall Building #2, 11th Floor
1921 Jefferson Davis Highway
Washington, D.C. 20460

Dear Sylvia:

Enclosed please find the quarterly report for July 1, 1981 to September 30, 1981 for the NRRA-AARP Noise Counseling Program.

Sincerely,

John Hart
National Coordinator
Special Programs

OES: Glenn Northup
    I. Copes

Attachment: Quarterly Report

File: Quarterly
NRDA-AARP COMMUNITY NOISE COUNSELOR PROGRAM

EPA Cooperative Agreement #CS807416-02

QUARTERLY REPORT
7/1/81 - 9/30/81

Submitted by: Linda Scott, Program Coordinator
National Retired Teachers Association-
American Association of Retired Persons

Submitted to: Sylvia Jones - Program Officer
PROGRAM ADMINISTRATION

One new Community Noise Counselor was hired during this quarter. Prior to his hiring, he had spent approximately two months working with a community conducting a physical noise survey, hoping to pass a noise ordinance in the near future. He was responsible for collecting much of the data and assisting in the following compilation. A Community Noise Counselor has been in the same geographic area since the beginning of this program, but had generated so much activity it was felt the area was large enough to split and be even more effective. This seemed especially advantageous to our program, since the new counselor had shown ability and interest at the time of the survey.

With a rigorous thrust toward advancing the volunteer segment of the program, a 3 day workshop was held in New Orleans in September. The Program Coordinator, two other persons from the Special Programs staff, and five Community Noise Counselors who had substantial experience in some form of dealing with volunteers were in attendance. We had an excellent group working very hard those few days, and accomplished what we believe to be the backbone of the volunteer program. The raw material produced in that meeting will be drafted into a format suggested by the group, then we expect a critical review and testing by the counselors. We expect the draft version will be complete during the next quarter, with some testing started.

During this quarter, the Program Coordinator made ten routine monitoring site visits. In two of these, the Florida Field Assistant accompanied her in "on the job training" so he can better understand what is expected of him. Another member of the Special Programs Staff made an additional three routine site visits.

The Florida Field Assistant made an additional site visit this quarter. He has also initiated a monthly newsletter for the Florida Community Noise Counselors that is well accepted.
Two individual training sessions were held, one for a counselor hired toward the end of the last quarter, and another for our newly hired counselor. The two were also brought together along with the established Community Noise Counselor for further orientation and better understanding of their own duties. This was possible since the geographical distance was not far, and was desirable to have the feeling of a group and not just an isolated worker.

The Noise Abatement worker assigned to Region I Environmental Protection Office was responsible for a one day seminar in September. A Special Program Staff person and one of the new counselors were able to attend.

Also in Region I, a meeting was held with everyone cooperating in establishing goals, boundaries, and coordination of activities in the areas of our counselors and this appears to have cleared up any misconceptions and plans developed for ongoing communications.

During this quarter, the Program Coordinator attended the National Urban League's Counselor Training session. She presented them with information about the Community Noise Counselor Program, both in general and specific tasks being carried out. There was opportunity for discussion with several of the counselors, some of whom had been in contact with one or more of the NRRA/AARP counselors; they seemed appreciative of the response.

Three weeks of this quarter were spent in Washington by the Program Coordinator mainly working on administrative matters of the program.

COUNSELOR ACTIVITIES

With this being the time for many fairs to take place both local and state, several of the Community Noise Counselors were able to have a booth or share one, and distribute a lot of information. The counselor from Columbus, Ohio maintained such a booth at their State Fair and decided to keep track of the number of people she personally talked to during that time. She came up with a figure of 2,154 during ten days.

The Fayetteville Counselor learned that police officers ran into difficulty in trying to enforce their ordinance because the zoning, and consequently the decibel levels, were confusing in the geographic layout of the city. She obtained a large map of the city and with the ordinance, color coded the map for all the enforcement areas. The police chief was so happy he had it framed - and now when there is a question, the officer can radio in to the station, give his location to the person on duty who checks the map, and immediately give the correct information.

The Community Noise Counselor in Dubuque made a visit to the Police Chief of that city while the Program Coordinator was there. In the discussion, the Chief stated he felt she had done a very good job of developing awareness there, and the relationship between the police and she was very positive. The Police Chief and counselor both felt the city actually was quieter on the whole than the year before, with the Chief attributing this to better enforcement because of the awareness level. To check it out, he pulled out his records of Vehicle Noise Citations discovering 539 citations in the first six months of 1981 versus 300 citations during that same time a year earlier.
Two Community Noise Counselors in Santa Barbara were accepted in the Noise Enforcement Training Session given by the State of California. Both attended, passed the course, and now have certificates stating this.

Another activity of interest from the counselor in Fayetteville is her "bureaucrat" success. When she first became a counselor, there had been a lawsuit filed against the city because of noise problems around the airport. The counselor had contact with all involved and was able to get them together and at least work on the problems. They now have had several meetings and are discussing any method of attaining an acceptable solution.

In Florida, the Pinellas County Budget Manager wanted to cut the noise ordinance from the books. Our St. Petersburg counselor gave the problem to twelve volunteers who called and wrote, consequently, the ordinance was not rescinded.

The Phoenix counselor has been charged with developing an Arizona Noise Coordinating Council. He will be working with three major areas in the state and they plan to meet on a quarterly basis.

The counselor in Salem coordinated and trained 13 CETA workers to do both an attitudinal and physical surveys in Salem. He then assisted in analyzing that data. He also assisted in the initial portion of training for a physical survey carried out in another city nearby.

Many of the counselors are making the necessary preliminary steps to get into the schools again this year. Several have already received affirmative responses. Along these same lines, many counselors receive requests for assistance in papers, research, or school projects from students starting in 7th or 8th grades, all the way up to graduate students and teachers.

STATISTICAL RESULTS

Incoming Calls: Phone: 1053 Letter: 165 Other: 182
Questions and Information Requests: 677
Complaints Handled: 551
Self Initiated Contacts: Phone: 815 Letter: 521 Other: 193
Presentations: 138 to more than 2,500 persons

Special Event Participation
1. Open House at Radio Station
2. Noise Surveys
3. Conferences - Seminars
4. Fairs
5. Displays

Media Coverage
TV 24 Newsletters 14+
Radio 40 Posters - Too many to even estimate
Newspaper 14
REGIONAL NOISE SEE STAFF

With the elimination of the Regional Noise Offices, the job requirements of the Senior Environmental Employment staff were changed to facilitate a smoother transition. At the beginning of the quarter, six persons in five regions were still working. One of these positions ended September 30, 1981 leaving coverage in Regions I, V, VII, and X. It is expected that these will continue to January 6, 1982 to wind up the obligations of each noise office.

During this quarter, the staff in each region prioritized the needs of that region and carried out with the Environmental Protection Agency Noise personnel workshops, development of literature, equipment reassignment, and other duties to meet their obligations. The Senior Environmental Employment staff will continue these same duties for the remainder of the year.

EVALUATION

At this time, all of the Noise Abatement personnel are well trained and working at a high level of complexity in all the many different types of job possibilities. They continue to be well accepted in their areas and are finding the communities have great confidence in being of help to them.

The workshop held in New Orleans for development of the volunteer program was believed by all attending to be quite valuable. Those involved in the workshop had not only worked with volunteers, but had also studied other volunteer programs and written material about development and maintenance of such programs. It is hoped that specific areas such as education, problem solving, and maturation of ombudsman role can be studied the same way for completion of the program.
November 18, 1982

Project Officer
United States Environmental Protection Agency
Office of Noise Abatement and Control
Crystal Mall Building #2 11th Floor
1921 Jefferson Davis Highway
Washington, D.C. 20460

Dear Project Officer:

Enclosed please find the quarterly report for July 1, 1982 through September 30, 1982, for the AARP Noise Counseling Program.

Sincerely,

[Signature]

John Hart
National Coordinator
Special Programs

ccs: G. Northup
I. Copes

Attachment - Quarterly Report
QUARTERLY REPORT
NOISE PROGRAM - 7/1/82 - 9/30/82

PROGRAM ADMINISTRATION

The Florida Field Assistant recruited and trained two new Title V Noise Counselors during this quarter. One in Tampa, and one in Orlando. He has continued his monitoring activities of all the Florida Noise Counselors, and also carried out the printing and distribution of a Noise Counselor Newsletter.

A final noise seminar for Noise Counselors was held during the week of August 23, 1982 in St. Petersburg, Florida. This training seminar was hosted by the Environmental Protection Agency. All the Noise Counselors were invited by EPA to attend and take part in panel discussions on various topics regarding noise pollution and noise abatement.

During this quarter, planning activities were continued on the transition of the noise program to a volunteer program administered under the Program Department of AARP.

The Special Programs staff continued to provide assistance and guidance to the Noise Counselors.

COUNSELOR ACTIVITIES

The Community Noise Counselor from Albuquerque, New Mexico, attended a noise training session held at Asilomar, California.

The Community Noise Counselor from Phoenix, Arizona, conducted a Noise seminar for governmental officials during this quarter which was very well attended.

Several of the Noise Counselors maintained noise booths at shopping malls and health fairs. Also, one large noise booth was maintained for several days at the Ohio State Fair.

The Noise Counselors have continued to work on presentations for school children and several have volunteered to carry out this presentation in the fall.
The Community Noise Counselor from Norfolk, Virginia, completed her attitudinal survey for the city of Norfolk. Approximately 700 interviews were conducted. An evaluation of the results of this survey is currently being conducted by the main office in Norfolk.

STATISTICAL RESULTS

Incoming calls: phone: 729
letters: 132
other: 941

Questions and information requests: 1,254

Complaints handled: 287

Self-initiated contacts: phone: 392
letters: 238
other: 72

Presentations: 15 to approximately 782 persons.

Special Events:
- Heart fair: 3
- Exhibitions: 1
- Festivals: 1
- Noise Seminars: 2
- Noise Workshop: 1

Media Coverage:
- T.V.: 15
- Radio: 8
- Posters: 30
- Newspaper: 2
- Newsletters: 135
- Other: 1916 (distributed materials)
SOUND ADVICE

A Volunteer Organizer's Guide

Developed By:

Special Events Section
Program Department
American Association of Retired Persons

Under a grant from the
U. S. Environmental Protection Agency

FF3125(483)
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INTRODUCTION

In neighborhoods across the country, people are realizing that noise is a serious matter, and that practical steps are available to reduce noise.

Many communities have been successful in reducing or eliminating noise problems. The success is usually the result of many individuals and groups working together. As an organizer of a noise abatement program, you can help to bring interested persons together to control or reduce noise. "Sound Advice" is a noise abatement program which can help to make your community a healthier and better place to live.

"Sound Advice" will focus on the use of older persons as volunteers in the noise abatement program. Older Americans are an excellent resource for the program. Many older persons will have the time and interest in the community that are required for volunteer noise counselors. Older persons will also have various skills from past work or volunteer activities which can be put to use in the campaign against noise.

This guide will help concerned individuals who want to organize a noise abatement program in their community. Suggestions are given for establishing a volunteer noise counselor program and for recruiting and working with volunteers. Also included are samples of organizational materials and resource materials for use in establishing your program.

-1-
THE EFFECTS OF NOISE

Noise can be defined as any loud or disagreeable sound. We are confronted with noise daily in our working and living situations. Sounds from trucks, motorcycles, airplanes, lawnmowers and appliances are some of the noises that are part of modern life.

In addition to being a nuisance, noise can be a serious health hazard. It can cause irreversible hearing loss as well as physical and psychological stress.

Hearing Loss. Of the many health hazards related to noise, hearing loss is the most clearly observable. Noise loud enough to cause hearing loss is common. The places where we live, work, and play are filled with potentially harmful levels of noise. The Environmental Protection Agency (EPA) estimates that over twenty-million Americans are exposed daily to noise that is permanently damaging to their hearing.

Hearing loss is usually gradual. People become aware of the damage when they start to miss occasional words in general conversation and have difficulty understanding telephone conversations. Unfortunately, there is no cure for this kind of hearing damage. Hearing aids do not repair noise-damaged hearing, although they can be of limited help to some people.

People with partial deafness from exposure to noise do not necessarily live in a quieter world. Many sounds they
hear are distorted in volume, pitch, or clarity. Consonants of speech, especially high frequency sounds such as "s" and "ch" are often lost or indistinguishable from other sounds. Speech frequently seems garbled, and is difficult to understand. When exposed to a very loud noise, people with partial hearing loss may experience discomfort or pain. They also frequently suffer from tinnitus--irritating ringing or roaring in the head.

**Stress.** Many of us know the irritation and annoyance of noise we cannot control. Our bodies automatically react to sudden or loud sounds as a defense for possibly dangerous or harmful situations. Generally, blood pressure rises, heart rate and breathing speed up, muscles tense, hormones are released into the blood stream, and perspiration increases.

Frequent or prolonged exposure to loud noise keeps our bodies in this state of tension and can lead to stress related ailments. Research has linked noise with the development or aggravation of heart and circulatory diseases. Noise in the workplace may cause the listener to develop ulcers. Workers in certain noisy industries have ulcers at a rate five times that of the general population. Other research has shown that noise may be a factor in lower resistance to disease and infection.

**Sleep Disruption.** Sleep is a restorative time of life, and a good night's sleep is probably crucial to good health.
But everyday experience suggests that noise interferes with our sleep. Noise can make it difficult to fall asleep, it can wake us, and it can cause shifts from deeper to lighter sleep stages.

Human response to noise before and during sleep varies widely among age groups. The elderly and the sick are particularly sensitive to disruptive noise. Compared to young people, the elderly are more easily awakened by noise and, once awake, have more difficulty returning to sleep. As a group, the elderly require special protection from the noises that interfere with their sleep.

Other Effects. Noise in school and in the home can affect children's learning. In a school located near an elevated railroad track, students whose classrooms faced the track did significantly worse on reading tests than did similar students whose classrooms were further away. Some school districts have built new schools in quieter neighborhoods to alleviate this serious concern.

The effects of noise are also seen in the workplace. Workers in noisy environments are more likely to be tense, irritable and upset. Their efficiency may be hampered by exhaustion, absentmindedness, mental strain and absenteeism.
NOISE LEVELS

Decibels, often abbreviated as "dB" are measures of the intensity of sound. Typically people are exposed to decibels ranging from 0, the point where hearing starts, to 140, which represents a very loud sound. Noise can begin to harm hearing at about 70 decibels, particularly when constant exposure occurs. Some common examples of sounds and their measurement are shown on the chart below.

(Insert noise level chart)
VOLUNTEER ACTIVITIES

Noise counselors can contribute to the welfare of the community by engaging in a variety of noise-reducing activities. For instance, they might help by referring people with noise complaints to the appropriate authorities in the community. Or they might make presentations about noise to local community groups. They might also work with local groups to conduct hearing tests. These are just a few of the ways noise counselors can do something about noise in the community. These and other noise counselor activities are explained in more detail below. The volunteer noise program can choose those activities best suited to the particular needs of the community.

School Programs. One or more volunteer counselors may wish to undertake educating students to noise and its possible effects. Teachers and school principals will often agree to having a noise counselor present a lesson about noise to their classes.

A series of courses on noise has been developed by the Environmental Protection Agency for inclusion in school curricula. An excerpt from Sounds Alive, for children from kindergarten through sixth grade, is included with this guide book. An excerpt from Preparing for a Quieter Tomorrow, for grades seven through twelve, is included in Appendix A. Counselors might also choose to develop their own materials for class presentations.
Fairs. Many communities have county, state or health fairs which are open to everyone in the community. Noise counselors staffing a fair booth can be very effective in educating attendees about noise and its effects. Distributing brief educational materials is recommended. A brief explanation of the health effects of noise, suitable for photocopying, is given in Appendix B. Fairs also provide an opportunity to recruit volunteers for the noise abatement program.

Hearing Tests. Another valuable project is making arrangements for hearing tests for community residents. In addition to helping persons identify hearing problems, the testing project can also help raise the level of awareness about hearing and noise effects throughout the community.

The local school system may be able to conduct student hearing tests by the school nurse or by an audiologist. Many communities have free or low-cost speech and hearing clinics, some areas have mobile diagnostic units. Arrangements might be made for these clinics to do testing at senior centers, nursing homes, fairs, or at community group meetings. Or noise counselors might volunteer to transport interested persons to the clinic for a hearing test.
Quiet Day. Some noise abatement groups have successfully organized a community-wide event which emphasizes the importance of noise control to a large number of residents. A "Quiet Day" in your city or town can help to build interest in your program and to provide information and education to the general public. There are many activities which can be incorporated into a "Quiet Day" to help achieve your goals, for example:

-- free speech and hearing tests
-- kite flying
-- frisbee competition
-- free muffler tests for motorcycles and cars
-- silent films
-- mime show
-- magic show
-- nature walks
-- demonstration of sign language
-- hot air balloon rides
-- hang glider demonstration
Community Presentations. There are a large number of community groups that invite speakers to their meetings. These groups are often looking for new and interesting topics, and you might approach them about making a presentation on noise. Addressing community groups is an excellent way to disseminate information about noise and to enlist interested persons in your efforts for noise control.

Counselors might start their presentation by showing a film or a slide-tape. This can be followed by a general question-and-answer session, or a description of a specific community noise project. An introductory level slide-tape program, The George Show, was developed by EPA and is available with this kit. Other slide or film programs may be available from the community library.

Barking Dogs. A common noise complaint in many communities is barking dogs. The Humane Society of the United States and other groups have developed an effective training method to control most dogs' barking. A copy of the dog training information is given in Appendix C. This copy of "Quiet, Man's Best Friend" is suitable for photocopying.

Noise counselors may be able to cooperate with the local S.P.C.A. or local veterinarians to promote this training. Distributing copies of the information to pet stores or veterinarian's offices or at special sessions for training dog owners can help to cut down on excessive barking.
Changes in the Home. There are many sounds in our homes, and several of these can combine to make the home a very noisy place. Fortunately, there are some simple ways to reduce noise in the home. Quieting noisy appliances, fixing dripping faucets, and reducing the noise from a neighbor's apartment are just a few of the changes which can be made.

Noise counselors can advise local residents about some techniques to decrease noise. A list of possible solutions is provided in Appendix D as a starting place for advice to community residents. This list is suitable for photocopying, and can be distributed during group presentations, at county or health fairs, or in schools.
Referral Service. The volunteers might gather information about community organizations responsible for certain noise problems which can be used to develop a referral service. Volunteers can refer callers with complaints to the individual or agency best able to help them. While supplying a valuable service to the community, this program also acts to inform the noise counselors about the most common noise complaints.

It is best to use a phone in an office or public place rather than someone's home. Various volunteers can staff the phone on a regular schedule, and the phone number can be well publicized.
Noise Ordinances. A growing number of local jurisdictions have enacted noise control ordinances. Many communities have developed legislation that sets specific noise decibel levels and establishes the agencies responsible for enforcement.

Some model community noise control ordinances are available. These model ordinances may help in developing an appropriate ordinance for your community. Volunteers can contact some of the agencies in Appendix E for copies of various models.

Public Hearings. State, county, and municipal authorities hold regular hearings on public issues. When the issue is noise, a counselor may want to give testimony and answer questions. Keep in mind also that hearings on building codes, zoning ordinances, and even recreation facilities can also involve the noise situation. Find out what hearings are scheduled in your county or municipal government and try to have community concerns about noise represented.
THE VOLUNTEER ORGANIZER

The volunteer organizer is a person aware of the serious nature of noise, and commits to taking action to reduce it. The most important characteristics of the volunteer organizer are AWARENESS of the problem and COMMITMENT to action. The organizer does not need to be a noise expert to organize a volunteer noise abatement program in the community.

The role of the organizer entails recruiting, motivating and helping to train volunteers to act as counselors. Together they will be involved in studying the types of activities appropriate for volunteer noise counselors, and will help the volunteers carry out these activities in the community. The volunteer organizer will coordinate and guide volunteer activities to meet the program goal of noise abatement in the community.

RESOURCES

Noise counselors in the "Sound Advice" program will want to gather as much information about noise as possible. It will help to know what's being done about noise in your community, and who's doing it. Volunteer activities can then be developed to supplement present community efforts, not duplicate them.

The resource list will include names, addresses and telephone numbers of various persons and organizations involved in noise enforcement and legislation. These individuals can act as resources for technical information, can share education-

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al materials, and may be interested in working actively with the volunteer noise counselors.

Some agencies which may be included on the resource list are:

- local police or sheriff's department
- Mayor's office
- airport control tower and planning officer
- health department
- Humane Society
- parks and recreation department
- port authority
- various industry complaint departments
- transportation systems
- refuse collection agencies
- public works department
- planning and zoning authorities
- office in charge of emergency vehicle sirens
- local representatives at each level of government

Other organizations or agencies which can act as resources include:

ACOUSTICAL SOCIETY OF AMERICA (ASA). This group has regional coordinators who can act as technical resources to noise counselors. The regional coordinators, who are members of the Coordinating Committee on Environmental Acoustics, can answer technical questions on sound, sound measurement, and noise. To find the coordinator in your area, contact:

The Coordinating Committee on Environmental Acoustics
Acoustical Society of America
335 E. 45th Street
New York, New York 10017
(212) 661-9404 ext. 564
AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION. This national organization is working toward preventing noise-induced hearing impairment and reducing environmental noise. The local office may be able to provide technical information or program support. To find the office near you, contact:

American Speech-Language-Hearing Association
10801 Rockville Pike
Rockville, Maryland 20852
(301) 897-5700

DEPARTMENT OF DEFENSE (DOD). The DOD has a program to address the problem of noise generated by military airfields. The objectives of the program are the protection of the integrity of military operations at DOD bases and the protection of the safety, health and welfare of affected public. The program involves technically assisting communities in land use planning and controls that will ensure that local development is compatible with the noise levels generated by the airfield.

DEPARTMENT OF LABOR/ OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). The Department of Labor is concerned with noise as an on-the-job hazard and deals with it through OSHA. OSHA programs include the development of noise exposure standards for workers; enforcement of those standards by inspections; and training, education, and information programs to assist employers, employees, and others in complying with standards.
ENVIRONMENTAL PROTECTION AGENCY (EPA). This agency has in the past been actively involved with noise education and noise abatement programs at the local, state and federal levels. However, because of funding cut-backs, most EPA regional offices and the federal office in Washington, D.C. no longer have noise control departments. You may want to contact your regional EPA office (see Appendix F) for advice on sources for assistance in your area.

Approximately half of the states still had a state-wide noise control program as of 1982. These state offices are also included in Appendix F.

FEDERAL AVIATION ADMINISTRATION (FAA). The FAA has a program to reduce noise exposure at civil airports. The objectives of the program are to reduce the noise at the airport boundary to a prescribed level as much as possible and to assist communities in achieving compatible land use for the remaining areas. The FAA encourages citizen participation in the process of noise compatible land use planning.

FEDERAL HIGHWAY ADMINISTRATION (FHWA). The FHWA noise policy addresses noise associated with highway construction and use. The focus of the policy is to consider noise exposure in Federal-aid highway location and design decisions by requiring studies of expected noise levels where the highway will be located.

FHWA also provides for noise reduction on existing Federal-aid highways. This primarily involves the placement of noise barriers at particularly loud locations which present a problem to nearby residents.
NATIONAL ASSOCIATION OF NOISE CONTROL OFFICIALS (NANCO).
NANCO is a non-profit organization dedicated to environmental noise control. The national NANCO office can act as a technical resource on noise legislation, and can refer you to interested persons or agencies in your area. NANCO publishes a monthly newsletter, Vibrations, for its members. A senior associate membership rate is available to interested older persons. For information, contact:

National Association of Noise Control Officials
P. O. Box 2618
Fort Walton Beach, Florida 32549
(904) 243-9129

THE ORGANIZATIONAL MEETING

The first step in organizing a volunteer noise abatement program is to identify community groups or individuals that may be willing to endorse the program and assist in its development. The information for your resource list will be useful in identifying many of the persons to contact for an initial organizational meeting.

The purpose of the organizational meeting is to bring all interested persons together to discuss a volunteer noise abatement program. The meeting will involve a discussion of present noise reducing activities in the community and additional activities that would be appropriate for volunteers.

Initial contact with the interested community groups or individuals should be made either by letter or by telephone.
Emphasize the need for local noise abatement activities, and stress the positive results that might be attained from a community volunteer noise abatement program. Invite interested individuals or a group representative to attend the organizational meeting. Notify the persons of the meeting date a few weeks in advance to accommodate their schedule.

The agenda for the organizational meeting might include:

- introductions: each person introducing themselves, explaining individual or agency interest
- noise control needs in the community
- present community attempts to meet these needs
- possible use of volunteers to help meet these needs
- discussion of initial steps to develop the volunteer network
- establishing a steering committee
- establishing a date and time for the next group meeting

Some people attending the organizational meeting may be interested in actively participating in the development of the volunteer program. These persons can be formed into a steering committee to give continued support and counsel. Others may not be able to commit themselves to ongoing participation, but may act as resource persons or technical advisers in their area of expertise.

Before the next scheduled meeting, contact the persons who
will serve on the steering committee to reinforce the importance of their support and the value of the program. The advisory committee can be of valuable assistance in the next step of the project, the actual recruiting and working with the volunteers.

RECRUITING AND WORKING WITH VOLUNTEERS

Recruiting. Recruiting capable volunteers is one of the most important tasks in the development of a SOUND ADVICE program. Those volunteers will be the backbone of the committee's efforts to educate the community and to reduce noise. Once the steering committee is established, and they have identified some possible volunteer activities, recruitment can begin.

A good way to reach large numbers of potential volunteers is through presentations to civic and community groups. The presentation should include an explanation of the community's noise problems and what volunteer noise counselors can do to help solve them. The slide-tape show "Turning Down the Volumes" is a good introduction to these issues. It runs for approximately 8 minutes and is included with this kit. The volunteer recruiter can then explain noise problems specific to the community and answer questions from the audience.

Local news media can also be helpful in your efforts to recruit volunteers. Small local papers including weekly or bi-weekly papers and newsletters of AARP chapters or senior
centers may be particularly receptive to including information about the SOUND ADVICE program. A sample press release is included in Appendix G.

Local radio stations may be willing to air a short Public Service Announcement (PSA) about the program. Keep the announcement brief, and include the phone number of the volunteer organizer or some other informed person. Some samples are given in Appendix H.

Television stations may use this same type of announcement but they will want accompanying slides, perhaps of the telephone number to contact or other visuals. Find out about their requirements, and whether they will provide necessary visuals.

When recruiting volunteer noise counselors, the following qualifications should be considered:

- Sincere interest in the issue of noise reduction
- Effective speaking skills
- Willingness to commit several hours a month to noise control
- Effective written communication skills

A sample recruitment letter which explains the types of activities for volunteer noise counselors is included in Appendix I. A volunteer information form (Appendix J) can be included with this letter, or can be distributed at group presentations when recruiting volunteers. This form should help the volunteer organizer determine the most appropriate
activities for each volunteer.

There are many community organizations that may be good sources for volunteers. These include:

- Area Agency on Aging
- Senior Centers
- Nutrition Centers
- AARP Chapters
- RTA Units
- Gray Panthers
- Church and Synagogue groups
- Community Service Organizations
- Retired Senior Volunteer Program (RSVP)

**Orientation/Training.** The orientation and training meeting will be the first opportunity to meet with the volunteers as a group. The purpose of the meeting is to explain the noise abatement program, provide the volunteers basic information about noise, and discuss volunteer activities in the community.

Planning for the meeting should begin about two months in advance of the scheduled date. This allows plenty of time to arrange for a meeting room and speakers, and notify the volunteer noise counselors. A volunteer welcome letter (see sample in Appendix K) can be sent to notify the volunteers of the meeting. The steering committee will be valuable help in planning the meeting.

Seek a meeting place that is easily accessible (Appendix L is a checklist for selecting a meeting site). A member of the steering committee might be able to make a meeting room available. A local senior center or nutrition site might be appropriate.
Plan the meeting agenda carefully to include educational sessions with speakers as well as group discussion. Speakers should be limited to 15-20 minutes. Allow plenty of time for questions. Copies of the agenda should be distributed at the start of the meeting. The agenda might include:

1) Review the purpose of the meeting

2) Participants introduce themselves with a brief explanation of their interest in the noise abatement program

3) A viewing of "The George Show", which is an introduction to noise in the community (included in this kit)

4) Educational presentation on the health effects of noise (for handout, see Appendix D)

5) Small group discussion of noise problems in the community

6) Return to large group, set priorities for the noise problems the volunteers want to work on first

7) Group discussion of possible volunteer activities to meet these priorities

Some experts in the field can be recruited to participate in the orientation session, especially to present educational information about noise and its health effects. Members of the steering committee may be qualified for these duties. Local colleges or universities, the local health department, or the local office of the American Speech-Language-Hearing Association may also be good resources.
In addition to this general orientation meeting, some specialized volunteer training may be desirable depending on the kinds of activities being undertaken by the volunteers. Training sessions in public speaking might be necessary for volunteers involved in school programs or community presentations. If some volunteers are to help with a hearing test program, they may want information about the equipment the nurse or audiologist will use.

Several kinds of volunteer activities might require the use of a sound level meter. This instrument is simple to use with proper training. The regional EPA office, the local Speech and Hearing Association, the police department, or the engineering or audiology departments of nearby universities, may loan a sound level meter to the program and provide the necessary training.

Motivating. People volunteer for many reasons, to meet a variety of needs. They might volunteer because of an interest in the activity itself, because of a concern for others, to keep busy, or perhaps to learn something new. To motivate a volunteer to remain interested and committed to the noise program, match the volunteer to a task that meets his or her needs. Finding the right job for the volunteer is the first step in a strong program.

It is important that the volunteer have a clear understanding of the task. Working with the steering committee,
develop job descriptions for the volunteer activities the program will involve. These job descriptions should outline the basic duties and qualifications for a specific job. Some examples are given in Appendix M.

An important way to keep volunteers motivated and active is to involve them in the planning and decision making process of the program. This emphasizes the value of their opinions and experience. As the persons with ongoing duties in the the community, they may be the first to see the need for changes or additions to the program, and can make useful suggestions.

Recognition of the volunteer is also a valuable motivating tool. There are several ways to show your appreciation to the volunteer and to publicly "recognize" his or her contributions. You can offer them new responsibilities as they show themselves capable of advancement, ask them to serve on committees or boards, include their name and picture in an article about the program, or honor them at an awards banquet.

Funding. Since there are no paid staff in the program, expenses can be kept to a minimum. Many program needs can be met by donations of services, rather than cash. Regular or occasional use of a telephone, desk and filing space, typewriter, a copying machine, meeting rooms, and audio-visual equipment are some of the services that could be shared or donated to the program.
The organizations you have already contacted that expressed an interest in noise, or organizations represented on your steering committee may be willing to donate some services. Community or civic groups such as AARP, the Rotary Club, the Chamber of Commerce and many others might adopt SOUND ADVICE as a community service project for the year. In contacting these organizations for donations of money or services, remember to emphasize that reducing noise is a benefit to everyone in the community and that their support can help to make your community a better place to live.
SUMMARY

Noise affects all of us. Almost everywhere we go, we hear noise. But it does not have to be that way. This guide has outlined a program for noise abatement in the community. As a volunteer organizer, you can play an important part in the effort to make your community a quieter place to live.
APPENDIX A

Objective: The purpose of this lesson is to develop an awareness of the adverse effects that excessive noise has on human health and welfare. Through this knowledge, students should become more concerned about protecting themselves from excessive noise exposure.

LECTURE SUMMARY

It has been estimated that over 20 million Americans are working, playing, and living around environmental noise that is dangerously loud. Excessive noise exposure is a well documented cause of permanent, irreversible hearing damage. Generally, the onset of noise-induced hearing loss is gradual. Hearing of high-frequency sounds is affected first. As a result, the individual begins to confuse high-frequency consonant sounds such as “s” and “f” and describes speech as slushy or unclear. As exposure continues, the hearing loss increases and ability to hear lower frequency sounds is also affected. The individual begins to experience greater difficulties in understanding conversational speech. Sometimes a hearing aid will help, however, it cannot in anyway make speech sound normal again. A hearing impaired person often feels isolated from his/her environment because of the problems experienced in trying to communicate, listen to the radio, or participate fully in social gatherings or public meetings.

It is important for students to recognize that not all noise-induced hearing losses are caused by noise exposure in the workplace. In fact, the noise levels associated with many popular hobbies and recreational activities exceed the levels believed to cause hearing damage over a prolonged period of exposure. Therefore, students should be aware of the noisy activities in which they participate and consider protecting themselves both by limiting the length of exposure and using properly fitted earplugs or earmuffs during exposure.

Our bodies respond to noise as a form of stress. Researchers have observed temporary stress reactions to loud noise which include increased blood pressure, dilation of the pupils of the eyes, and changes in heart rhythm and respiratory rate. Since noise is one cause of stress and stress is known to have a wide range of adverse health effects, noise may well contribute to stress related illnesses such as heart disease, high blood pressure, fatigue, and irritability. Researchers are presently involved in numerous studies to learn more about the effects of the interaction of noise with other variables on our bodies.
Noise also results in annoyances which detract from rest and relaxation. Generally, noises which are higher in pitch, intermittent in occurrence and unlocalized are the most annoying. Other factors which influence the degree of annoyance include the location of the noise, the time of day, whether the noise is considered necessary or appropriate, the type of living activities affected, the degree to which fear is associated with the noise, and the individual's overall attitude about his/her environment. The most commonly mentioned noise related annoyances are loss of sleep and interference with communication. Restful sleep is an essential element in the maintenance of good health. Noise affects our sleep by interfering with getting to sleep, waking us up, or causing changes in our sleep cycle. Noise disrupts communication by making it difficult and, sometimes impossible, to converse above the background of noise. We try to compensate by speaking louder, moving closer together, and watching the face and gestures of the speaker. However, as noise levels increase in loudness, it soon becomes impossible to carry on a meaningful conversation. Sometimes loud noise obscures particularly important communications such as warning signals or shouts for help.

It is also known that noise sometimes adversely affects work efficiency, and our social and emotional behavior. Noise also interferes with the educational process. Excessive noise disrupts the development of the language and reading skills which are so vital to a successful educational experience. In addition, noise interrupts and distracts both teacher and students in the classroom, thereby interfering with and prolonging the time required to understand a concept.

In summary, noise does present a significant health problem. Its effects on our hearing ability, its contribution to stress and its probable impacts on sleeping, communication, work efficiency, learning, and social and emotional behaviors should definitely be of concern to us all. It is important that we work with our state, local, and Federal officials in controlling the noises everywhere around us. In addition, as individuals and families we need to be aware of our personal noise environment and protect ourselves from the adverse effects of excessive exposure.
QUESTIONS FOR CLASSROOM DISCUSSION

1. Can you think of situations in which you have had trouble talking to someone else because of noise interference?

2. Do you remember times when friends or family have complained about noise interfering with an activity such as relaxing or studying?

3. Describe some of the effects associated with excessive noise exposure? If you know someone who works in a noise environment, discuss how noise affects them.

4. Do you think you would be bothered by a lot of noise when you are taking an important test or trying to read a good book?

5. Do your parents or neighbors ever complain about noise in your community? What noise sources seem to concern them?

6. Can you think of some economic impacts associated with high noise levels in working or living arrangements?

CLASSROOM EXPERIMENTS AND PROJECTS

1. The most effective way to create an understanding of the adverse effects of excessive noise is to personally experience the situation. If there is a printing company, a mill, or some other noisy industry in your community, arrange a site visit. The students will benefit from learning about the particular industry, while experiencing the noise levels associated with the process. Encourage them to try to communicate while in the noisy environment. It would also be useful to arrange for them to try ear protectors to see how the noise levels are reduced. Also, the students should have the opportunity to talk to workers who have noise induced hearing loss. If possible, hearing tests for some of the students, both before and immediately after the plant tour would demonstrate the adverse effects of noise on the hearing mechanism. Arrangements for the hearing tests might be made through the school health program, or a university, community, or hospital speech and hearing clinic. Check the yellow pages of your telephone directory for a listing of area speech and hearing clinics.

2. Have the students prepare an article for the school newspaper to educate fellow students about the adverse effects of exposure to excessive noise.
3. Have the students prepare an article for the hallway bulletin board or the school or community library to share what they have learned about the health effects of noise.

4. The students could conduct a survey about noise, exploring individual reaction to noise, knowledge about ways to control noise, etc. Through interviewing community residents, the students can obtain information and also give information about what they have learned about noise pollution. The results of the survey could then be condensed into a report about noise in your community. The students might wish to consider transmitting their findings to your local government or writing a letter to the editor of your local paper.

This material was excerpted from a publication from the Environment Protection Agency: "Preparing for a Quieter Tomorrow". It is appropriate for grades seven through twelve.
APPENDIX B
NOISE: A HEALTH HAZARD

Racket, din, clamor, noise. Whatever you want to call it, unwanted sound is America's most widespread nuisance. But noise is more than just a nuisance. It constitutes a real danger to people's health. At home, at work, and at play, noise can produce serious physical and psychological consequences.

Hearing Loss. Noise loud enough to cause hearing loss is virtually everywhere today. 20 million or more Americans are estimated to be exposed daily to noise that is permanently damaging to their hearing.

When hearing loss occurs, it is in most cases gradual. At first there is the loss of occasional words in general conversation and difficulty understanding speech on the telephone. Many sounds are distorted in loudness, pitch, apparent location, or clarity. High frequency sounds such as "s" and "ch," are often lost or indistinguishable from other sounds. Speech frequently seems garbled.

The hard of hearing person faces other problems. Their inability to converse normally makes it difficult for partially deaf people to participate in lectures, meetings, parties, and other public gatherings. For a person with hearing loss, listening to TV, radio, and the telephone—important activities of our lives—is difficult, if not impossible.
Heart Disease. A growing body of evidence strongly suggests a link between exposure to noise and the development and aggravation of a number of heart disease problems. Noise causes stress and the body reacts with increased adrenaline, changes in heart rate, and elevated blood pressure. Some studies have shown that workers in high noise levels had a higher incidence of circulatory problems than did workers in quiet industries. The danger of stress from noise is even greater for those already suffering from heart disease.

Noise and the Unborn. While still in its mother’s womb, the developing child is responsive to sounds in the mother’s environment. Particularly loud noises have been shown to stimulate the fetus directly, causing changes in heart rate. The fetus is also affected by it’s mother’s response to noise, with the physical changes she experiences being transmitted to the fetus. These fetal responses may threaten fetal development, particularly early in the pregnancy.

Special Effects on Children. Good health includes the ability to function mentally as well as physically. Research has shown that children may have learning difficulties because of noisy schools, play areas and homes. Students in classrooms near railroad tracks, airports or other noise sources may learn less than students in quiet classrooms.
Sleep Disruption. Sleep is a restorative time of life, and a good night's sleep is probably crucial to good health. But everyday experiences suggest that noise interferes with our sleep. Noise can make it difficult to fall asleep, it can wake us, and it can cause shifts from deeper to lighter sleep stages.

Human response to noise during sleep varies widely among age groups. The elderly and the sick are particularly sensitive to disruptive noise. Compared to young people, the elderly are more easily awakened by noise and, once awake, have more difficulty returning to sleep. As a group, the elderly require special protection from the noise that interferes with their sleep.

A Final Word. Except for the serious problem of hearing loss, there is no human illness known to be directly caused by noise. But in dozens of studies, noise has been identified as an important cause of physical and psychological stress, and stress has been directly linked with many of our most common health problems.

This material was excerpted from a publication from the Environmental Protection Agency: "Noise: A Health Hazard".
APPENDIX C

"QUIET : MAN’S BEST FRIEND

GOOD DOG OR NUISANCE?

Determine for yourself whether your dog is a good companion, a good watchdog, or a neighborhood nuisance, by answering the following:

- Does your dog bark excessively:
  - When he is left alone and lonesome?
  - When another dog barks?
  - When the kids next door come out to play?
  - When he's outside and wants to get in the house?
  - When the neighbors leave or return home?
  - When you come home?
  - At garbage collectors, passing cars?
  - When he hears a siren?

If your answer is "yes" to any one of these, your dog could be a neighborhood noise nuisance.

Dogs bark for many reasons: when other dogs bark; when they are generally excited or frustrated; or when a stranger intrudes on their territory.

Excessive barking can be extremely annoying to neighbors as well as to those who have to live with a noisy dog. A constant barker is more likely to be ignored if there is an intruder, since he seems to "cry wolf" all the time.

One of the most common public complaints is about neighbors' barking dogs. Is your dog an excessive barker and a potential public nuisance? The National League of Cities, together with the Humane Society of the United States, would like to pass on an effective training method to responsible owners.

WATER TRAINING METHOD

The WATER TRAINING METHOD works for almost all dogs.

If possible, consider going to a reputable local obedience training school. An obedience trained dog will stop barking on command, and knowing obedience signals will help you control your dog in other situations and make life happier for all.

Consider the times when your dog's barking is a nuisance. If it's when he's left alone all day, help his loneliness by leaving the radio on. If your dog is an outside pet, allowing it more freedom or movement in a fenced yard or pen may quiet its barking. If practical, you might consider a companion pet. Be sure you have plenty of toys available for amusement.

Don't make a big thing out of leaving or returning home. Overexcited dogs are more likely to bark and yip:

- First training rule is to be consistent and persistent. You can’t expect a dog to learn if barking for the wrong reason is corrected one time and not the next.
- Second, be ready for an immediate response. Have ready a plant mister filled with water.
- Say "QUIET DOG" (or whatever is name is) and give one or two squirts of water at the dog while it is barking. He will stop at once. If you want until he stops, barking he may confuse him.
- If the dog moves away, repeat saying "QUIET" as you go to him and give one more squirt of water at him. Repeat each time he barks needlessly.
- Usually a day or two of training is enough if you are consistent. (5 to 10 water treatments)
- Remember to reassure the dog that you are still friends by petting him later when he’s quiet.

- With this conditioning procedure your dog will soon learn to expect a squirt of water when you shout "QUIET" for once he has made the association, you won't need to shout him again — only rarely, should he forget.

DEFINITION

Do you know what a nuisance barker is? According to the new law passed by the city and county of Honolulu in cooperation with the Hawaiian Humane Societies and Citizens Against Noise, their definition is given as an example of the way one community is adopting a "Barking Dog Ordinance".

An "Excessive Barking Dog" shall mean an animal that makes any one of the following noises for a period of ten minutes or longer intermittent for a period of two minutes or longer, or for any noise at any time of day or night regardless of whether the dog is on or off his property. It also means that a dog that makes excessive barking dog for purposes of annoyance at any time of day or night in a manner which results in an excessive degree of noise. The dog shall be considered to be a nuisance if any noise is increased or decreased by the dog's or other dog's activities.

Honolulu also has a penalty for owners keeping or permitting a barking dog within the limits of the city and county. After receiving a warning citation, the owner is required to follow specific instructions for the dog's training by the Humane Society.
TIPS FOR DOG OWNERS

• Always find out WHY your dog barks. Unless it has a witching reason, then you must correct it at this time.
• Do not throw a garden hose on a dog or throw rocks or tin cans at him.
• Spitting-hitting is an ineffective substitute for water treatment and rarely solves any problems.
• Whenever your dog barks for a barking reason, praise it or get it.
• Remember, dogs are companion animals and should be kept in the house during the normal night hours whenever possible.

IS YOUR DOG TRAINABLE?

A dog that is chained up or left alone indoors and is allowed to bark hour after hour may no longer be trainable. Such a dog may have become too nervous for an inexperienced trainer. If this is the case with your dog, consult your veterinarian or qualified dog trainer.

REWARDS

Correcting unnecessary barking is more convenient during the day, but getting up a few times at night will prove worthwhile. After that, you and your neighbors will know when your dog barks, there's a real reason. If your neighbors are home and you're not, they will check to see if police should be notified. The security of knowing you have a real barking dog, as well as enjoying a peaceful and quiet night, and allowing your neighbors to enjoy one too, is well worth the effort.

This material was reprinted with permission from the Humane Society of the United States. It was adapted from materials provided by the City and County of Honolulu, the Honolulu Humane Society, and Citizens Against Noise.
## APPENDIX D

### REDUCING NOISE IN THE HOME

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE SOLUTION</th>
</tr>
</thead>
</table>
| 1. Noise intrusion from outside | • install storm windows and doors  
| | • caulk cracks around doors and windows |
| 2. Noisy washing machine and other appliances | • lubricate motor  
| | • VIBRATION - isolate heavy equipment from a floor using a rubber pad or thick rug  
| | • isolate appliances from walls and cabinet enclosures; where practical and safe, surround with sound absorbing materials  
| | • undercoat garbage disposals with damping compound (similar to auto undercoating); can also be used on outside drain of washers and dryers |
| 3. Noisy power tools | • use variable speed tools when possible  
| | • use isolated area of home to work in  
| | • don't use late at night or early in the morning  
| | • wear hearing protector |
| 4. TV or stereo too loud | • install fireproof acoustical tile behind TV or stereo  
| | • turn down volume  
| | • use earphones |
| 5. Noisy car | • drive sensibly  
| | • check muffler and wheels  
| | • adjust or replace fan belt if there is a screeching noise under the hood |
| 6. Too much noise from neighbor's apartment | • caulk along wall and floor after removing molding  
| | • use rugs and drapes where possible  
| | • ask neighbors to be more quiet |
7. Dripping faucet
   • place a sponge or facecloth under the drip
   • tie a string or a shoelace to the faucet so the drip is channeled as a miniature stream down the string
   • a more permanent and cost-saving solution is to replace the worn washer

8. Creaking doors and hinges
   • install weather stripping to tighten door seal
   • lubricate hinges with oil or silicone

9. Door slamming
   • install door closure dampers on exterior or spring loaded self-closing doors
   • install a resilient gasket or weather stripping around the door
   • substitute a solid-core door for a hollow-core door

10. Fans and exhausts
    • remember the saying "slow and low"; the slower the motor speed, the quieter the fan

11. Window rattle
    • if window panes rattle, look for breaks in the putty; if the entire frame rattles, check the adjustment of springs or weather stripping
    • double-hung windows in aluminum guides can have the guide spacing adjusted for a good fit

12. Air conditioning noise
    • select a unit with adequate power capacity
    • mount window units on resilient pads
    • install perimeter gasket of soft rubber to isolate unit from wall or window structure
    • locate unit away from neighbor's bedroom
15. Noisy plumbing
   - reduce water pressure
   - install air lock

14. Noisy ventilation
    (forced air heating and cooling systems)
    - reduce air flow velocity
    - install more grilles
    - install padding around ducts where possible

15. Loud furnace blower
    - align blower pulley and motor
    - lubricate properly (at least once a year)
Appendix E

Model Community Noise Control Ordinances

T. Michael Taimi, Commissioner
Kentucky Department of Environmental Protection
18 Reilly Road
Fort Boone Plaza
Frankford, Kentucky 40601
(502) 564-3382

National Environmental Health Association
1200 Lincoln Street, Suite 704
Denver, Colorado 80203
(303) 861-9090

League of Minnesota Cities
183 University Avenue, East
St. Paul, Minnesota 55101
(612) 227-5600

Florida Department of Environmental Regulation
Twin Towers
2600 Blair Stone Road
Tallahassee, Florida 32301
(904) 488-0300
John: Are we still receiving these?
Noise pollution program silent as city loses funds, counselor

By JESSIE-LYNNE KERR

Florida's noise program died without so much as a whisper at the end of 1985. The money just gave out.

That quiet end paralleled the demise of Pat Croce's second career 18 months earlier in Jacksonville.

Croce, a senior citizen, had really enjoyed his work as Jacksonville's official community noise counselor. Certified by the state, Croce warned the public about the dangers of excessive sound levels and earned $15,500 a week for 25 hours' work.

When your peaceful coexistence with your neighbor was obliterated by a noisy air conditioner, swimming pool pump or the perforated muffler of his sports car, roce was the man to call.

Croce would visit the scene of the noise with a decibel-measuring device. Although he had no enforcement powers, Croce often quieted the disturbing situation through conference, persuasion and conciliation.

But 16 months ago, federal funding cuts eliminated Croce's part-time job. On Dec. 31, state cuts killed the program under which Croce was certified.

"Other cities are jumping way ahead of us," Don Bayly, chief of city Bio-Environmental Services Division, said. "But noise pollution control is going nowhere here. No one seems to care."

Bayly said no federal, state or city funds are being spent to cope with noise pollution. His division is charged with controlling noise pollution but has had no noise-control engineer since the last one quit in 1979 and the position was deleted.

Statewide, the Department of Environmental Regulation, which had certified Croce after a special training program, closed its noise office Dec. 31 because of a lack of funding. For the past 15 months, the program had subsisted on federal grants totaling less than $20,000.

"That's the crux of the whole thing"...
Continued from page 1A

$75,000 officials said.
Dennis Wile, an environmental special- ist, headed that office. He now works for the federal Environmental Protection Agency in Atlanta, according to Charles R. Hoovers, who was assistant to Wile.

"Dennis came to Florida from the EPA in Atlanta when the federal government cut its noise program," Hoover said. "When Florida recently cut out the state's noise office, Dennis went back to the EPA, but not in noise control."

Hoover, who said he spent only half of his time as Wile's only assistant, now works in pesticide review.

"Even though I am not supposed to, I am keeping a log of all the calls coming in on noise," Hoover said. "Yours is the seventh I've received today. The callers not only want information about noise control, but they want to voice a complaint about noise. All I can tell them is that we have no enforcement authority whatsoever and never really did have. We would counsel local governments and provide them with model ordinances."

Hoover said Croce is the only state-certified community noise counselor in Jacksonville, to his knowledge. He said there are slightly more than a hundred throughout the state who were certified by DER, many of them police officers and city employees.

And until the funding cuts decimated the programs in Florida, the state had more noise counselors than all of the other states combined, Wile said.

"I just hope the people understand the noise problem will only get worse," Hoover said of the cutbacks. "Just think what it would be like if we had quiet schools," he said. "I bet a quiet school would jump those test scores by 10 percent and not cost us a cent. I've taken some readings at schools, and a reading of 102 decibels was supposed to be okay in a learning experience."

Doctors say a noise greater than 90 decibels for prolonged periods can harm hearing.

Doug Burton, regional DER director in Jacksonville, said attempts several years ago to establish a state noise-control activity failed when the Legislature refused to come up with the funding."

On the city front, Bayly said there have been no recent developments toward establishing a noise-control activity. "There has been nothing except a lot more noise from citizens who are still complaining and who I am still referring to their councils," Bayly said.

"We still have no enforceable ordin- ance," Bayly said, adding that the city's Environmental Protection Board proposed that the city's nuisance ordinance be amended to place decibel limits on neighborhoods according to the use for which they are zoned. But the amendment got nowhere, he said."

"The federal government dropped noise control completely ever since the Reagan administration got into office," Bayly said. "The state noise office was funded with federal money and when EPA pulled out..."
Excessive noise can be detrimental to your health

By MICHAEL DUNN
News-Press Bureau

NAPLES — A headache is born. Your nerves are on edge, you’re irritable, but you don’t know why.

Sure, the phone’s ringing off the hook, the neighbor’s dog is barking and a baby on television is screaming while three motorcycles whiz by your window with ear-splitting tenacity, but that’s not unusual — it happens every day.

Well, health specialists now say that excessive, unwanted sound, often called noise pollution, can cause serious health problems far beyond bothersome hearing problems.

Frequent exposure to high noise levels can lead to hearing damage, permanent changes in heart rate, increased blood pressure, headaches, ulcers and stress severe enough to bring on a heart attack. It can aggravate existing disease.

And even more startling noise can affect the health of unborn and newborn babies and lead to hearing problems and learning disabilities in children.

Gladys McDonald, 52, is a noise counselor and investigator in Naples. Only one other person in the state, she said, has such a position. She is employed by the Senior Community Employment Program, supervised by the American Association of Retired Persons.

A noise counselor goes and takes noise (level) readings for any complaints of noise such as barking dogs and airplanes. We’re trying to make people aware of noise because noise can be a health hazard,” she said.

“We’re also trying to improve Naples’ noise ordinance. The ordinance is very broad, they don’t have a specific decibel, so we’re trying to get them to refine the ordinance.”

Naples City Attorney David W. Ryders said the current city noise ordinance has been in effect for many years and is enforced. It covers various types of activities and includes provisions for different times of day, although it is very broad, he said.

In addition to investigating noise complaints, McDonald administers hearing tests to Collier County school students, and wherever she goes, she carries a decimeter with her to check noise levels.

“Like rock music,” she said. “That’s very bad for kids. And if you’re a child with headphones in and wearing, many kids have lost their lives because they don’t hear a car coming.”

A big problem, McDonald said, is that people think they have no choice in the matter. They tend to dismiss the annoyance caused by noise as the price for living in today’s modern, mechanized world.

“People think they have to put up with noise, but they don’t,” she said. “If you contact the right person, it can be curtailed.”

In some cases, McDonald said, she can even take people to court to ensure they comply with noise level regulations.

“ Anyone in a community environment of 60 decibels, about six months you’d lose your hearing because it destroys the little hairs in your inner ear,” she said. “Noise is a health problem, but a health problem.”

The most common complaint McDonald receives concerns loud motorcycles, she said. According to the Environmental Protection Agency (EPA), safe sounds are those at 70 decibels and below. Motorcycles average about 100 decibels, rock music hits about 110 decibels. After motorcycles, other types of motor generators are the most complaints.

But noise pollution seems to be reaching alarming proportions as the population grows and the proliferation of deafening machinery grows with it.

“Calling noise a nuisance is like calling smoke an inconvenience. Noise must be considered a hazard to the health of people everywhere,” wrote Dr. William B. Stewart, former U.S. Surgeon General. In his report, he said, noise-related health problems.

The Office of Noise Abatement and Control, a branch of the EPA, estimates that alone 20 million Americans are exposed daily to noise levels permanently damaging to hearing.

Hearing loss can lead to emotional problems as people retreat from social interaction due to curtailed ability to communicate.

“As a rule,” the EPA writes, “whenever we want to raise our voices to be heard, the background noise may be too loud and should be avoided.”

The EPA also found that noise is a leading cause of stress. Studies conducted in industrial settings have shown that laborers in places such as steel mills and machine shops had higher incidences of circulatory and heart disease problems.

In another study, monkeys subjected to continual recordings of street noise developed high blood pressure.

Even unborn babies feel the effects of noise, according to the EPA. A Japanese study of more than 1,000 births, for instance, demonstrated a high proportion of low-weight babies whose mothers lived in noisy environments. Hormone levels in these babies also were lower than in the “quiet area” babies, and a disturbing, although preliminary, study of babies born to mothers living near a busy airport showed an increased incidence of birth defects.

In the early 1960s, “quiet zones” were established around many of the schools, and found that children have a particularly hard time learning language skills in noisy environments, often because they cannot distinguish between the different sounds of speech. Reading skills also become harder to master in such settings.

McDonald said schools near airports have led to irritate students’ teachers’ relationships and reduced teaching effectiveness.

A recent study by the EPA showed that people were less willing to help persons with broken arms pick up an armrest at dropped hours when a
APPENDIX F

EPA Regional Offices
State Noise Control Programs (as of 1982)

Region I -- Connecticut*
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

*Regional Office:
JFK Federal Building
Boston, MA 02203
(617) 223-5708

*State Offices:
Connecticut Department of Environmental Protection
Office of Noise Control
122 Washington Street
Hartford, CT 06115

Joseph B. Pulaski -- (203) 566-7494

Region II -- New Jersey*
New York*
Puerto Rico
Virgin Islands

*Regional Office:
26 Federal Plaza
New York, NY 10007
(212) 264-2110

*State Offices:
New Jersey Department of Environmental Protection
Office of Noise Control
45 Prospect Street
Trenton, NJ 08618

Edward J. DiPolvere -- (609) 292-7695

New York Department of Environmental Conservation
Division of Air
50 Wolf Road
Albany, NY 12233

Barbara Allen -- (518) 457-7454
<table>
<thead>
<tr>
<th>Region III</th>
<th>Delaware*</th>
<th>Regional Office:</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>District of Columbia*</td>
<td>Curtis Building</td>
</tr>
<tr>
<td></td>
<td>Maryland*</td>
<td>6th and Walnut Streets</td>
</tr>
<tr>
<td></td>
<td>Pennsylvania</td>
<td>Philadelphia, PA 19106</td>
</tr>
<tr>
<td></td>
<td>Virginia</td>
<td>(215) 597-9118</td>
</tr>
<tr>
<td></td>
<td>West Virginia*</td>
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</tr>
</tbody>
</table>

*State Offices:*

Delaware Department of Natural Resources and Environmental Control
Edward Tatnall Building
P. O. Box 1401
Dover, DE 19901

Charles W. Wilkins, III -- (302) 736-4791

Metropolitan Washington Council of Governments
Department of Environmental Programs
1875 Eye Street, N.W.
Washington, D.C. 20006

George Nichols -- (202) 223-6800

Maryland Environmental Health Administration
Division of Noise Control
201 West Preston Street
Baltimore, MD 21201

Michael Hurney -- (301) 383-2727

West Virginia Department of Health
Bureau of Industrial Hygiene
151 Eleventh Avenue
South Charleston, W. VA 25303

William Aaroe
Region IV -- Alabama
Florida*
Georgia
Kentucky*
Mississippi
North Carolina*
South Carolina*
Tennessee

Regional Office:
345 Courtland Street, N.E.
Atlanta, GA 30308
(404) 881-4361

*State Offices:
Florida Department of Environmental Regulation
Noise Control Section
2600 Blair Stone Road
Tallahassee, FL 32301
Denis E. Wile -- (904) 488-0300

Kentucky Department of Natural Resources
and Environmental Protection
Noise Control Section
1050 U.S. 127 South
Frankfort, KY 40601
Thomas Jackson -- (502) 564-3560

North Carolina Department of Natural Resources
and Community Development
Division of Environmental Management
P. O. Box 27687
Raleigh, NC 27611
David Johnson

South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201
Samuel H. McNutt -- (803) 758-5506
Region V
-- Illinois*
Indiana*
Michigan
Minnesota*
Ohio*
Wisconsin

Regional Office:
230 South Dearborn Street
Chicago, IL 60604
(312) 353-2205

*State Offices:

Illinois Environmental Protection Agency
Division of Land/Noise Pollution Control
2200 Churchill Road
Springfield, IL 62706
James Reid -- (217) 782-9469

Indiana Association of Cities and Towns
Noise Control Program
150 West Market Street, Suite 600
Indianapolis, IN 46204
Bradford G. Garton -- (317) 635-8616

Minnesota Pollution Control Agency
Division of Air Quality, Noise Section
1935 West Country Road, B2
Roseville, MN 55113
David Kelso -- (612) 296-7373

Ohio Department of Health
Bureau of Environmental Health
P. O. Box 118
Columbus, OH 43216
Richard Martin -- (614) 466-1390
Region VI -- Arkansas
Louisiana
New Mexico*
Oklahoma*
Texas

Regional Office:
First International Bldg.
1201 Elm Street
Dallas, TX 72570
(214) 749-3837

*State Offices:
New Mexico Occupational Health & Safety Bureau
P. O. BOX 968
Santa Fe, NM 87503
Dave Marble -- (505) 827-3563

Oklahoma Department of Health
1000 Northeast 10th Street
P. O. Box 53551
Oklahoma City, OK 73152
Dale McHard -- (405) 271-5221

Region VII -- Iowa*
Kansas
Missouri
Nebraska*

Regional Office:
1735 Baltimore Street
Kansas City, MO 64108
(816) 374-3307

*State Offices:
Iowa League of Municipalities
Noise Control Program
900 Des Moines Street
Des Moines, IA 50316

Nebraska ECHO Program
Lincoln-Lancaster County Health Department
2200 St. Mary's Avenue
Lincoln, NE 68502

Gary L. Walsh -- (402) 474-1541
Region VIII -- Colorado*
Montana
North Dakota*
South Dakota
Utah
Wyoming

Regional Office:
Lincoln Tower, Suite 900
1860 Lincoln Street
Denver, CO 80295
(303) 837-2221

*State Offices:

Colorado Department of Health
Noise Program
4210 East 11th Avenue
Denver, CO 80220

David Gourdin, Jr. -- (303) 320-8333

North Dakota Department of Health
Noise Control Program
1200 Missouri Avenue
Bismarck, ND 58505

Jeffrey Burgess -- (701) 224-2348

Region IX -- Arizona*
California*
Hawaii*
Nevada
Pacific Trust

Regional Office:
215 Fremont Street
San Francisco, CA 94105
(415) 456-4606

*State Offices:

Arizona Department of Health
Noise Program
411 North Twenty-Fourth
Phoenix, AZ 85008

A.J. Battistone -- (602) 255-1156

California Department of Health Services
Office of Noise Control
714 P Street, OE6-692
Sacramento, CA 95814

Ross A. Little -- (916) 322-2097
Region IX --

*State Offices (cont.):

Hawaii Department of Health
Noise and Radiation Branch
P. O. Box 3378
Honolulu, HI 96801

Thomas Anamizv -- (808) 548-3075

Region X -- Alaska

Regional Office:
Idaho
Oregon*
Washington

1200 Sixth Avenue
Seattle, WA 98101
(206) 442-1253

*State Office:

Oregon Department of Environmental Quality
Noise Pollution Control
522 S.W. 5th Avenue
Box 1760
Portland, OR 97207

John Hector -- (503) 229-5989
Sample Press Release

Please retypen this release, substituting the correct information about your particular program in the underlined spaces, and take it to your local newspaper and radio and television stations.

* * * * * * * * * *

FOR IMMEDIATE RELEASE

The Newtown Sound Advice Program
November 5
John Jones
234-5678

Are you tired of motorcycles and buses disturbing your peace and quiet? Is the barking dog next door driving you crazy?

Unwanted noise is a serious matter that affects all of us. Noise will be the program topic at a meeting of the Newtown Chapter #11 of the American Association of Retired Persons scheduled for 11 a.m., Thursday, November 12. The group will meet in the auditorium of the First National Bank, 123 Main Street.

The program will include a slide presentation that discusses the effects of noise and suggests some simple ways to reduce noise in our everyday lives. Mary Smyth, a volunteer noise counselor, will answer questions from the audience.

For further information, contact John Jones at 234-5678.

# # # # # # #
Appendix H

Sample Public Service Announcements

10 seconds:

The Sound Advice program invites you to a lecture on the health effects of noise. Come to the Knights of Columbus hall at 7:00 p.m. on Wednesday, March 3rd.

20 seconds:

Are you tired of being kept awake all night by barking dogs? Loud all night parties? Motorcycles roaring through the neighborhood at 1:00 a.m.? Act now to reduce noise in Newtown. Complain to the noise counselor at 123-4567. That's 123-4567!

30 seconds:

Noise is a health problem. It is estimated that 20 million Americans are exposed daily to noise that is permanently damaging to hearing. Noise may also contribute to such conditions as high blood pressure, ulcers, asthma, headaches and colitis. Noise is all around us, in our homes, at work and outside. But there are ways to reduce noise. If you would like more information on noise and what can be done about it, call Mrs. Bea Quiet at 123-4567! That's 123-4567!
Dear Mrs. Jones,

SOUND ADVICE is a volunteer program being developed in Newtown to help reduce noise. Noise is a serious matter, which can cause irreversible hearing loss, as well as physical and mental stress. But in many communities, people are realizing that practical steps are available to reduce noise.

Volunteers for the SOUND ADVICE program can help in many ways. They can make presentations to community groups, distribute information at health or county fairs, work with local schools to educate students about noise, or be involved in developing noise control legislation.

Currently, we are recruiting volunteers to act as "noise counselors" for the program. All noise counselors will be asked to attend a one day training session to become familiar with noise control and the many volunteer opportunities.

If you are interested in learning more about being a volunteer noise counselor, please complete the enclosed volunteer information form and return it by October 12. We will contact you to discuss the volunteer role further. Please feel free to contact me at 123-4567 if you have any questions.

Sincerely,

Bea Quiet
Volunteer Organizer
Appendix J

Volunteer Information Form

Name ____________________________________________________________

Address __________________________________________________________

____________________________________________________________________

Phone Number ( ) _______________________

I am interested in serving as a volunteer noise counselor. As a noise counselor, I will be able to help reduce noise in our community.

Experience:

Other volunteer activities (past or present):

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Other experience or skills:

____________________________________________________________________

____________________________________________________________________

I would be interested in volunteering for:

____ community presentations
____ school education program
____ writing news articles or press releases about noise
____ attending public hearings
____ developing noise control legislation
____ participating at county or health fairs
____ other (please explain) ____________________
I would like to recommend the following person(s) to be a volunteer noise counselor:

Name ___________________________ Name ___________________________
Address __________________________ Address __________________________

Phone Number ( ) __________ Phone Number ( ) __________

Please return form to:

Mrs. Bea Quiet
105 Whisper Lane
Newtown
Dear Mrs. Jones,

I am pleased to welcome you as a volunteer for the SOUND ADVICE program in Newtown. As a volunteer noise counselor, you can help reduce noise in your community.

An orientation and training meeting will be held Wednesday, November 15 at the Newtown Senior Center, 101 Main Street. It will begin at 9:00 a.m. and should last approximately 3 hours. The purpose of the meeting is to learn some basic information about noise and to discuss noise abatement activities in our community.

Welcome to the SOUND ADVICE program. I look forward to our meeting on November 15. If you are unable to attend or have any questions, please contact me at 123-4567.

Sincerely,

Bea Quiet
Volunteer Organizer
APPENDIX L

Checklist for Selecting Training Site

During training, participants will be seated at tables which need to accommodate six to seven persons. The site selected should be large enough to comfortably accommodate all participants in this arrangement.

Estimating Room Capacity

- Estimated number of participants
- Round or rectangular tables seating 6-7 each - 12 sq.ft. per person

Items To Be Considered

- Adequate lighting
- Adequate acoustics
- Suitable temperature -- heat/air conditioning
- Space for headtable
- Lectern
- Adequate tables and chairs to set up subgroups (6-7 at a table)
- Comfortable seating
- Table available for registration and supplies (removed from group)
- Table for coffee
- Shades to darken room
- Restroom conveniently located
- Architectural barriers:
  - a. No steep steps
  - b. Quiet location
  - c. Few obstructions--pillars, posts, etc.
  - d. Other, specify ____________________________

- Adequate parking facilities - number of spaces available
- Availability of audio-visual equipment
  - Blackboard
  - Screens
  - Film and slide/projectors
  - Easel for flip chart
APPENDIX M

Sample Volunteer Job Descriptions

SPEAKER BUREAU REPRESENTATIVE

Goal: To present the noise abatement program to general public through group presentations.

Qualifications:

1. Ability to collect and arrange materials for interesting, thought provoking presentations;
2. Neat and professional appearance;
3. Ability to project vocally to audience;
4. Ability to deal with large groups of people;
5. Provide own transportation;
6. Ability to work independently.

Duties:

1. List your name and subject matter on the community speaker's bureau;
2. Contact local organizations for speaking engagements;
3. Prepare and present interesting presentations to many groups;
4. Assemble resource materials for distribution to groups;
5. Attend training sessions as required;
6. Be available for 5-10 hours per week.
VOLUNTEER SCHOOL NOISE COUNSELOR

Goal: To inform primary and secondary school children of the hazardous effects of noise.

Qualifications:

1. Ability to communicate with school personnel;
2. Ability to relate to young people;
3. Ability to prepare interesting and informative presentations suitable for classroom use;
4. Ability to work independently.

Duties:

1. Meet with appropriate school personnel to outline the program;
2. Prepare program presentations appropriate to grad levels;
3. Present programs in an interesting, informative and challenging manner;
4. Guide students to appropriate resource materials when necessary;
5. Follow-up presentations to evaluate effectiveness;
6. Provide own transportation;
7. Be available 5-10 hours a week during the school year. Some hours, however, may be required during the summer months for special projects, summer school, etc.
8. Attend training sessions as required.
VOLUNTEER PRESS CONTACT

Goal: To prepare and distribute news articles regarding Noise Program activities.

Qualifications:

1. Ability to write informative articles;
2. Some previous experience in writing news articles or press releases would be helpful;
3. Ability to gather information for news releases.

Duties:

1. Collect informative, factual information regarding all phases of the Noise Program;
2. Prepare interesting articles, complete with symbols, illustrations, etc., when appropriate;
3. Distribute articles to appropriate recipients;
4. Attend training session when required;
5. Be willing to volunteer at least 5-10 hours per week.
VOLUNTEERS FOR HEARING SCREENING

Goal: To be involved in community basic hearing screenings.

Qualifications:

1. The ability to work with groups, especially youth groups;
2. The ability to learn to use scientific equipment;
3. The ability to maintain accurate records.

Duties:

1. Assist community based organizations, schools, etc., in carrying out hearing screenings;
2. Keep abreast of health fairs and other such functions where screenings may be appropriate;
3. Seek out health agencies which can provide hearing screenings;
4. Keep accurate records of persons screened, results and follow-ups;
5. Attend training sessions when required;
6. Be available for 5-10 hours a month, probably very flexible.
Volunteer Legislative Representative

Goal: Represent the Noise Programs at meetings of government officials and enforcement personnel and work with community groups on local noise ordinances.

Qualifications:

1. Ability to meet and communicate with many difference types of people;
2. Ability to present information in a concise, comprehensive manner;
3. Ability to search out data regarding the legal aspects of noise control;
4. Some knowledge of law would be helpful but not necessary.

Duties:

1. Attend and participate in meetings of governmental or enforcement personnel regarding noise problems or noise legislation;
2. Study data pertinent to the various aspects of noise control and the legal ramifications from existing documentary sources, such as law libraries, state, county, and local governmental offices;
3. Assist community groups in the development of local noise ordinances;
4. Be aware of resource material available for community groups;
5. Attend training session when required;
6. Volunteer time should be flexible depending on the immediate need, approximately 5-10 hours per week.
The "Sound Advice" program was developed by the AARP Program Department under a grant from the U.S. Environmental Protection Agency. It was the culmination of an EPA funded project, which utilized older persons as noise counselors.

This material is part of a kit on noise abatement, which includes: a volunteer noise counselor's guide, a volunteer organizer's guide, a slide-tape program "The George Show", and a slide-tape program "Sound Advice".

We gratefully acknowledge the assistance of the American Speech-Language-Hearing Association, the National Urban League, the Florida Department of Environmental Regulation, and the National Association of Noise Control Officials in reviewing these materials.

The American Association of Retired Persons is a non-profit, nonpartisan organization dedicated to helping older Americans achieve lives of independence, dignity, and purpose. By providing a wide range of direct member benefits and services and a host of community service programs, the Association has become the nation's largest organization of older citizens. For additional information about programs and services, write: AARP, 1909 K Street, N.W., Washington, D.C. 20049.
SOUND ADVICE

A Volunteer Noise Counselor's Guide

Developed by:
Special Events Section
Program Department
American Association of Retired Persons

Under a grant from the
U. S. Environmental Protection Agency
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INTRODUCTION

In neighborhoods across the country, people are realizing that noise is a serious matter, and that practical steps are available to reduce noise. Many communities have been successful in reducing or eliminating noise problems. The success is usually the result of many individuals and groups working together. As a volunteer noise counselor, you can work with other volunteers to control or reduce noise. "Sound Advice" is a noise abatement program which can help to make your community a healthier and better place to live.

This handbook will help volunteers interested in acting as noise counselors in a community noise abatement program. It explains the reasons for a noise abatement program, the role of the noise counselor, and some of the techniques a noise counselor can use to reduce neighborhood noise. Also included is an appendix to help locate resource materials and key people in the community.
THE EFFECTS OF NOISE

Noise can be defined as any loud or disagreeable sound. We are confronted with noise daily in our working and living situations. Sounds from trucks, motorcycles, airplanes, lawnmowers and appliances are some of the noises that are part of modern life.

In addition to being a nuisance, noise can be a serious health hazard. It can cause irreversible hearing loss as well as physical and psychological stress.

Hearing Loss. Of the many health hazards related to noise, hearing loss is the most clearly observable. Noise loud enough to cause hearing loss is common. The places where we live, work, and play are filled with potentially harmful levels of noise. The Environmental Protection Agency (EPA) estimates that over twenty-million Americans are exposed daily to noise that is permanently damaging to their hearing.

Hearing loss is usually gradual. People become aware of the damage when they start to miss occasional words in general conversation and have difficulty understanding telephone conversations. Unfortunately, there is no cure for this kind of hearing damage. Hearing aids do not repair noise-damaged hearing, although they can be of limited help to some people.

People with partial deafness from exposure to noise do not necessarily live in a quieter world. Many sounds they
hear are distorted in volume, pitch, or clarity. Consonants of speech, especially high frequency sounds such as "s" and "ch" are often lost or indistinguishable from other sounds. Speech frequently seems garbled, and is difficult to understand. When exposed to a very loud noise, people with partial hearing loss may experience discomfort or pain. They also frequently suffer from tinnitus—irritating ringing or roaring in the head.

**Stress.** Many of us know the irritation and annoyance of noise we cannot control. Our bodies automatically react to sudden or loud sounds as a defense for possibly dangerous or harmful situations. Generally, blood pressure rises, heart rate and breathing speed up, muscles tense, hormones are released into the blood stream, and perspiration increases.

Frequent or prolonged exposure to loud noise keeps our bodies in this state of tension and can lead to stress related ailments. Research has linked noise with the development or aggravation of heart and circulatory diseases. Noise in the workplace may cause the listener to develop ulcers. Workers in certain noisy industries have ulcers at a rate five times that of the general population. Other research has shown that noise may be a factor in lower resistance to disease and infection.

**Sleep Disruption.** Sleep is a restorative time of life, and a good night's sleep is probably crucial to good health.
But everyday experience suggests that noise interferes with our sleep. Noise can make it difficult to fall asleep, it can wake us, and it can cause shifts from deeper to lighter sleep stages.

Human response to noise before and during sleep varies widely among age groups. The elderly and the sick are particularly sensitive to disruptive noise. Compared to young people, the elderly are more easily awakened by noise and, once awake, have more difficulty returning to sleep. As a group, the elderly require special protection from the noises that interfere with their sleep.

Other Effects. Noise in school and in the home can affect children's learning. In a school located near an elevated railroad track, students whose classrooms faced the track did significantly worse on reading tests than did similar students whose classrooms were further away. Some school districts have built new schools in quieter neighborhoods to alleviate this serious concern.

The effects of noise are also seen in the workplace. Workers in noisy environments are more likely to be tense, irritable and upset. Their efficiency may be hampered by exhaustion, absentmindedness, mental strain and absenteeism.
NOISE LEVELS

Decibels, often abbreviated as "dB" are measures of the intensity of sound. Typically people are exposed to decibels ranging from 0, the point where hearing starts, to 140, which represents a very loud sound. Noise can begin to harm hearing at about 70 decibels, particularly when constant exposure occurs. Some common examples of sounds and their measurement are shown on the chart below.

(Insert noise level chart)
COMMUNITY ACTIVITIES

There are many activities which can be implemented in a community to help reduce noise. As a volunteer noise counselor, you will be able to work with other volunteers to help determine the kinds of activities best suited to the community and its needs. You can then volunteer for those community activities which meet your interests and capabilities. An individual noise counselor would not be expected to do all of these activities, but some volunteers working together might develop several of these activities in the community. Some activities which could be implemented in a community program for noise abatement include:

School Programs. One or more volunteer counselors may wish to undertake educating students to noise and its possible effects. Teachers and school principals will often agree to
having a noise counselor present a lesson about noise to their classes.

Begin by contacting the school principal. He or she may want to talk to you directly, or may put you in contact with the appropriate teachers. Science or health teachers are usually interested in the topic of noise. You may also want to contact the curriculum directors for the school system, or the Parent-Teachers Association (PTA).

A series of courses on noise has been developed by the Environmental Protection Agency for inclusion in school curricula. An excerpt from Sounds Alive, for children from kindergarten through sixth grade, is included with this guide book. An excerpt from Preparing for a Quieter Tomorrow, for grades seven through twelve, is included in Appendix A. Counselors might also choose to develop their own materials for class presentations.

One noise counselor in New Mexico had her own ideas about the best ways to teach children about noise. She developed materials for different age groups and made class presentations herself. Younger children saw a puppet show with puppets, stage and story all developed by the noise counselor. Older children received a homework assignment to keep a record of the noises around them for a few days before the class. They could then discuss the noises they heard with the noise counselor.

Because of the special effort she gave to the project, most teachers claimed that their students really enjoyed the lesson, and more importantly, learned a lot about noise.
Fairs. Many communities have fairs which are open to everyone in the community. This includes county fairs, health fairs, or state fairs. Noise counselors staffing a fair booth can be very effective in educating fair attendees about noise and its effects. Distributing brief educational materials is recommended. Many people will take these home to read them, and may also pass the information on to family and friends. A brief explanation of the health effects of noise, suitable for photocopying, is given in Appendix B.

Hearing Tests. Another valuable project is making arrangements for hearing tests for community residents. In addition to helping persons identify hearing problems, the testing project can also help raise the level of awareness about hearing and noise effects throughout the community.

The local school system may be able to conduct student hearing tests by the school nurse or by an audiologist. Many communities have free or low-cost speech and hearing clinics, some areas have mobile diagnostic units. Arrangements might be made for these clinics to do testing at senior centers, nursing homes, fairs, or at community group meetings. Or noise counselors might volunteer to transport interested persons to the clinic for a hearing test.
**Quiet Day.** Some noise abatement groups have successfully organized a community-wide event which emphasizes the importance of noise control to a large number of residents. A "Quiet Day" in your city or town can help to build interest in your program and to provide information and education to the general public. There are many activities which can be incorporated into a "Quiet Day" to help achieve your goals, for example:

-- free speech and hearing tests
-- kite flying
-- frisbee competition
-- free muffler tests for motorcycles and cars
-- silent films
-- mime show
-- magic show
-- nature walks

-- demonstration of sign language
-- hot air balloon rides
-- hang glider demonstration
Community Presentations. There are a large number of community groups that invite speakers to their meetings. These groups are often looking for new and interesting topics, and you might approach them about making a presentation on noise. Addressing community groups is an excellent way to disseminate information about noise and to enlist interested persons in your efforts for noise control. Local organizations you might consider include:

- Altrusa International
- American Association of Retired Persons
- American Legion
- Area Agencies on Aging
- Audubon Naturalist Society
- B'nai B'rith International
- Boy's Clubs of America
- Boy Scouts of America
- Business and Professional Women
- Camp Fire Girls
- Chamber of Commerce
- Church and synagogue groups
- General Federation of Women's Clubs
- Girl's Clubs of America
- Girl Scouts of the U.S.A.
- Gray Panthers
- Izaak Walton League of America
- Junior Chamber of Commerce (Jaycees)
- Kiwanis International
- Labor Unions
- League of Cities
- League of Women Voters
- Lions Clubs International
- National Urban League
- Neighborhood Associations
- Parent-Teachers Association
- Pilot Club International
- Professional Associations (Medical, Hearing, Gerontological, Architectural, Urban Planners, Engineers)
- Quota International
- Retired Teacher's Association
Using a film or a slide-tape show is a good way to start your presentation. This can be followed by a general question-and-answer session, or a description of a specific community noise project. An introductory level slide-tape program, The George Show, is available with this kit. Other slide or film programs may be available from your community library. You should make arrangements for the necessary audio-visual equipment with the group receiving your presentation. Previewing the film or slide show is also recommended.

Barking Dogs. A common noise complaint in many communities is barking dogs. The Humane Society of the United States and other groups have developed an effective training method to control most dogs' barking. A copy of the dog training information is given in Appendix C. This copy of "Quiet, Man's Best Friend" is suitable for photocopying.

Noise counselors may be able to cooperate with the local S.P.C.A. or local veterinarians to promote this training. Distributing copies of the information to pet stores or veterinarians offices or at special sessions for training dog owner's can help to cut down on excessive barking.
Changes in the Home. There are many sounds in our homes, and several of these can combine to make the home a very noisy place. Fortunately, there are some simple ways to reduce noise in the home. Quieting noisy appliances, fixing dripping faucets, and reducing the noise from a neighbor's apartment are just a few of the changes which can be made.

Noise counselors can advise local residents about some simple techniques to decrease noise. A list of possible solutions is provided in Appendix D as a starting place for advice to community residents. This list is suitable for photocopying, and can be distributed during group presentations, at county or health fairs, or in schools.

Referral Service. Volunteers can gather information about community organizations responsible for certain noise problems, and can develop a referral service. Callers with complaints can be referred to the individual or agency best able to help them. While supplying a valuable service to the community, this program also acts to inform the noise counselors about the most common noise complaints.

It is best to use a phone in an office or public place rather than someone's home. Various volunteers can staff the phone on a regular schedule, and the phone number can be well publicized.
Noise Ordinances. A growing number of local jurisdictions have enacted noise control ordinances. Many communities have developed legislation that sets specific noise decibel levels and establishes the agencies responsible for enforcement.

Some model community noise control ordinances are available. These model ordinances may help in developing an appropriate ordinance for your community. Contact some of the agencies in Appendix E for copies of various models. One noise ordinance success story is outlined below:

Boulder, Col., has a noise ordinance because one man was disturbed by the increasing number of loud motor vehicles going up and down the street in front of his house. He liked to putter around in his yard and flower beds, and the noise really bothered him. So he formed a committee of citizens, and started working on an ordinance.

His committee, composed of an acoustician, some professional engineers, and a few high school students, published a questionnaire in the local newspaper asking people which noise sources annoyed them most. The responses, in order, were motorcycles, traffic, barking dogs, and aircrafts. The committee collected evidence for about a year and a half, including a survey on the health effects of noise.

The committee presented their findings to the city manager and city attorney. An ordinance was drafted, and the city council passed it in January, 1970.
Public Hearings. State, county, and municipal authorities hold regular hearings on public issues. When the issue is noise, ask to be invited to give testimony and answer questions. Keep in mind also that hearings on building codes, zoning ordinances, and even recreation facilities can also involve the noise situation. Find out what hearings are scheduled, particularly in your county or municipal government. If these hearings relate to noise, make sure your concerns are represented. Generally, attending hearings is a good way to learn about community activities.
Problem Solving. Many of the noise problems in your community will not have a simple straight-forward solution. You will need to work with the various people or groups involved to determine some possible solutions to the problem, and then help the groups agree on one course of action. Being a problem solver is one of the most challenging aspects of your role as a volunteer noise counselor. It can also be one of the most rewarding aspects! As an example:

For years, the residents of a neighborhood in one part of a large city lived in a quiet, almost small town environment. Often people would gather on a neighbor's stoop on a weekend or after dinner and visit for several hours at a time.

But as the city and the outlying suburbs grew, that neighborhood began to undergo a change. A new bus route was established to service the suburbs and several times an hour commuter buses rumbled through the narrow streets of the neighborhood.

"It got to the point," said one resident, "that we'd just stop talking when the buses went by. But they come so often we could hardly carry on a conversation." So a group of concerned citizens decided to take action.

They gathered one afternoon on one of the front stoops and counted the number of buses that passed in an hour. They then met with the consumer representative of the transit company. Within three weeks, the transit company agreed to change the bus routes for most of the buses. The result was a slightly longer ride for commuters, but a quieter and more pleasant community for residents.
GATHERING INFORMATION

Noise counselors in the "Sound Advice" program will want to gather as much information about noise as possible. This will involve developing a list of names, addresses, and telephone numbers of various officials and agencies involved in noise enforcement and legislation. Determine what kinds of noise an agency is involved with and what the agency does regarding noise complaints or concerns. This list will be a useful resource for the noise abatement program as it begins community noise control activities. Many organizations have noise or hearing experts who can act as resources from your program. Some may wish to join forces in the fight to decrease noise.

Some agencies you should contact are:

- local police or sheriff's department
o Mayor's office
o airport control tower and planning officer
o health department
o humane society
o park and recreation department
o port authority
o various industry complaint departments
o transportation systems
o refuse collection agencies and businesses
o public works department
o planning and zoning authorities
o the office in charge of emergency vehicle sirens

o local representatives at each level of government

Other organizations or agencies which can act as resources include:

ACOUSTICAL SOCIETY OF AMERICA (ASA). This group has regional coordinators who can act as technical resources to noise counselors. The regional coordinators, who are members of the Coordinating Committee on Environmental Acoustics, can answer technical questions on sound, sound measurement, and noise. To find the coordinator in your area, contact:

The Coordinating Committee on Environmental Acoustics
Acoustical Society of America
335 E. 45th Street
New York, New York 10017
(212) 661-9404 ext. 564
AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION. This national organization is working toward preventing noise-induced hearing impairment and reducing environmental noise. The local office may be able to provide technical information or program support. To find the office near you, contact:

American Speech-Language-Hearing Association
10801 Rockville Pike
Rockville, Maryland 20852
(301) 897-5700

DEPARTMENT OF DEFENSE (DOD). The DOD has a program to address the problem of noise generated by military airfields. The objectives of the program are the protection of the integrity of military operations at DOD bases and the protection of the safety, health and welfare of affected public. The program involves technically assisting communities in land use planning and controls that will ensure that local development is compatible with the noise levels generated by the airfield.

DEPARTMENT OF LABOR/OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). The Department of Labor is concerned with noise as an on-the-job hazard and deals with it through OSHA. OSHA programs include the development of noise exposure standards for workers; enforcement of those standards by inspections; and training, education, and information programs to assist employers, employees, and others in complying with standards.
ENVIRONMENTAL PROTECTION AGENCY (EPA). This agency has in the past been actively involved with noise education and noise abatement programs at the local, state and federal levels. However, because of funding cut-backs, most EPA regional offices and the federal office in Washington, D.C. no longer have noise control departments. You may want to contact your regional EPA office (see Appendix F) for advice on sources for assistance in your area.

Approximately half of the states still had a state-wide noise control program as of 1982. These state offices are also included in Appendix F.

FEDERAL AVIATION ADMINISTRATION (FAA). The FAA has a program to reduce noise exposure at civil airports. The objectives of the program are to reduce the noise at the airport boundary to a prescribed level as much as possible and to assist communities in achieving compatible land use for the remaining areas. The FAA encourages citizen participation in the process of noise compatible land use planning.

FEDERAL HIGHWAY ADMINISTRATION (FHWA). The FHWA noise policy addresses noise associated with highway construction and use. The focus of the policy is to consider noise exposure in Federal-aid highway location and design decisions by requiring studies of expected noise levels where the highway will be located.

FHWA also provides for noise reduction on existing Federal-aid highways. This primarily involves the placement of noise barriers at particularly loud locations which present a problem to nearby residents.
NATIONAL ASSOCIATION OF NOISE CONTROL OFFICIALS (NANCO).
NANCO is a non-profit organization dedicated to environmental noise control. The national NANCO office can act as a technical resource on noise legislation, and can refer you to interested persons or agencies in your area. NANCO publishes a monthly newsletter, Vibrations, for its members. A senior associate membership rate is available to interested older persons. For information, contact:

National Association of Noise Control Officials
P. O. Box 2618
Fort Walton Beach, Florida 32549
(904) 243-8129
PUBLICITY

Radio, television and newspapers can be important assets in your effort to reduce noise in your community. You can use the media to educate people about noise and its effects and to inform the community about efforts to decrease noise.

The most effective step in good media relations is to get to know personally those who report the news in your community. A good working relationship with an editor, news director or reporter is very important.

Your basic goals should be to make the editor or manager aware of your group and its involvement in the community, and to let him or her know that your group is a source of news and feature material of interest to community residents. You should also get to know the working reporters and radio or TV newsmen whose job it is to cover community service programs such as yours. Here are some tips on working with the media:

- Be available. Make sure reporters who cover your group know how to reach you.
- Know the deadlines and other working requirements of the newspapers and radio and television stations you work with. Don’t hesitate to ask reporters and editors for this information; you’ll be making their jobs easier in the long run by doing so.
- Plan ahead. Give your news contacts as much notice as you can before deadlines.
- Always remember to say "thanks". When someone is particularly helpful in reporting on your program, a short note of thanks will be appreciated and remembered.
Newspaper Articles. Newspapers reach a large number of persons in the community, and are a valuable promotion source for your program. You can make use of newspapers for news stories, feature stories, and editorials. You should begin by contacting key individuals to inform them about noise and your noise-reducing activities. Be prepared to discuss your ideas for possible articles now or in the future. The titles of the individuals you should contact include:

- publisher
- editor-in-chief
- managing editor
- news editor
- feature editor
- reporters and writers on environmental issues
- reporters and writers on education

Photographs of an event can be used to interest a newspaper in carrying the story. Sometimes a picture and caption will be used without an article, especially if the photograph and caption can tell a whole story by themselves. Be sure to use black-and-white photos and to check the required size for prints.

When writing an article, try to write the way reporters write their stories. The first sentence or two—the "lead"—must contain the WHO, WHAT, WHEN, WHERE and WHY. The lead is designed to give the readers information quickly and to interest them in reading the rest of the story. It should be
kept to thirty words or less, if possible.

After the lead, write other details of the story in declining order of importance. This permits the editor to cut the story from the bottom, if necessary, without leaving out important facts.

Press Releases. When you are ready to prepare a news release about a specific event, there are several basic rules to follow. A sample is included in Appendix G. Remember to:

- Use standard size (8½ x 11) white paper, preferably without decoration.
- Type your release, double-spaced, on only one side of each sheet. Leave about one-third of the first page blank at the top for the editor's use. Leave at least an inch margin on both sides and at the bottom.
- Reproduce the release on some type of copying machine, or type an original for each recipient. Carbon copies generally make a poor impression.
- Type your group's name in the upper left-hand corner of the first page, and the date, your name, title, and telephone number in the upper right-hand corner.
- Two or three lines below your name and address, type "For Immediate Release" or instructions for a specified release date, if it is important that your story be held until a particular time.
- Try to hold your release to a single page. If you must use a second page, end the first page with a complete sentence and paragraph, then type the work "More" at the bottom of the page. On the second page, type your group's name at the upper left and "Page 2" at the upper right. Do not write headlines.
- At the end of the release, type "end".
Radio or TV News. Like newspapers, radio and TV can be a useful way to inform the public about noise. Again, begin by contacting appropriate personnel and discussing your noise abatement program. While you will not be working with the manager closely, you will want to meet with him or her to gain acceptance for your program. The manager will identify the staff people to contact, and these may include:

- news director
- public service director
- public relations/public affairs director
- program director

Timing and scheduling are of great importance to ensure adequate TV or radio coverage for your program and its events. In your initial planning, you should develop a schedule of events and milestones that are newsworthy. Provide your activity schedule to the contacts you have developed at the radio and TV stations. Most stations need this kind of advance information to coordinate their assignments and coverage of activities.

Talk Programs. Most cities have at least one radio or TV talk program. Try to persuade the producer to do a segment on noise in your community. You may want to be on the program yourself or you may arrange for others to participate. Keep in mind that the producers of these programs have a continuing need to develop good local stories. Noise issues might be on the program two or three times in one year as new angles for
noise stories develop. For instance, one presentation might address the health effects of noise, another might deal with the major sources of noise in the community, and yet a third might review the status of a municipal noise control ordinance.

Public Service Announcements (PSAs). Radio and television stations usually provide free air time for announcements that are in the public interest. PSAs are brief, usually between 10 to 60 seconds. Because of time limitations, the PSA is best used to get across one single message. The most important information, such as telephone numbers, addresses, times or places, should be repeated if possible. Some samples are given in Appendix H.
SUMMARY

Noise affects all of us. Almost everywhere we go, we hear noise. But it does not have to be that way. This guide has outlined many practical and simple ways to control and reduce the noise around us. As a volunteer noise counselor in a noise abatement program, you can play an important part in the effort to make your community a quieter place to live.
APPENDIX A

Objective: The purpose of this lesson is to develop an awareness of the adverse effects that excessive noise has on human health and welfare. Through this knowledge, students should become more concerned about protecting themselves from excessive noise exposure.

LECTURE SUMMARY

It has been estimated that over 20 million Americans are working, playing, and living around environmental noise that is dangerously loud. Excessive noise exposure is a well documented cause of permanent, irreversible hearing damage. Generally, the onset of noise-induced hearing loss is gradual. Hearing of high-frequency sounds is affected first. As a result, the individual begins to confuse high-frequency consonant sounds such as "s" and "f" and describes speech as slushy or unclear. As exposure continues, the hearing loss increases and ability to hear lower frequency sounds is also affected. The individual begins to experience greater difficulties in understanding conversational speech. Sometimes a hearing aid will help, however, it cannot in anyway make speech sound normal again. A hearing impaired person often feels isolated from his/her environment because of the problems experienced in trying to communicate, listen to the radio, or participate fully in social gatherings or public meetings.

It is important for students to recognize that not all noise-induced hearing losses are caused by noise exposure in the workplace. In fact, the noise levels associated with many popular hobbies and recreational activities exceed the levels believed to cause hearing damage over a prolonged period of exposure. Therefore, students should be aware of the noisy activities in which they participate and consider protecting themselves both by limiting the length of exposure and using properly fitted earplugs or earmuffs during exposure.

Our bodies respond to noise as a form of stress. Researchers have observed temporary stress reactions to loud noise which include increased blood pressure, dilation of the pupils of the eyes, and changes in heart rhythm and respiratory rate. Since noise is one cause of stress and stress is known to have a wide range of adverse health effects, noise may well contribute to stress related illnesses such as heart disease, high blood pressure, fatigue, and irritability. Researchers are presently involved in numerous studies to learn more about the effects of the interaction of noise with other variables on our bodies.
Noise also results in annoyances which distract from rest and relaxation. Generally, noises which are higher in pitch, intermittent in occurrence and unlocalized are the most annoying. Other factors which influence the degree of annoyance include the location of the noise, the time of day, whether the noise is considered necessary or appropriate, the type of living activities affected, the degree to which fear is associated with the noise, and the individual's overall attitude about his/her environment. The most commonly mentioned noise related annoyances are loss of sleep and interference with communication. Restful sleep is an essential element in the maintenance of good health. Noise affects our sleep by interfering with getting to sleep, waking us up, or causing changes in our sleep cycle. Noise disrupts communication by making it difficult and, sometimes impossible, to converse above the background of noise. We try to compensate by speaking louder, moving closer together, and watching the face and gestures of the speaker. However, as noise levels increase in loudness, it soon becomes impossible to carry on a meaningful conversation. Sometimes loud noise obscures particularly important communications such as warning signals or shows for help.

It is also known that noise sometimes adversely affects work efficiency, and our social and emotional behavior. Noise also interferes with the educational process. Excessive noise disrupts the development of the language and reading skills which are so vital to a successful educational experience. In addition, noise interrupts and distracts both teacher and students in the classroom, thereby interfering with and prolonging the time required to understand a concept.

In summary, noise does present a significant health problem. Its effects on our hearing ability, its contribution to stress and its probable impacts on sleeping, communication, work efficiency, learning, and social and emotional behaviors should definitely be of concern to us all. It is important that we work with our state, local, and federal officials in controlling the noises everywhere around us. In addition, as individuals and families we need to be aware of our personal noise environment and protect ourselves from the adverse effects of excessive exposure.
QUESTIONS FOR CLASSROOM DISCUSSION

1. Can you think of situations in which you have had trouble talking to someone else because of noise interference?

2. Do you remember times when friends or family have complained about noise interfering with an activity such as relaxing or studying?

3. Describe some of the effects associated with excessive noise exposure? If you know someone who works in a noise environment, discuss how noise affects them.

4. Do you think you would be bothered by a lot of noise when you are taking an important test or trying to read a good book?

5. Do your parents or neighbors ever complain about noise in your community? What noise sources seem to concern them?

6. Can you think of some economic impacts associated with high noise levels in working or living arrangements?

CLASSROOM EXPERIMENTS AND PROJECTS

1. The most effective way to create an understanding of the adverse effects of excessive noise is to personally experience the situation. If there is a printing company, a mill, or some other noisy industry in your community, arrange a site visit. The students will benefit from learning about the particular industry, while experiencing the noise levels associated with the process. Encourage them to try to communicate while in the noisy environment. It would also be useful to arrange for them to try ear protectors to see how the noise levels are reduced. Also, the students should have the opportunity to talk to workers who have noise induced hearing loss. If possible, hearing tests for some of the students, both before and immediately after the plant tour would demonstrate the adverse effects of noise on the hearing mechanism. Arrangements for the hearing tests might be made through the school health program, or a university, community, or hospital speech and hearing clinic. Check the yellow pages of your telephone directory for a listing of area speech and hearing clinics.

2. Have the students prepare an article for the school newspaper to educate fellow students about the adverse effects of exposure to excessive noise.
3. Have the students prepare an article for the hallway bulletin board or the school or community library to share what they have learned about the health effects of noise.

4. The students could conduct a survey about noise, exploring individual reaction to noise, knowledge about ways to control noise, etc. Through interviewing community residents, the students can obtain information and also give information about what they have learned about noise pollution. The results of the survey could then be condensed into a report about noise in your community. The students might wish to consider transmitting their findings to your local government or writing a letter to the editor of your local paper.

This material was excerpted from a publication from the Environment Protection Agency: "Preparing for a Quieter Tomorrow". It is appropriate for grades seven through twelve.
APPENDIX B

NOISE: A HEALTH HAZARD

Racket, din, clamor, noise. Whatever you want to call it, unwanted sound is America's most widespread nuisance. But noise is more than just a nuisance. It constitutes a real danger to people's health. At home, at work, and at play, noise can produce serious physical and psychological consequences.

Hearing Loss. Noise loud enough to cause hearing loss is virtually everywhere today. 20 million or more Americans are estimated to be exposed daily to noise that is permanently damaging to their hearing.

When hearing loss occurs, it is in most cases gradual. At first there is the loss of occasional words in general conversation and difficulty understanding speech on the telephone. Many sounds are distorted in loudness, pitch, apparent location, or clarity. High frequency sounds such as "s" and "ch," are often lost or indistinguishable from other sounds. Speech frequently seems garbled.

The hard of hearing person faces other problems. Their inability to converse normally makes it difficult for partially deaf people to participate in lectures, meetings, parties, and other public gatherings. For a person with hearing loss, listening to TV, radio, and the telephone—important activities of our lives—is difficult, if not impossible.
Heart Disease. A growing body of evidence strongly suggests a link between exposure to noise and the development and aggravation of a number of heart disease problems. Noise causes stress and the body reacts with increased adrenaline, changes in heart rate, and elevated blood pressure. Some studies have shown that workers in high noise levels had a higher incidence of circulatory problems than did workers in quiet industries. The danger of stress from noise is even greater for those already suffering from heart disease.

Noise and the Unborn. While still in its mother's womb, the developing child is responsive to sounds in the mother's environment. Particularly loud noises have been shown to stimulate the fetus directly, causing changes in heart rate. The fetus is also affected by its mother's response to noise, with the physical changes she experiences being transmitted to the fetus. These fetal responses may threaten fetal development, particularly early in the pregnancy.

Special Effects on Children. Good health includes the ability to function mentally as well as physically. Research has shown that children may have learning difficulties because of noisy schools, play areas and homes. Students in classrooms near railroad tracks, airports or other noise sources may learn less than students in quiet classrooms.
Sleep Disruption. Sleep is a restorative time of life, and a good night's sleep is probably crucial to good health. But everyday experiences suggest that noise interferes with our sleep. Noise can make it difficult to fall asleep, it can wake us, and it can cause shifts from deeper to lighter sleep stages.

Human response to noise during sleep varies widely among age groups. The elderly and the sick are particularly sensitive to disruptive noise. Compared to young people, the elderly are more easily awakened by noise and, once awake, have more difficulty returning to sleep. As a group, the elderly require special protection from the noise that interfere with their sleep.

A Final Word. Except for the serious problem of hearing loss, there is no human illness known to be directly caused by noise. But in dozens of studies, noise has been identified as an important cause of physical and psychological stress, and stress has been directly linked with many of our most common health problems.

This material was excerpted from a publication from the Environmental Protection Agency: "Noise: A Health Hazard".
APPENDIX C

"QUIET : MAN'S BEST FRIEND"

WATER TRAINING METHOD

The WATER TRAINING METHOD WORKS for almost all dogs.

If possible, consider going to a reputable local obedience training school. An obedience trained dog will stop barking on command, and knowing obedience signals will help you control your dog in other situations and make life happier for all.

Consider the times when your dog's barking is a nuisance. If it's when he's left alone all day, help his loneliness by leaving the radio on. If your dog is an outside pet, allow it more freedom of movement in a fenced yard or pen may quiet its barking. If practical, you might consider a companion pet. Be sure you have plenty of toys available for amusement.

Don't make a big thing out of leaving or returning home. Overexcited dogs are more likely to bark and yelp.

- The first training rule is to be consistent and persistent. You can't expect a dog to learn barking for the wrong reason is corrected one time and not the next.
- Second, be ready for an immediate response. Have ready a plant mister filled with water
- Say "QUIET!" (for whatever its name is) and give one or two sprays of water at the dog while it is barking. He will stop at once. If you wait until he stops barking it may confuse him.
- If the dog moves away, repeat saying "QUIET!" as you go to him and pour one more square of water on him Repeat each time he barks excessively.
- Usually 3 or 4 days of training is enough if you are consistent. (is to 10 water treatments)
- Remember to reassure the dog that you are not trying to make him later when he barks.

DEFINITION

Do you know what a nuisance is? A nuisance is any such noise or thing that is not properly used, or is not properly regulated in any way, or that is not properly managed, which is disturbing or annoying to other persons.

In the case of dogs, it is usually the barking that is considered a nuisance. When a dog barks excessively, it may be considered a nuisance and may be cited as such.

Honduras dog barking is usually the only problem when it is barking excessively. The barking is not loud enough to be a nuisance and is not considered a nuisance in Honduras.

We would like to thank all the people who have helped us in our research and who have contributed to this report.
TIPS FOR DOG OWNERS

- Always find out WHY your dog barks. Unless it has a valid reason, then you must correct it at that time.
- Do not turn a garden hose on a dog or force him to sit in the sun with clothes on.
- Speaking in a low, soothing voice is an ineffective substitute for water treatment and rarely solves the problem.
- Whenever your dog barks for a trained watching reason, praise him or pet him.
- Remember, dogs are companion animals and should be kept in the house during the normal night hours whenever possible.

IS YOUR DOG TRAINABLE?

A dog that is trained up to left alone indoors and is allowed to run after hour may no longer be trainable. Such a dog may have become too nervous for an inexperienced trainer. If this is the case with your dog, consult your veterinarian or qualified dog trainer.

REWARDS

Correcting unnecessary barking is more convenient during the day, but getting up a few times at night will prove worthwhile. After that, you and your neighbors will know when your dog barks, there's a reason. If your neighbors are home and you're not, they will check to see if police should be notified.

The security of knowing you have a real watchdog, as well as enjoying a peaceful and quiet night, and allowing your neighbors to enjoy one too, is well worth the effort.

This material was reprinted with permission from the Humane Society of the United States. It was adapted from materials provided by the City and County of Honolulu, the Honolulu Humane Society, and Citizens Against Noise.
# Reducing Noise in the Home

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Noise intrusion from outside</td>
<td>- install storm windows and doors</td>
</tr>
<tr>
<td></td>
<td>- caulk cracks around doors and windows</td>
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<tr>
<td>2. Noisy washing machine and other appliances</td>
<td>- lubricate motor</td>
</tr>
<tr>
<td></td>
<td>- VIBRATION - isolate heavy equipment from a floor using a rubber pad or thick rug</td>
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<tr>
<td></td>
<td>- isolate appliances from walls and cabinet enclosures; where practical and safe,</td>
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<tr>
<td></td>
<td>surround with sound absorbing materials</td>
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<tr>
<td></td>
<td>- undercoat garbage disposals with damping compound (similar to auto undercoating);</td>
</tr>
<tr>
<td></td>
<td>can also be used on outside drain of washers and dryers</td>
</tr>
<tr>
<td>3. Noisy power tools</td>
<td>- use variable speed tools when possible</td>
</tr>
<tr>
<td></td>
<td>- use isolated area of home to work in</td>
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<tr>
<td></td>
<td>- don't use late at night or early in the morning</td>
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<tr>
<td></td>
<td>- wear hearing protector</td>
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<tr>
<td>4. TV or stereo too loud</td>
<td>- install fireproof acoustical tile behind TV or stereo</td>
</tr>
<tr>
<td></td>
<td>- turn down volume</td>
</tr>
<tr>
<td></td>
<td>- use earphones</td>
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<tr>
<td>5. Noisy car</td>
<td>- drive sensibly</td>
</tr>
<tr>
<td></td>
<td>- check muffler and wheels</td>
</tr>
<tr>
<td></td>
<td>- adjust or replace fan belt if there is a screeching noise under the hood</td>
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<tr>
<td>6. Too much noise from neighbor's apartment</td>
<td>- caulk along wall and floor after removing molding</td>
</tr>
<tr>
<td></td>
<td>- use rugs and drapes where possible</td>
</tr>
<tr>
<td></td>
<td>- ask neighbors to be more quiet</td>
</tr>
</tbody>
</table>
7. Dripping faucet

- place a sponge or facecloth under the drip
- tie a string or a shoelace to the faucet so the drip is channeled as a miniature stream down the string
- a more permanent and cost-saving solution is to replace the worn washer.

8. Creaking doors and hinges

- install weather stripping to tighten door seal
- lubricate hinges with oil or silicone

9. Door slamming

- install door closure dampers on exterior or spring loaded self-closing doors
- install a resilient gasket or weather stripping around the door
- substitute a solid-core door for a hollow-core door

10. Fans and exhausts

- remember the saying "slow and low": the slower the motor speed, the quieter the fan

11. Window rattle

- if window panes rattle, look for breaks in the putty; if the entire frame rattles, check the adjustment of springs or weather stripping
- double-hung windows in aluminum guides can have the guide spacing adjusted for a good fit

12. Air conditioning noise

- select a unit with adequate power capacity
- mount window units on resilient pads
- install perimeter gasket of soft rubber to isolate unit from wall or window structure
- locate unit away from neighbor's bedroom
13. Noisy plumbing
   - reduce water pressure
   - install air lock

14. Noisy ventilation
    (forced air heating and cawling systems)
    - reduce air flow velocity
    - install more grilles
    - install padding around ducts where possible

15. Loud furnace blower
    - align blower pulley and motor
    - lubricate properly (at least once a year)
APPENDIX E

Model Community Noise Control Ordinances

T. Michael Taimi, Commissioner
Kentucky Department of Environmental Protection
18 Reilly Road
Fort Boone Plaza
Frankford, Kentucky 40601
(502) 564-3382

National Environmental Health Association
1209 Lincoln Street, Suite 704
Denver, Colorado 80203
(303) 861-9090

League of Minnesota Cities
183 University Avenue, East
St. Paul, Minnesota 55101
(612) 227-5600

Florida Department of Environmental Regulation
Twin Towers
2600 Blair Stone Road
Tallahassee, Florida 32301
(904) 488-0300
APPENDIX F

EPA Regional Offices
State Noise Control Programs (as of 1982)

Region I -- Connecticut*  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

*State Offices:  
Connecticut Department of Environmental Protection  
Office of Noise Control  
122 Washington Street  
Hartford, CT 06115

Joseph B. Pulaski -- (203) 566-7494

Region II -- New Jersey*  
New York*  
Puerto Rico  
Virgin Islands

*State Offices:  
New Jersey Department of Environmental Protection  
Office of Noise Control  
65 Prospect Street  
Trenton, NJ 08618

Edward J. DiPolvere -- (609) 292-7695

New York Department of Environmental Conservation  
Division of Air  
50 Wolf Road  
Albany, NJ 12233

Barbara Allen -- (518) 457-7454
Region III -- Delaware
District of Columbia
Maryland
Pennsylvania
Virginia
West Virginia

Regional Office:
Curtis Building
5th and Walnut Streets
Philadelphia, PA 19106
(215) 597-9118

*State Offices:

Delaware Department of Natural Resources
and Environmental Control
Edward Tatnall Building
P. O. Box 1401
Dover, DE 19901

Charles W. Wilkins, III -- (302) 736-4791

Metropolitan Washington Council of Governments
Department of Environmental Programs
1875 Eye Street, N.W.
Washington, D.C. 20006

George Nichols -- (202) 223-6800

Maryland Environmental Health Administration
Division of Noise Control
201 West Preston Street
Baltimore, MD 21201

Michael Hurney -- (301) 383-2727

West Virginia Department of Health
Bureau of Industrial Hygiene
151 Eleventh Avenue
South Charleston, W. VA 25303

William Aaroe
Region IV  -- Alabama
Florida*
Georgia
Kentucky*
Mississippi
North Carolina*
South Carolina*
Tennessee

*State Offices:

Florida Department of Environmental Regulation
Noise Control Section
2600 Blair Stone Road
Tallahassee, FL 32301
Denis E. Wile -- (904) 488-0300

Kentucky Department of Natural Resources
and Environmental Protection
Noise Control Section
1050 U.S. 127 South
Frankfort, KY 40601
Thomas Jackson -- (502) 564-3560

North Carolina Department of Natural Resources
and Community Development
Division of Environmental Management
P. O. Box 27687
Raleigh, NC 27611
David Johnson

South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201
Samuel H. McNutt -- (803) 758-5506
Region V

-- Illinois*
Indiana*
Michigan
Minnesota*
Ohio*
Wisconsin

Regional Office:
230 South Dearborn Street
Chicago, IL 60604
(312) 353-2205

*State Offices:

Illinois Environmental Protection Agency
Division of Land/Noise Pollution Control
2200 Churchill Road
Springfield, IL 62706
James Reid -- (217) 782-9469

Indiana Association of Cities and Towns
Noise Control Program
150 West Market Street, Suite 600
Indianapolis, IN 46204
Bradford G. Garton -- (317) 635-8616

Minnesota Pollution Control Agency
Division of Air Quality, Noise Section
1935 West Country Road, B2
Roseville, MN 55113
David Kelso -- (612) 296-7373

Ohio Department of Health
Bureau of Environmental Health
P. O. Box 118
Columbus, OH 43216
Richard Martin -- (614) 466-1390
### Region VI

- **Arkansas**
- **Louisiana**
- **New Mexico**
- **Oklahoma**
- **Texas**

**Regional Office:**
First International Bldg.
1201 Elm Street
Dallas, TX 75250
(214) 749-3817

*State Offices:*

- **New Mexico Occupational Health & Safety Bureau**
  P. O. Box 968
  Santa Fe, NM 87503
  Dave Marble -- (505) 827-3563

- **Oklahoma Department of Health**
  1000 Northeast 10th Street
  P. O. Box 53551
  Oklahoma City, OK 73152
  Dale McHard -- (405) 271-5211

### Region VII

- **Iowa**
- **Kansas**
- **Missouri**
- **Nebraska**

**Regional Office:**
1735 Baltimore Street
Kansas City, MO 64108
(816) 374-3307

*State Offices:*

- **Iowa League of Municipalities**
  Noise Control Program
  900 Des Moines Street
  Des Moines, IA 50316

- **Nebraska ECHO Program**
  Lincoln-Lancaster County Health Department
  2200 St. Mary's Avenue
  Lincoln, NE 68502
  Gary L. Walsh -- (402) 474-1541
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<th>Region</th>
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<tr>
<td></td>
<td>Montana</td>
<td>Lincoln Tower, Suite 900</td>
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<td>North Dakota*</td>
<td>1860 Lincoln Street</td>
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<td></td>
<td>South Dakota</td>
<td>Denver, CO 80295</td>
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<td></td>
<td>Utah</td>
<td>(303) 837-2221</td>
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<td>4210 East 11th Avenue</td>
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<td>Denver, CO 80220</td>
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<td>David Gourdin, Jr. -- (303) 320-8333</td>
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<td>North Dakota Department of Health</td>
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<td>1200 Missouri Avenue</td>
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<td>Bismarck, ND 58505</td>
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<td>Jeffrey Burgess -- (701) 224-2348</td>
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<td>Region IX</td>
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<td>Arizona*</td>
<td>215 Fremont Street</td>
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<td>California*</td>
<td>San Francisco, CA 94105</td>
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<td>Hawaii*</td>
<td>(415) 456-4506</td>
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<td>Pacific Trust</td>
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<td>Phoenix, AZ 85008</td>
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<td>A.J. Battistone -- (602) 255-1156</td>
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<td>California Department of Health Services</td>
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<td>Office of Noise Control</td>
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<td>714 P Street, 088-692</td>
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<td>Sacramento, CA 95814</td>
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<td>Ross A. Little -- (916) 322-2097</td>
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- 6 -
Region IX

*State Offices (cont.):

Hawaii Department of Health
Noise and Radiation Branch
P. O. Box 3378
Honolulu, HI 96801

Thomas Anamizu -- (808) 548-3075

Region X

-- Alaska
-- Idaho
-- Oregon*
-- Washington

Regional Office:

1200 Sixth Avenue
Seattle, WA 98101
(206) 442-1253

*State Office:

Oregon Department of Environmental Quality
Noise Pollution Control
522 S.W. 5th Avenue
Box 1760
Portland, OR 97207

John Hector -- (503) 229-5989
Sample Press Release

Please retype this release, substituting the correct information about your particular program in the underlined spaces, and take it to your local newspaper and radio and television stations.

FOR IMMEDIATE RELEASE

The Newtown Sound Advice Program
November 5
John Jones
234-5678

Are you tired of motorcycles and buses disturbing your peace and quiet? Is the barking dog next door driving you crazy?

Unwanted noise is a serious matter that affects all of us. Noise will be the program topic at a meeting of the Newtown Chapter #11 of the American Association of Retired Persons scheduled for 11 a.m., Thursday, November 12. The group will meet in the auditorium of the First National Bank, 123 Main Street.

The program will include a slide presentation that discusses the effects of noise and suggests some simple ways to reduce noise in our everyday lives. Mary Smyth, a volunteer noise counselor, will answer questions from the audience.

For further information, contact John Jones at 234-5678.
Appendix H

Sample Public Service Announcements

10 seconds:

The Sound Advice program invites you to a lecture on the health effects of noise. Come to the Knights of Columbus hall at 7:00 p.m. on Wednesday, March 3rd.

20 seconds:

Are you tired of being kept awake all night by barking dogs? Loud all night parties? Motorcycles roaring through the neighborhood at 1:00 a.m.? Act now to reduce noise in Newtown. Complain to the noise counselor at 123-4567. That's 123-4567!

30 seconds:

Noise is a health problem. It is estimated that 20 million Americans are exposed daily to noise that is permanently damaging to hearing. Noise may also contribute to such conditions as high blood pressure, ulcers, asthma, headaches and colitis. Noise is all around us, in our homes, at work and outside. But there are ways to reduce noise. If you would like more information on noise and what can be done about it, call Mrs. Bea Quiet at 123-4567. That's 123-4567!
(for back cover)

Developed by Special Events Section of Program Department
American Association of Retired Persons

The "Sound Advice" program was developed by the AARP Program Department under a grant from the U.S. Environmental Protection Agency. It was the culmination of an EPA funded project, administered by AARP, which utilized older persons as noise counselors.

This material is part of a kit on noise abatement, which includes: a volunteer noise counselor's guide, a volunteer organizer's guide, a slide-tape program "The George Show", and a slide-tape program "Sound Advice".

We gratefully acknowledge the assistance of the American Speech-Language-Hearing Association, the National Urban League, the Florida Department of Environmental Regulation, and the National Association of Noise Control Officials in reviewing these materials.

The American Association of Retired Persons is a non-profit, nonpartisan organization dedicated to helping older Americans achieve lives of independence, dignity, and purpose. By providing a wide range of direct member benefits and services and a host of community service programs, the Association has become the nation's largest organization of older citizens. For additional information about programs and services, write: AARP, 1909 K Street, N.W., Washington, D.C. 20049.