

**Breathe Free Program:  
A 3-Year Evaluation Report, 2005-2007**



---

A Report by RS Burman & Associates, LLC



## Table of Contents

I.	Executive Summary .....	3
II.	Program Description .....	4
III.	Program Goals & Measurable Objectives.....	5
IV.	Methodology & Analysis of Findings	
	Objective #1.....	6
	Objective #2.....	11
	Objective #3.....	15
	Objective #4.....	17
	Objective #5.....	23
V.	Conclusions & Recommendations.....	25
VI.	Appendix of Survey Instruments.....	27

## Executive Summary

The primary goal of *Breathe Free* is to identify individuals at-risk for COPD through lung health screenings, increase awareness and education about COPD, and identify needs and resources of COPD patients, providers, and the general community. Five measurable objectives were identified and data was collected over a 3-year period beginning in fiscal year 2005 and ending fiscal year 2007.

Findings suggest that there is a clear lack of COPD awareness, information, and education among patients, providers, and the community. Approximately half of the COPD Community Survey participants age 44 and older were unfamiliar with COPD. Furthermore, providers indicated that time demands, a lack of resources, and a lack of training related to early detection and treatment of COPD, are barriers to providing care to their patients.

Early detection and screening efforts should continue to utilize smoking cessation classes, workshops, and support groups as means for identifying and collecting more extensive data on at-risk populations for COPD. At the statewide level, information, screening efforts, referrals, and management related to COPD is fragmented. Health care professionals, public health officials, and other stakeholders should work collaboratively to develop a more comprehensive system of managed care to ensure that all patients and those at-risk for COPD receive the highest quality of continuing care in the state of Arizona.

## Program Description

The American Lung Association Arizona (ALAA), is a non-profit 501(c) 3 organization, established in 1912 whose mission is to prevent lung disease and promote lung health. Nationally, chronic obstructive pulmonary disease (COPD) is the fourth leading cause of death and is the only major disease that is rising in prevalence and mortality while all other major causes of death are declining. The National Heart, Lung, and Blood Institute (NHLBI) estimated that \$37.2 billion was spent on COPD in 2004. According to Arizona Comprehensive Lung Disease Control Plan, a report developed by the Arizona Department of Health Services, COPD was the third leading cause of morbidity in Arizona in 2002, contributing to 13,638 hospitalizations. Based on hospital discharge data and prevalence and population estimates, the Arizona Department of Health Services indicated the total number of Arizonans with COPD is 290,124.

The *Breathe Free* program identifies individuals at-risk for COPD through early detection and screening. The program consists of community and healthcare provider education aimed at improving the quality of life for those afflicted, increasing awareness of the use of spirometry for early detection and screening, and increasing awareness of interventions aimed at high-risk behavior associated with the disease such as smoking.

## Program Goals & Measurable Objectives

**Goal 1:** Increase the number of individuals in the targeted area (i.e., age 44 and older) who understand the importance of screening and early detection, avoidance of high-risk behaviors (i.e., smoking), and who are aware of the advantages of disease management for COPD.

**Goal 2:** Increase the incidence of screening and early detection of COPD among the target population (i.e., age 44 and older).

**Goal 3:** Identify specific needs, resources and strategies for the management of newly diagnosed COPD patients, caregivers and healthcare providers in the target population.

**Outcome Objective 1:** By May 31, 2007, 1,500 program participants will have engaged in a COPD needs assessment which will identify specific needs, resources, and strategies in the management of newly diagnosed COPD patients.

**Outcome Objective 2:** By May 31, 2007, 30 COPD community or provider education workshops will be conducted educating participants on the causes, symptoms, disease management of COPD, and/or benefits of early detection and screening and avoidance of high-risk behaviors such as smoking. This will include an overview of the implementation of a brief tobacco cessation intervention.

**Outcome Objective 3:** By May 31, 2007, 20 COPD education and awareness presentations will be conducted as a part of smoking cessation clinics.

### **Outcome Objective 4:**

2005: By June 30, 2005, at least 2,500 individuals from the target counties will be screened using spirometry for early detection of COPD.

2006: By June 30, 2006, up to 1,500 individuals from the target counties will be screened using spirometry for early detection of COPD.

2007: By May 31, 2007, up to 1,000 individuals from the target counties will be screened using spirometry for early detection of COPD.

**Process Objective 5:** By May 31, 2007, program participants will have engaged in program-related process evaluation activities to improve on-site program deliveries and overall program outcomes.

## **Outcome Objective 1**

By May 31, 2007 1,500 program participants will have engaged in a COPD needs assessment which will identify specific needs, resources, and strategies in the management of newly diagnosed COPD patients.

### **Methodology**

#### **COPD Patient and Caregiver Needs Resource Assessment**

After determining a clear need for more COPD education based on the results of the COPD Community Survey in Year 1 of the *Breathe Free* program, the ALAA focused its efforts on developing an assessment tool that identified specific needs of patients and caregivers in COPD concentration areas of early detection and screening, COPD disease progression, and COPD management. With guidance from the Community Survey results in Year 1 (2005) and input from the ALA staff, the *Breathe Free* project evaluator developed a first draft of the Patient and Caregiver Needs Resource Assessment (Appendix A). Several revisions to various items and choice selections were made throughout the survey development process before the final draft was completed in fall 2005. The same survey instrument has been used to assess COPD patient and caregiver needs in Year 2 (2006) and Year 3 (2007) of *Breathe Free*.

#### **COPD Provider Needs Resource Assessment**

The COPD Provider Needs Resource Assessment (Appendix A) was created in response to findings from the COPD Provider Survey conducted in Year 1 (2005) of the *Breathe Free* program. The purpose of the assessment tool is to identify more specific needs of providers in the areas of early detection and screening of COPD, COPD disease progression and management, and general provider questions. With guidance from the COPD Provider Survey results in Year 1 (2005) and ALA staff input, an evaluator developed the first draft of the assessment tool. Items were modified within these targeted areas throughout the survey development process before the final draft was completed in fall 2005. The COPD Provider Needs Resource Assessment tool has been used to assess specific provider needs in Year 2 (2006) and Year 3 (2007) of *Breathe Free*.

### **Data Analysis**

#### **COPD Patient and Caregiver Needs Resource Assessment**

In FY 2006 and FY 2007, a total of 650 participants completed the COPD Patient and Caregiver Needs Resource Assessment. Of these 650 participants, 484 were COPD patients, 128 were caregivers, and 38 participants did not identify themselves as a patient or caregiver. To obtain the most accurate history of COPD patients, all analyses of background data (questions 1-3 in the survey) include only those respondents who are self-reported patients with COPD.

#### ***Patient Background Analysis***

Not surprisingly, the majority of patients with COPD are ex-smokers (see Table 1). One positive finding is that only 12% of patients are currently smoking. Interestingly enough, the

median age of current smokers (65 years of age) and respondents who are not currently smoking (70 years of age) is not significantly different. This finding demonstrates a need for continuing education related to smoking cessation.

<b>Table 1. Results: Patients Only</b> (caregiver respondents and missing data excluded)	<b>Yes</b>	<b>No</b>
Are you an ex-smoker?	76%	24%
Do you currently smoke?	12%	88%

Often times, one challenge related to early detection and screening of COPD is getting patients to a doctor or health care professional for an initial visit. In the survey, patients were asked what prompted them to seek out a doctor or health care professional. Table 2 illustrates the top three most common reasons for an initial visit:

<b>Table 2. Top 3 Reasons For Visiting a Doctor/Health Care Professional</b>	<b>Percent of Respondents</b>
1. Shortness of breath	82%
2. Increased coughing	48%
3. Increased phlegm or mucus production	40%

Shortness of breath was by far the most common reason for an initial visit reported by COPD patients. Perhaps the most important finding is that all three symptoms above are strongly correlated with smoking. Once again, this finding highlights smoking as a risk factor for the development of COPD later in life.

Findings also revealed that when patients decided to quit smoking, it was often too late to avoid symptoms commonly associated with the development of COPD. Mild (i.e., coughing, colds, flu, decreased fitness) and severe (i.e., heart attack, chest pain, shortness of breath) physical symptoms were the top two reasons given by patients for deciding to quit smoking. This finding is another example of why early detection and screening for COPD, particularly for current and ex-smokers, is vital to a patient’s well-being later in life. In many cases, a patient’s physical symptoms are so severe that treatment options are limited.

Physical limitations associated with the progression of COPD may be the reason why 70% of patients cited “doing everyday tasks” as the biggest challenge that they face. Table 3 shows the most common challenges patients and caregivers face in dealing with COPD.

<b>Table 3. Biggest Challenges For Patients and Caregivers</b>	<b>Patients</b>	<b>Caregivers</b>
Doing everyday tasks	70%	64%
Emotional hurdles	47%	66%
High cost of medication	43%	44%
Not knowing where to get medical help	41%	64%
Access to pulmonary rehab programs	31%	35%

One interesting finding of note is that caregivers reported more emotional hurdles than the patients they care for. Furthermore, caregivers experienced challenges associated with finding medical help and performing everyday tasks.

***What Are the Specific Needs of Patients and Caregivers?***

Patients and caregivers need and *want* to be more educated about all aspects of the COPD process. Table 4 below provides overwhelming support for continuing to educate both patients and caregivers about early detection and screening of COPD.

<b>Table 4. In what areas do patients and caregivers need more information?</b>	<b>Percent of Respondents Who Agree or Strongly Agree</b>
There is not enough information about the risk factors for COPD.	75%
Spirometry (i.e., breathing tests) should be a part of a patient’s annual exam.	96%
I would like to know more about how to prevent COPD.	85%
There needs to be more information about COPD symptoms.	95%
A step-by-step guide to understanding COPD progression should be made available.	100%
More information on specific treatments for COPD should be made available.	99%
More information on when to seek medical attention for COPD should be made available.	98%

***What Resources Do Patients and Caregivers Recommend?***

It is clear that patients and caregivers feel that there is a lack of information available in all phases of COPD progression, from early detection and screening to treating patients with COPD. But what is the best way to get patients and caregivers this information? Table 5 provides some insight directly from the people who need these resources the most, patients and caregivers.

<b>Table 5. If it was available in the community, I would:</b>	<b>Percent of Respondents who Agree or Strongly Agree</b>
Use an online resource to access COPD information	86%
Attend a support and disease management group	88%
Attend a COPD workshop	86%

Results indicate that patients and caregivers would be willing to utilize any means necessary to access more information on COPD. With that said, when survey participants were forced to select the best way to increase COPD education and awareness, both patients and caregivers identified “offering COPD workshops” as their top choice.

### **COPD Provider Needs Resource Assessment**

In FY 2006 and FY 2007, a total of 598 providers completed the COPD Provider Needs Resource Assessment. The majority of these 598 participants were RCPs (55%), MDs (20%), and RNs (14%) employed in either Maricopa County (69%) or Pima County (22%).

Findings suggest that providers have the necessary basic tools to conduct screenings for COPD. Eighty-two (82%) of providers have a spirometer in their office, and 92% of providers with a spirometer in their office know how to use it correctly. Not surprisingly, only 61% of providers without a spirometer in their office know how to use a spirometer correctly.

#### ***Provider Perceptions of COPD Prevention and Early Detection***

Providers reported that the majority of patients they screen for COPD are referred by their doctors (69%). While doctor referrals ultimately help increase the number of overall screenings, in many cases (as the Patient Needs Resource Assessment illustrates), a patient will schedule an initial visit after they have already experienced mild to severe symptoms of COPD. Providers were asked to cite the most effective ways to reach at-risk patients. Findings in Table 6 below revealed that providers feel that written materials on COPD such as brochures, pamphlets, and newsletters are the most effective means for reaching patients at-risk.

<b>Table 6. Most Effective Ways to Reach Patients as Cited by Providers</b>	<b>Percent of Respondents</b>
Provide COPD written materials	67%
Smoking cessation workshops/classes	50%
During an annual physical exam	36%

The findings reported in Table 6 clearly go hand-in-hand with provider responses to the question, “What are the biggest obstacles to increasing early detection of COPD?” Nearly two out of three providers (61%) cited a lack of time to devote to educating patients about COPD, easily the most common response among providers. The salient factor in provider responses to the most effective ways to reach patients is time. Providing written materials and smoking cessation workshops do not disrupt the daily work routine, and physical exams usually occur only once a year. In other words, the most effective ways to reach patients may also be the most convenient ways to reach patients from a provider perspective.

#### ***What are the Specific Needs of Providers?***

More than half of providers (51%) indicated that training on when to screen a patient for COPD would be helpful to them. Approximately one out of every four providers mentioned that additional training in areas such as patient referral, COPD risk factors, and how to recognize COPD symptoms would also be helpful. In addition to trainings on specific topics, providers feel that partnerships with hospitals (58%), managed care (56%), and state health agencies (47%) would be beneficial to increasing the early detection of COPD.

The majority of providers agree that they are trained to treat patients with COPD (93%) and that they have adequate organizational resources to treat patients (83%). However, when asked to pick the area that they know the least about (i.e., prevention, risk factors,

symptoms, or treatments), the most popular choice among providers was COPD treatments (37%). Interestingly enough, providers indicated that they felt patients were the least educated about COPD risk factors. More than 9 out of 10 providers (93%) reported that getting patients to quit smoking (the most common risk factor) was their biggest challenge they faced in relation to COPD management.

***What Resources Do Providers Recommend?***

Although there was no consensus among providers as to the best way to increase COPD education and awareness (i.e., written materials, COPD workshops, etc), it is important to note that resources are generally dependent upon providers biggest obstacle to increasing education, a lack of time in their daily schedules.

## **Outcome Objective 2**

By May 31, 2007, 30 COPD community or provider education workshops will be conducted educating participants on the causes, symptoms, disease management of COPD, and/or benefits of early detection and screening and avoidance of high-risk behaviors such as smoking. This will include an overview of the implementation of a brief tobacco cessation intervention.

### **Methodology**

#### **COPD Community Survey**

The COPD Community Survey, conducted in FY 2005, was designed to assess community knowledge and attitudes related to COPD. A project evaluator, with input from the ALA staff, developed items to gather data on the above dimensions. After several revisions, a final draft was completed in 2004. To assess change in COPD education over time, the ALA staff and project evaluator conducted a 3-month follow-up of respondents who participated in the initial COPD Community Survey. However, due to low response rates and limitations associated with a small sample size, meaningful trends could not be identified. Therefore, results of the 3-month follow-up survey will not be discussed in this report. Findings from the COPD Community Survey demonstrated a critical need for more education in the community in Year 1 (2005). As a result, the focus shifted from determining whether more education was needed in the community (Year 1) to identifying specific needs and available resources among patients and caregivers in Year 2 (2006) and Year 3 (2007) through the COPD Patient and Caregiver Needs Resource Assessment (Objective 1).

#### **COPD Provider Survey**

The COPD Provider Survey, conducted in FY 2005, was designed to assess provider knowledge and attitudes related to COPD. A project evaluator, with input from the ALA staff, developed items to gather data on the above dimensions. After several revisions, a final draft was completed in 2004. To assess change in COPD education over time, the ALA staff and project evaluator conducted a 3-month follow-up of participants in the initial COPD Provider Survey. However, due to a low provider response rate (N = 27) in the 3-month follow up survey, any longitudinal comparisons over time are inconclusive. Therefore, results of the 3-month follow-up survey will not be discussed in this report. Findings from the COPD Provider Survey demonstrated a critical need for more education in the community in Year 1 (2005). As a result, the focus shifted from determining whether more provider education was needed (Year 1) to identifying specific needs and available resources among providers in Year 2 (2006) and Year 3 (2007) through the COPD Provider Needs Resource Assessment (Objective 1).

### **Data Analysis**

#### **COPD Community Survey**

A total of 144 participants completed the COPD Community Survey in Year 1 of the Breathe Free program (FY 2005). Table 7 shows a breakdown of participants by county.

<b>Table 7. COPD Community Survey Participants by County</b>	<b>Percent of Respondents</b>
Maricopa	35%
Pima	33%
Pinal	15%
Yavapai	11%
Yuma	6%

***Overall Findings***

Overall, findings suggest that community respondents understand the basic facts, statistics, and concepts related to COPD. For example, more than 75% of respondents understand that COPD is a preventable disease that can affect a person of any age. Moreover, over 80% of respondents answered educational items related to physical (i.e., the main symptom is of COPD is shortness of breath) and emotional (i.e., anxiety and depression are common in people with COPD) symptoms correctly.

However, it was clear that community respondents struggled with educational items that applied basic COPD facts within the context of early detection and treatment. For example, respondents recognized that shortness of breath was a main symptom of COPD, but were unsure of how to go about treatment. Nearly half of respondents incorrectly answered items related to COPD treatment (i.e., “a small percentage of COPD patients rely on surgery to treat their symptoms”, “pulmonary rehab is used as a treatment in only severe cases of COPD”).

***Analysis of Individual and Community Attitudes***

The most revealing finding is that only 1 in 5 respondents (21%) feel well-informed about COPD. Furthermore, 58% of respondents do not know where to locate COPD resources. These findings are important considering that 68% of respondents feel that COPD is a serious health problem in Arizona.

While there are no significant differences in self-reported knowledge of COPD and community attitudes about COPD across counties, one finding in particular is worthy to note and deserves more attention in future research. Nearly 1 in 10 respondents in Maricopa County (8%) missed work at least once in the past 12 months due to a respiratory problem. Furthermore, 17% of respondents in Pima County and 40% of respondents in Yuma County were absent from work due to a respiratory problem in the past 12 months. Although there are limitations in sample size, particularly in Yuma County, these preliminary findings illustrate the economic impact of COPD in the workplace. Findings suggest that employers in rural communities appear to be most at-risk.

***Analysis of Informed vs. Uninformed Respondents***

Exploratory analyses were conducted comparing participants who feel informed about COPD (i.e., marked agree or strongly agree on Item 16) to those who feel uninformed about COPD (i.e., marked disagree or strongly disagree on Item 16). Table 8 illustrates the differences between the informed and uninformed groups.

<b>Table 8. Crosstabs Analysis of Informed vs. Uninformed Groups</b>	<b>Informed (N = 21)</b>	<b>Uninformed (N = 57)</b>
I know where to find COPD-related resources.	90%	29%
I contacted my physician with results of my lung health screening.	77%	39%
Doctors need to be more educated about COPD.	83%	54%

Respondents who are informed about COPD are more likely to know where to find resources, and overall, are more likely to take action based on the results of their screening. These findings support the link between community education and preventative action. As a result of being knowledgeable about COPD, informed respondents follow-up with physicians, thereby increasing the likelihood of preventing COPD and minimizing the negative effects of the disease.

### **COPD Provider Survey**

A total of 108 participants completed the COPD Provider Survey in Year 1 of the Breathe Free program (FY 2005). The majority of participants in the survey were RCPs (74%) and RNs (8%). Table 9 shows a breakdown of participants by county.

<b>Table 9. COPD Provider Survey Participants by County</b>	<b>Percent of Respondents</b>
Maricopa	14%
Pima	47%
Pinal	12%
Yavapai	9%
Yuma	19%

### ***Overall Findings***

Consistent with the results from the COPD Community Survey, providers understand the basic facts, statistics, and concepts related to COPD causes, progression of the disease, and treatments. An overwhelming majority (98%) of providers agree that COPD is a serious health problem in Arizona. Furthermore, 97% of providers mentioned that their patients need more education in COPD management.

Interestingly enough, providers share similar frustrations in treating COPD as respondents in the COPD Community Survey. For example, nearly 2 out of every 3 providers (63%) find it difficult to treat patients with COPD and only 16% of providers feel that they do NOT need more training on treatments related to COPD.

### ***Analysis of Provider Responses by County***

To provide a more accurate investigation into the needs of providers statewide, an analysis of provider responses was conducted by county. Although a small sample size is a limitation of this analysis, Table 10 serves as a benchmark of provider needs and perceptions of COPD across the state of Arizona.

<b>Table 10. Provider Needs and Perceptions</b>	<b>Maricopa</b>	<b>Pima</b>	<b>Pinal</b>	<b>Yavapai</b>	<b>Yuma</b>
% of respondents with a spirometry in their office	100%	88%	100%	100%	57%
% of respondents who feel more provider training on COPD treatments is needed	80%	63%	73%	90%	63%
% of respondents who feel that their patients know where to find COPD resources	33%	48%	8%	60%	37%
% of respondents who feel that it is difficult to treat patients with COPD	67%	62%	42%	90%	61%
% of respondents who feel COPD is a growing concern among providers	100%	88%	75%	100%	67%
% of respondents who feel well-informed about COPD	93%	92%	85%	90%	61%

Results suggest that there is a strong need for COPD equipment (Yuma County) and additional training and patient resources, namely for providers located in rural areas of Arizona. It is also interesting to note the parallels between the COPD Community Survey and the COPD Provider Survey results. For example, the analysis of community respondents informed about COPD compared to those uninformed about COPD yielded findings that suggest informed community respondents take more action related to COPD prevention and management. This holds true when provider results for Yuma County in Table 10 are examined more closely. Providers in Yuma County were significantly less likely to report feeling well-informed about COPD compared to providers in Maricopa, Pima, Pinal, and Yavapai counties. Not surprisingly, being “uninformed” was positively related to “not taking action”. Respondents from Yuma County reported that only 57% had a spirometer in their office, significantly fewer than providers in other counties.

Unfortunately, limited funding and staff resources prevented ALAA from addressing the specific needs of rural counties such as Yuma in Year 2 (2006) and Year 3 (2007) of *Breathe Free*. However, findings clearly reiterate the need for more education among providers and suggest a critical need for more research on provider needs and available resources in Arizona’s rural communities.

## Outcome Objective 3

By May 31, 2007, 20 COPD education and awareness presentations will be conducted as a part of smoking cessation clinics.

### **Methodology**

#### **Smoking Cessation Class Survey**

The purpose of the Smoking Cessation Class Survey is to track participant smoking habits and perceptions of smoking over a 6-week period of time. With the guidance of the ALA staff, a project evaluator created the Smoking Cessation Baseline Survey that was administered on the first day of class. A modified version of the baseline survey was given after session #3, after a COPD presentation in which a speaker with COPD shared her experiences living with COPD. At the conclusion of the 6-week course, a final survey was administered to collect participant exit data.

### **Data Analysis**

#### ***Overall Findings***

In FY 2006, a total of 114 participants enrolled in a 6-week smoking cessation class in Pima County. Of these 114 participants, 60% were female and 40% were male, with a median age of 48. Sixty percent (60%) of participants indicated that this was the first time they had enrolled in a smoking cessation class.

<b>Table 11. Smoking Habits Over the 6-Week Course</b>	<b>Baseline Survey (N = 79)</b>	<b>Mid-Course Survey (N = 61)</b>	<b>Exit Survey (N = 49)</b>
% of respondents who used tobacco products in the last 24 hours	89%	56%	8%
% of respondents who used tobacco products in the last 7 days	94%	80%	12%
% of respondents who used tobacco products in the last 24 hours	95%	90%	71%

Results (Table 11) indicate that smoking cessation course participants significantly reduced their use of tobacco products over the 6-week period. While this analysis is not a long-term indicator of smoking cessation, it does suggest short-term success for class participants. One limitation of this finding is that less than half of class participants completed an exit survey. Therefore, results of smoking cessation may be slightly overstated given the lower response rate in the exit survey.

#### ***Reasons For Wanting to Quit Smoking***

Table 12 lists the top reasons participants provided for wanting to quit smoking. Results suggest that smoking has implications for a respondent's personal health, finances, and family and social networks. It is important to note that advice from a physician appeared to play a role in a participant's effort to quit smoking.

<b>Table 12. Reasons For Wanting to Quit Smoking</b>	<b>Percent of Respondents</b>
Smoking affect my health	65%
Smoking costs too much	51%
Pressure to quit from family and friends	45%
My doctor told me to quit smoking	43%
Smoking is too inconvenient	31%

### ***Participant Fears***

Table 13 illustrates the health conditions or diseases that worry class participants the most. Surprisingly, shortness of breath caused the most anxiety among class participants, even more so than cancer and heart disease.

<b>Table 13. What Health Conditions/Diseases Worry You the Most?</b>	<b>Percent of Respondents</b>
Shortness of breath	40%
Cancer	39%
Heart disease	38%
Emphysema	34%
Coughing	32%

### ***Class Satisfaction Analysis***

Baseline data collected prior to the start of the 6-week course indicated that nearly 2 out of every 3 class participants (62%) believed that listening to a speaker with chronic disease would motivate them to quit smoking. As a result of this finding, the ALA arranged for a presenter to share her personal battle with COPD during the third class. Results of the 3-week follow-up survey support the addition of this “human element” to the smoking cessation course. Ninety-two percent (92%) of participants agreed that they are more likely to quit smoking after listening to the speaker. Additionally, 66% of participants indicate that “speakers motivate me more to quit smoking than general classroom instruction”.

Participants had very positive feedback about the presenter. A few comments include:

*“It was extremely informative and reinforced my reasons for quitting”.*

*“The guest speaker showed me that it is never too late to stop [smoking]”.*

*“She made the disease [COPD] real”.*

*“I needed this wake-up call”.*

*“[The speaker] is my best source of inspiration. I like to hear someone that has had the same addiction and beat it, and to see first-hand what smoking can do to your health”.*

Clearly, participants were extremely satisfied with the entire 6-week smoking cessation course. Ninety-eight (98%) of participants agreed that they would recommend this class to a friend.

## **Outcome Objective 4**

2005: By June 30, 2005, at least 2,500 individuals from the target counties will be screened using spirometry for early detection of COPD.

2006: By June 30, 2006, up to 1,500 individuals from the target counties will be screened using spirometry for early detection of COPD.

2007: By May 31, 2007, up to 1,000 individuals from the target counties will be screened using spirometry for early detection of COPD.

## **Methodology**

### **Lung Health Screening Consent Form**

In 2005, the American Lung Association staff created the Lung Health Screening Consent Form (Appendix A) to gather more specific data on participants related to smoking behavior and familiarity with COPD. An evaluator assisted with revisions of each draft to ensure that participants understood each question, thereby increasing the quality and reliability of the data.

### **Venue Selection**

The American Lung Association is solicited by and seeks out venues in which it can promote its mission, provide information to the public, and service the community with pulmonary function tests. While the American Lung Association receives an overwhelming number of requests to attend health functions, the Breathe Free team evaluates each request based on how likely the attendees will benefit from the COPD specific services and information. The Breathe Free team selectively chooses its venues according to criteria that correspond with the pre-determined target population. These main criteria are as follows:

1. Majority of attendees fit into the targeted age group of 44 and older.
2. Roughly (25%) of attendees are current or former smokers.

Since 2005, health screening venues included Senior Citizen Community events, worksite health fairs, Religious Organization fairs, and Health Expos.

## **Data Analysis**

### ***Demographic Profile of Lung Health Screening Participants***

Over the past three years, the Breathe Free Program has screened a total of 4,324 individuals for COPD. Of these 4,324 individuals, 3,509 (81%) were in our target population of age 44 and older.

Table 14 below illustrates the total number of lung health screenings from fiscal year 2005 to 2007. After screening more than 3,000 participants in 2005, the focus shifted from the

quantity of screenings to the overall quality of screenings. Staffing and funding limitations prevented the ALA from following up with participants who reported an abnormal breathing test in 2005. To better serve those with abnormal breathing tests, screening target numbers were lowered to 1,500 in 2006 and 1,000 in 2007. Despite a decline in the number of overall screenings, the data suggests the ALA is becoming more efficient in screening the targeted age group of age 44 and older. For example, in 2005, individuals age 44 and older accounted for 80% of all screenings. By 2007, individuals age 44 and older accounted for more than 84% of all screenings.

**Table 14. Total Lung Health Screenings, Breathe Free Program, FY 2005-2007**

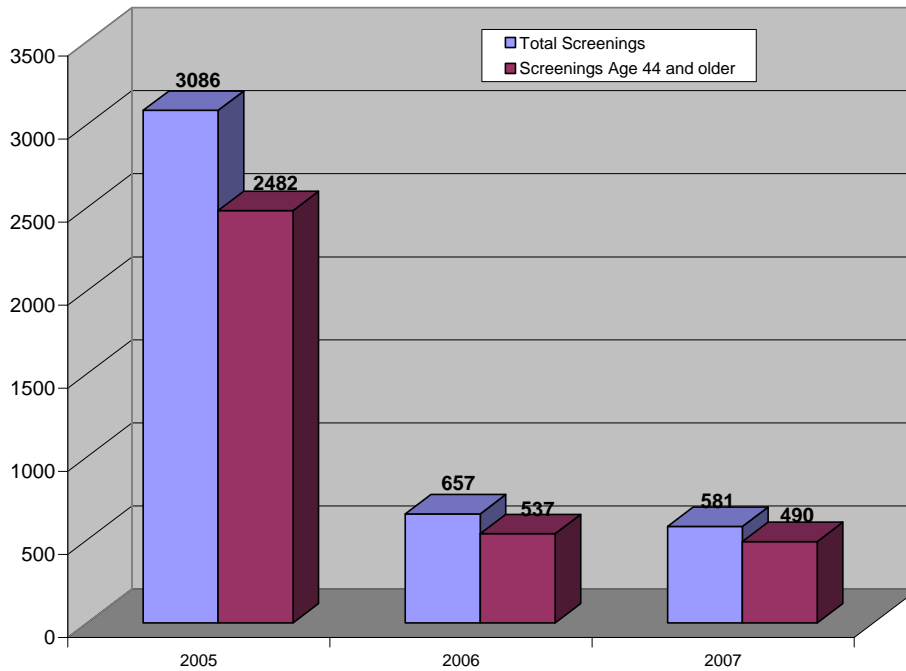


Table 15 below illustrates the total number of lung health screenings by gender. In each year of the program, there were nearly twice as many female participants as male participants. Over the three year period, 69% of all participants were female while 31% were male. This finding was also consistent with participants age 44 and older in the target population.

**Table 15. Total Lung Health Screenings by Gender, Breathe Free Program, FY 2005-2007**

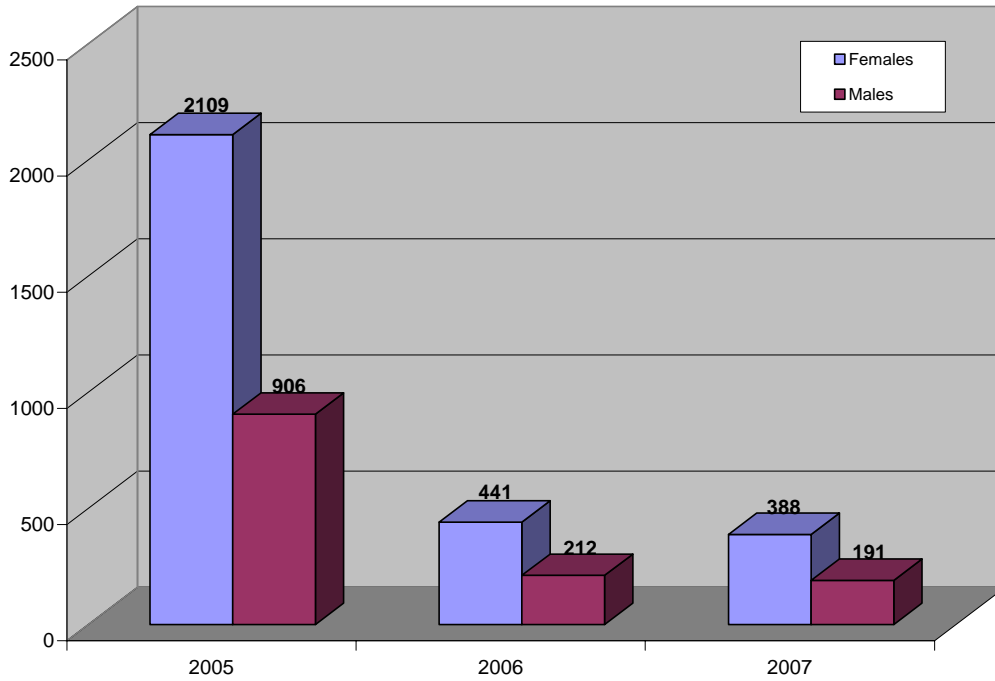


Table 16 illustrates the total number of lung health screenings by ethnicity. During the three-year period, white participants accounted for slightly more than 80% of all screenings. This finding was consistent with the target population of age 44 and older.

	2005	2006	2007
White	2,506	500	433
African American	90	26	15
Hispanic	244	88	69
Asian	58	18	10
Native American	69	10	36
Other	24	6	7
<b>Total</b>	2,991	648	570

The majority of screening participants resided in Pima County (58%). Twenty percent (20%) of participants resided in Maricopa, 11% in Yavapai, 10% in Pinal, and 1% in Yuma (based on 2006-2007 data only).

***Overall Findings***

Results presented in Table 17 support a need for more COPD education in the community, particularly for those ages 44 and older. Although less than two out of three (61%) screening participants are familiar with COPD, this percentage has increased each year since 2005, when less than half of all participants (49%) were familiar with COPD. The rise in

familiarity with COPD over the past three years is evidence that Breathe Free is creating awareness of COPD within the state of Arizona.

In addition to creating awareness of COPD in our community, findings suggest that more people are taking preventative action against COPD and other lung health illnesses. In 2005, only 34% of screening participants had taken a breathing test in the past. By 2007, over half of all participants (51%) had taken a breathing test, an increase of 50% in the three-year period. These findings confirm that more screening participants are taking necessary action (i.e., breathing tests) to guard against lung health disease or minimize the effects of lung health disease in its earliest stages. It should also be noted that results suggest that awareness breeds action. More than half of participants (51%) who are familiar with COPD had taken a breathing test in the past, while only 24% of those unfamiliar with COPD had taken a breathing test.

The percent of participants who reported an abnormal breathing test remained consistent over the three-year period. However, it is important to point out that 497 participants reported an abnormal breathing test since 2005 (more than 1 out of every 10 screenings). This finding demonstrates the importance of not only screening the community for lung health disease, but putting a reliable system in place for continuing care of patients.

	<b>2005</b>	<b>2006</b>	<b>2007</b>
Percent who are familiar with COPD	49%	51%	63%
Percent who have taken a breathing test in the past	34%	45%	51%
Percent who reported an abnormal breathing test	15%	7%	10%

The Arizona Comprehensive Lung Disease Control Plan (2004) outlines several risk factors for COPD that include smoking and exposure to secondhand smoke. Table 18 provides a breakdown of screening participants by salient risk factors for COPD.

Less than half of screening participants (43%) were self-reported ex-smokers over the three-year period and fewer than 1 in 10 participants had smoked in the past 30 days. However, results clearly indicated that participants live in an environment that is conducive to smoking. More than 8 in 10 participants (82%) reported that they are sometimes, frequently, or continuously exposed to secondhand smoke. This finding is particularly distressing in that non-smokers and current smokers who are trying to quit are often stuck in an environment in which the risk for diminished lung function still exists.

	<b>2005</b>	<b>2006</b>	<b>2007</b>
Percent who are ex-smokers	44%	42%	43%
Percent who are sometimes, frequently, or continuously exposed to second-hand smoke	83%	81%	83%
Percent who reported smoking in the past 30 days	10%	8%	8%

Tables 19 and 20 highlight two significant gender differences related to COPD awareness and risk factors. First, male participants (44%) are significantly less familiar with COPD

compared to female participants (55%) in the 44 and older age group. In addition, male participants (56%) are more likely to classify themselves as ex-smokers than female participants (38%). These findings, based on screening data from 2005 to 2007, identify a more specific population at greater risk for COPD, males age 44 and older who are ex-smokers. Moreover, males accounted for significantly fewer total screenings and reported higher rates of abnormal breathing tests (16% vs. 12% for females).

	<b>Females</b>	<b>Males</b>
Percent who are familiar with COPD	55%	44%
Percent who have taken a breathing test in the past	36%	43%
Percent who reported an abnormal breathing test	12%	16%

	<b>Females</b>	<b>Males</b>
Percent who are ex-smokers	38%	56%
Percent who are sometimes, frequently, or continuously exposed to second-hand smoke	84%	81%
Percent who reported smoking in the past 30 days	10%	8%

***Exploratory Analyses: Does smoking status impact COPD awareness and action?***

According to the Arizona Comprehensive Lung Disease Control Plan (2004), current smoking status is predictive of COPD mortality, with approximately 15% of all smokers developing clinically significant COPD. Current smoking status was examined in all three years of the Breathe Free program to determine if differences existed between ex-smokers and non-smokers in relation to the COPD education outcomes.

Exploratory analyses revealed that participants who were 44 and older and ex-smokers were more likely to be familiar with COPD, to have taken a breathing test, and to report an abnormal breathing test compared to their non-smoking peers (see Table 21-23). These findings suggest that those in greatest need of Breathe Free services (i.e., target population of age 44 and older with at least one risk factor) are becoming more familiar with COPD, and more importantly, taking preventative action by taking a breathing test. Not surprisingly, ex-smokers reported higher rates of abnormal breathing tests than their non-smoking peers in all years of the Breathe Free program.

	<b>2005</b>	<b>2006</b>	<b>2007</b>
Ex-smokers	50%	52%	70%
Non-smokers	47%	50%	58%

<b>Table 22. Percent who have taken a breathing test by Smoking Status (Age 44 and Older)</b>			
	<b>2005</b>	<b>2006</b>	<b>2007</b>
Ex-smokers	37%	53%	60%
Non-smokers	32%	38%	44%

<b>Table 23. Percent who reported an abnormal breathing test by Smoking Status (Age 44 and Older)</b>			
	<b>2005</b>	<b>2006</b>	<b>2007</b>
Ex-smokers	20%	8%	14%
Non-smokers	11%	6%	7%

## **Outcome Objective 5**

By May 31, 2007, program participants will have engaged in program-related process evaluation activities to improve on-site program deliveries and overall program outcomes.

### **Methodology**

#### **COPD Community Needs and Feedback Survey**

In 2005, the project evaluator developed the COPD Community Needs and Feedback Survey to better assist the ALA with future community trainings on COPD. Participants were asked to rate specific aspects of the workshop including quality, usefulness, and time spent on each topic.

#### **COPD Provider Needs and Feedback Survey**

In 2005, the project evaluator developed the COPD Provider Needs and Feedback Survey to better assist the ALA with future provider trainings on COPD. Participants were asked to rate specific aspects of the workshop including quality, usefulness, and time spent on each topic.

### **Data Analysis**

#### **COPD Community Needs and Feedback Survey**

##### ***Overall Results***

Survey participants were asked to rate their degree of satisfaction with the COPD workshop based on the following scale:

- 1 = Not satisfactory to my needs*
- 2 = Met only a few of my needs*
- 3 = It was satisfactory for my needs*
- 4 = It was more than satisfactory*
- 5 = It far exceeded my expectations*

Table 24 presents findings from the COPD Community Needs and Feedback Survey. Clearly, workshop participants were satisfied with workshop content, usefulness, and the time allotted for each topic. In fact, 53% of participants indicated that the COPD workshop “far exceeded their expectations”.

<b>Table 24. COPD Workshop: Community Participants</b>	<b>% of Participants with a Satisfactory (or better) Response</b>
Explanation of what COPD is	89%
Explanation of symptoms related to COPD	88%
Explanation of COPD causes	91%
Explanation of different ways to treat COPD	90%
Usefulness of material covered in my daily life	88%
Length of time spent on each topic	85%
Overall rating of the workshop	91%

### **COPD Provider Needs and Feedback Survey**

#### ***Overall Results***

Survey participants were asked to rate their degree of satisfaction with the COPD workshop based on the following scale:

- 1 = Not satisfactory to my needs*
- 2 = Met only a few of my needs*
- 3 = It was satisfactory for my needs*
- 4 = It was more than satisfactory*
- 5 = It far exceeded my expectations*

Table 25 presents findings from the COPD Provider Needs and Feedback Survey. Clearly, workshop participants were satisfied with workshop content, usefulness, and the time allotted for each topic. In fact, 42% of participants indicated that the COPD workshop “far exceeded their expectations”. It is important to highlight that 95% of providers found the workshop material useful to their occupation. Results confirm that the education the ALA is providing is being applied in the work environment.

<b>Table 25. COPD Workshop: Provider Participants</b>	<b>% of Participants with a Satisfactory (or better) Response</b>
Explanation of what COPD is	93%
Explanation of symptoms related to COPD	95%
Explanation of COPD causes	95%
Explanation of different ways to treat COPD	93%
Applicability of material covered to my occupation	95%
Length of time spent on each topic	95%
Overall rating of the workshop	95%

## Conclusions and Recommendations

An extensive analysis of the ALAA's *Breathe Free* project yielded two main conclusions: 1) There is a clear lack of COPD awareness, information, and education among patients, providers, and the community; 2) Providers need more time and resources to understand COPD and treat their patients.

### ***Make COPD Information and Education More Accessible***

Although findings illustrate an increase in COPD familiarity among patients, providers, and the general community over the 3-year period (2005-2007), the reality is, nearly half of the target population at-risk for COPD (age 44 and older) has never even heard of the disease. Results from the COPD Community Survey provide strong evidence that those who are familiar with COPD: 1) know where to find COPD-related resources and 2) follow-up with their physician after a lung health screening. It is obvious that there needs to be a comprehensive system in place to create, view, and/or distribute information related to COPD. In fact, 86% of respondents in the COPD Patient and Caregiver Needs Resource Assessment indicated that they would use an online resource to access COPD information if it was available.

Awareness campaigns should target the most at-risk populations for COPD. *Breathe Free* successfully utilized smoking cessation classes, COPD workshops, and lung health screenings in the community and workplace to reach those populations most in need. However, 3-year findings identify a specific at-risk subgroup that warrants more attention: male ex-smokers age 44 and older. Males in the age 44 and older target population were significantly more likely to be self-reported ex-smokers and significantly less likely to be familiar with COPD compared to females. Moreover, female lung health screening participants (N=2,938) significantly outnumbered males (N=1,309) in the total number of screenings over the 3-year period. Awareness campaigns should focus on how to increase COPD awareness and screenings in the male population age 44 and older. In general, utilizing smoking cessation classes, workshops, and support groups appears to be the most effective way to reach and obtain data on the most at-risk populations for COPD.

### ***Give Providers Time and Resources to Succeed***

Perhaps the most troubling finding in the analysis of the *Breathe Free* COPD Provider Needs Resource Assessment is that nearly two-thirds (61%) out of the 598 providers surveyed indicated that they do not have time to devote to educating their patients about COPD. With that said, it would be a stretch to say that providers have a solid understanding related to early detection, management, and treatment of COPD. Providers indicated that they need more training as to when to screen a patient for COPD, how to better recognize symptoms of COPD, and how to treat COPD.

Although the coordination of provider networks throughout the state was not a primary objective of the *Breathe Free* project, it is obvious that there is no comprehensive system implemented statewide that gives providers any direction as to how to screen and provide continuing care to patients with COPD. For example, COPD Provider Survey results suggest that Yuma County lacks the equipment and resources that are vital to serving COPD

patients. Providers indicated that partnerships with hospitals, managed care, and state health agencies would be most beneficial to creating an efficient system statewide.

Without a doubt, *Breathe Free* was successful in increasing COPD awareness, increasing the number of lung health screenings in the community, and identifying the needs of COPD patients and providers and resources currently available to them. *Breathe Free* has paved the way for the development of a more coordinated statewide system of managed care, a collaborative effort that will be challenging, but in due time will provide a more focused and comprehensive approach to decreasing morbidity and the cost of care related to COPD in the state of Arizona.

# Appendix of Survey Instruments

1. COPD Patient and Caregiver Needs Resource Assessment (Objective 1)
2. COPD Provider Needs Resource Assessment (Objective 1)
3. COPD Community Survey (Objective 2)
4. COPD Provider Survey (Objective 2)
5. Smoking Cessation Class Surveys (Objective 3)
6. Lung Health Screening Consent Form (Objective 4)
7. COPD Community Feedback and Needs Survey (Objective 5)
8. COPD Provider Feedback and Needs Survey (Objective 5)

## COPD Patient and Caregiver Needs Resource Assessment

This survey is intended to provide the Arizona Lung Association with information about education and attitudes related to Chronic Obstructive Pulmonary Disease (COPD) in order to serve the needs of patients and providers more efficiently. **COPD is a group of diseases that includes chronic bronchitis and emphysema.** Please complete the survey on your own. All responses will be confidential and will not be released to any party.

### Section 1. Background Information

Name: _____ Age: _____	
Gender: <input type="checkbox"/> Female <input type="checkbox"/> Male	
I am best described as a: <input type="checkbox"/> Patient <input type="checkbox"/> Caregiver	
1. Have you been diagnosed with COPD by a health care professional?	<input type="checkbox"/> Yes <input type="checkbox"/> No
1a. If YES, what prompted you to go to your doctor or other healthcare professional? (Check all that apply)	
<input type="checkbox"/> Chest pain	<input type="checkbox"/> Advice from friend/family member
<input type="checkbox"/> Shortness of breath	<input type="checkbox"/> Family history of COPD (i.e., emphysema, chronic bronchitis, etc)
<input type="checkbox"/> Increased coughing	<input type="checkbox"/> Wanted to quit smoking
<input type="checkbox"/> Increased phlegm or mucus production	<input type="checkbox"/> COPD discovered during routine, annual physical evaluation
<input type="checkbox"/> Other: _____	
2. Do you currently smoke?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2a. If YES, has a health care professional ever advised you to quit smoking?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Are you an ex-smoker?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3a. If YES to Question #3, what made you decide to quit smoking? (Check all that apply)	
<input type="checkbox"/> Mild physical symptoms (i.e., coughing, colds, flu, decreased fitness)	
<input type="checkbox"/> Severe physical symptoms (i.e., heart attack, chest pain, shortness of breath, etc.)	
<input type="checkbox"/> Family member or friend got ill or died from smoking	
<input type="checkbox"/> My doctor told me to quit smoking	
<input type="checkbox"/> Smoking costs too much	
<input type="checkbox"/> Pressure to quit from family, friends, and/or society	
<input type="checkbox"/> Smoking became too inconvenient	
<input type="checkbox"/> Other: _____	
3b. If YES to Question #3, what helped you the most to quit smoking? (Check all that apply)	
<input type="checkbox"/> Nicotine products (i.e., patch, gum, inhaler, lozenge, etc)	<input type="checkbox"/> Support from a doctor
<input type="checkbox"/> Zyban	<input type="checkbox"/> Support from family or friends
<input type="checkbox"/> Quit smoking class	<input type="checkbox"/> My own strong desire
<input type="checkbox"/> Other: _____	

4. The biggest challenges COPD patients and/or their caregivers face include the following: **(Check all that apply)**

- |   |  |
|---|--|
| <input type="checkbox"/> Not knowing when to get medical help | <input type="checkbox"/> Emotional hurdles (i.e., depression, etc) |
| <input type="checkbox"/> Doing everyday tasks                 | <input type="checkbox"/> Access to pulmonary rehab programs        |
| <input type="checkbox"/> High cost of medication              | <input type="checkbox"/> Access to quit smoking resources          |
| <input type="checkbox"/> Unwillingness to quit smoking        | <input type="checkbox"/> Difficulty quitting smoking               |
| <input type="checkbox"/> Other: _____                         |  |

**Section 2. Early Detection and Screening: For this section, please darken or check the box that most accurately reflects your feelings about the following statements.**

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
5. I understand all of the risk factors for COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I know where to get screened for COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. There is NOT enough information about the risk factors for COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Spirometry (i.e., breathing tests) should be part of a patient's annual physical exam.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. There needs to be more information about the COPD screening process.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I understand all of the symptoms of COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I would like to know more about how to prevent COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. There needs to be more information about COPD symptoms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 3. Disease Progression: For this section, please darken or check the box that most accurately reflects your feelings about the following statements.**

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
13. A brief, step-by-step guide to understanding how COPD progresses over time should be made available to patients and caregivers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. More information on specific treatments for COPD should be made available to patients and caregivers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. More information on when to get medical attention from a doctor should be made available to patients and caregivers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Of the choices below, which area do you feel you know the <b>least</b> about? (please make only <b>ONE</b> choice)				
<input type="checkbox"/> COPD risk factors	<input type="checkbox"/> COPD symptoms	<input type="checkbox"/> COPD treatments	<input type="checkbox"/> Other: _____	

**Section 4. COPD Management: For this section, please read the statements below and darken or check the box that most accurately reflects your feelings about the following statements.**

<b>If it was made available in the community, I would:</b>	<i><b>Strongly Agree</b></i>	<i><b>Agree</b></i>	<i><b>Disagree</b></i>	<i><b>Strongly Disagree</b></i>
17. Use an online resource that patients and caregivers can access for COPD information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Attend a support and disease management group for COPD patients and caregivers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Attend a workshop related to COPD education and awareness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. What is the best way to increase COPD education and awareness? (please make only <b>ONE</b> choice)				
<input type="checkbox"/> Develop an online resource	<input type="checkbox"/> Develop more brochures, pamphlets, etc.		<input type="checkbox"/> Offer COPD workshops	
<input type="checkbox"/> Offer COPD support groups	<input type="checkbox"/> Other: _____			

**Thank you for your time and participation in this survey.**

## COPD Provider Needs Resource Assessment

This survey is intended to provide the Arizona Lung Association with information about provider education and attitudes related to **Chronic Obstructive Pulmonary Disease (COPD)**. Please complete the survey on your own. All responses will be confidential and will not be released to any party. Information obtained will be used to gain a better understanding of COPD perceptions, education, and needs in the state of Arizona.

### Section 1. Background Information: Please complete the following blanks or check the box that best describes your current position.

County where you are employed:  Maricopa  Pima  Pinal  Yavapai  Other:

\_\_\_\_\_

My job title is best described as a(n):  RCP  RN  LPN  
 MD  PA  Health Educator  
 Other: \_\_\_\_\_

### Section 2. COPD Prevention and Early Detection: For this section, please darken or check the box that most accurately reflects your feelings about the following statements.

	YES	NO
1. We have a spirometer in our office.	<input type="checkbox"/>	<input type="checkbox"/>
2. I know how to administer a spirometry test.	<input type="checkbox"/>	<input type="checkbox"/>
3. In your organization, what is the <b>most effective way(s)</b> to reach patients at-risk for COPD? <b>(Check all that apply)</b>		
<input type="checkbox"/> COPD written material (i.e., brochures, pamphlets, newsletter)		<input type="checkbox"/> COPD information on the internet
<input type="checkbox"/> COPD support groups		<input type="checkbox"/> COPD workshops/classes
<input type="checkbox"/> Smoking cessation workshops/classes		<input type="checkbox"/> During an annual physical exam
<input type="checkbox"/> Other: _____		
4. In your organization, what are the <b>biggest obstacles</b> to increasing early detection of COPD? <b>(Check all that apply)</b>		
<input type="checkbox"/> Lack of time to devote to educating patients		<input type="checkbox"/> Difficult to recognize COPD symptoms
<input type="checkbox"/> Lack of COPD equipment (i.e., spirometer)		<input type="checkbox"/> Difficult to identify risk factors
<input type="checkbox"/> Difficult to determine when to screen a patient for COPD		<input type="checkbox"/> Lack of reimbursement for COPD expenses
<input type="checkbox"/> Lack of a home management resource for COPD		<input type="checkbox"/> Other: _____
5. What type(s) of training related to early detection of COPD would be most helpful to you? <b>(Check all that apply)</b>		
<input type="checkbox"/> How to use a spirometer		<input type="checkbox"/> How to recognize COPD symptoms
<input type="checkbox"/> Where to refer patients for spirometry testing		<input type="checkbox"/> Risk factors for COPD
<input type="checkbox"/> When to screen a patient for COPD		<input type="checkbox"/> Other: _____
6. <b>What reasons have patients given</b> for participating in a COPD screening? <b>(Check all that apply)</b>		
<input type="checkbox"/> My doctor recommended it		<input type="checkbox"/> I have symptoms of COPD
<input type="checkbox"/> I have a family history of COPD		<input type="checkbox"/> I am at-risk for COPD
<input type="checkbox"/> Attended a smoking cessation workshop and decided to get screened		<input type="checkbox"/> Read a brochure or pamphlet about COPD
<input type="checkbox"/> Attended a COPD workshop and decided to get screened		<input type="checkbox"/> A family member or friend told me to get screened
<input type="checkbox"/> Other: _____		
7. What partnerships would be <b>most beneficial</b> to increasing the early detection of COPD? <b>(Check all that apply)</b>		
<input type="checkbox"/> Managed care		<input type="checkbox"/> State health agencies

- Federal health agencies
- Nonprofits

- Hospitals
- Other: \_\_\_\_\_

**Section 3. COPD Progression and Management: For this section, please darken or check the box that most accurately reflects your feelings about the following statements.**

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
8. I am trained to treat patients with COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. My organization provides me with enough resources to treat patients with COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Patients do not understand how to manage COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. The biggest challenge I face related to COPD is getting patients to quit smoking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I find pulmonary rehab programs effective for treating COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Smokers who attend pulmonary rehab programs find them too costly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Of the choices below, which area do you feel <b>you</b> (the provider) know the <b>least</b> about? (please select only <b>ONE</b> choice)				
<input type="checkbox"/> COPD prevention <input type="checkbox"/> COPD risk factors <input type="checkbox"/> COPD symptoms <input type="checkbox"/> COPD treatments <input type="checkbox"/> Other: _____				
15. Of the choices below, which area do you feel <b>patients</b> know the <b>least</b> about? (please select only <b>ONE</b> choice)				
<input type="checkbox"/> COPD prevention <input type="checkbox"/> COPD risk factors <input type="checkbox"/> COPD symptoms <input type="checkbox"/> COPD treatments <input type="checkbox"/> Other: _____				

**Section 4. General Questions: For this section, please read the statements below and darken or check the box that most accurately reflects your feelings about the following statements.**

16. What is the best way to increase COPD education and awareness? (please make only **ONE** choice)
- Develop an online resource       Develop more brochures, pamphlets, etc.       Offer COPD workshops
  - Offer COPD support groups       Other: \_\_\_\_\_
17. As a provider, what do you feel is the most challenging “phase” of the COPD process? (please make only **ONE** choice)
- Increasing COPD awareness and education (phase #1)
  - Getting patients screened for COPD (phase #2)
  - Identifying the most effective way to treat COPD (phase #3)
  - Helping patients manage COPD when a treatment plan is in place (phase #4)
  - Other: \_\_\_\_\_

**Thank you for your time and participation in this survey.**

## COPD Community Survey

This survey is intended to provide the Arizona Lung Association with information about education and attitudes related to Chronic Obstructive Pulmonary Disease (COPD) within our community. Please complete the survey on your own. All responses will be confidential and will not be released to any party. Information obtained will be used to gain a better understanding of COPD perceptions, education, and needs in the state of Arizona.

### Section 1. Contact Information

Name \_\_\_\_\_

Age \_\_\_\_\_

**Section 2. COPD Education:** The following statements are designed to test your knowledge about COPD. Your answers will help us more clearly define the educational needs of our community.

	True	False
1. COPD is a preventable disease.	<input type="checkbox"/>	<input type="checkbox"/>
2. It is difficult to distinguish asthma from COPD because both diseases share the same symptoms.	<input type="checkbox"/>	<input type="checkbox"/>
3. The causes of COPD are primarily related to smoking.	<input type="checkbox"/>	<input type="checkbox"/>
4. The main symptom of COPD is shortness of breath.	<input type="checkbox"/>	<input type="checkbox"/>
5. Arizona has a lower rate of COPD deaths compared to other states.	<input type="checkbox"/>	<input type="checkbox"/>
6. Spirometry testing is best used for early detection of COPD.	<input type="checkbox"/>	<input type="checkbox"/>
7. COPD is a chronic disease that is not considered to be life-threatening.	<input type="checkbox"/>	<input type="checkbox"/>
8. Pulmonary rehabilitation is used as a treatment in only severe cases of COPD.	<input type="checkbox"/>	<input type="checkbox"/>
9. Anxiety and depression are common in people with COPD.	<input type="checkbox"/>	<input type="checkbox"/>
10. COPD patients should avoid exercise training.	<input type="checkbox"/>	<input type="checkbox"/>
11. Increasing water and fluid intake thickens mucus in the lungs of COPD sufferers.	<input type="checkbox"/>	<input type="checkbox"/>
12. Second-hand smoke can cause COPD.	<input type="checkbox"/>	<input type="checkbox"/>
13. A small percentage of COPD patients rely on surgery to treat their symptoms.	<input type="checkbox"/>	<input type="checkbox"/>
14. A person can have COPD and not even know it.	<input type="checkbox"/>	<input type="checkbox"/>
15. COPD patients should eat frequent, small meals.	<input type="checkbox"/>	<input type="checkbox"/>

**Section 3. Individual and Community Attitudes:** The following statements are designed to gain a better understanding of perceptions and attitudes about COPD that exist in our community. Please select only one answer.

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	
16. I feel well-informed about COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. COPD does not receive much attention in our community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. I would know where to find COPD-related resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19. Doctors should educate their patients more about COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20. It is difficult for me to lead an active life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
21. I worry about my respiratory condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22. COPD is a serious health problem in Arizona.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
				Yes	No	N/A
23. I contacted my family physician with the results of my Lung Health Screening.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I have visited a doctor before to treat a respiratory problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I had to limit my daily activities <b>at least 3 times in the past 12 months</b> due to a respiratory problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I have been absent from work <b>at least 3 times in the past 12 months</b> due to a respiratory problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Thank you for your time and participation in this survey.**

# COPD Provider Survey

This survey is intended to provide the Arizona Lung Association with information about provider education and attitudes related to Chronic Obstructive Pulmonary Disease (COPD). All responses will be confidential and will not be released to any party. Information obtained will be used to gain a better understanding of COPD perceptions, education, and needs in the state of Arizona.

## Section 1. Contact Information

Name \_\_\_\_\_

Age \_\_\_\_\_

**Section 2. COPD Education & Work Environment:** The following statements are designed to test your knowledge about COPD and gain a better understand of how COPD is managed in your organization.

	Yes	No
1. COPD is the 4 <sup>th</sup> leading cause of death in the U.S.	<input type="checkbox"/>	<input type="checkbox"/>
2. We have a spirometer in our office.	<input type="checkbox"/>	<input type="checkbox"/>
3. The causes of COPD are primarily related to smoking.	<input type="checkbox"/>	<input type="checkbox"/>
4. Less than half of smokers report being advised to quit by their primary care physician.	<input type="checkbox"/>	<input type="checkbox"/>
5. Arizona has a lower rate of COPD deaths compared to other states.	<input type="checkbox"/>	<input type="checkbox"/>
6. A spirometer can be used to track the progression of COPD.	<input type="checkbox"/>	<input type="checkbox"/>
7. Our office asks patients if they are smokers in our initial assessment.	<input type="checkbox"/>	<input type="checkbox"/>
8. Nicotine is more addictive than heroin.	<input type="checkbox"/>	<input type="checkbox"/>
9. Smoking cessation can stop the loss of lung function in younger patients with mild cases of COPD.	<input type="checkbox"/>	<input type="checkbox"/>
10. Our office refers patients to smoking cessation resources.	<input type="checkbox"/>	<input type="checkbox"/>
11. Our office does lung spirometry on smokers.	<input type="checkbox"/>	<input type="checkbox"/>
12. There is evidence that brief tobacco interventions are effective.	<input type="checkbox"/>	<input type="checkbox"/>
13. Brief tobacco interventions are more effective than providing free quit smoking tips.	<input type="checkbox"/>	<input type="checkbox"/>

**Section 3. Individual and Community Attitudes:** The following statements are designed to gain a better understanding of provider perceptions and attitudes about COPD. Please select only one answer.

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
14. I feel well-informed about COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. COPD does not receive much attention in our community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. My patients would know where to find COPD-related resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. COPD education is a high priority in my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. COPD patients need more education on managing their condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. COPD is a serious health problem in Arizona.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I feel I need more training on treatments related to COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. It is difficult to treat patients with COPD.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. COPD is a growing concern among providers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Thank you for your time and participation in this survey.**

## Smoking Cessation Class, Session #1 Survey

The purpose of this survey is to provide the Arizona Lung Association with information related to smoking cessation in order to serve the needs of our community more efficiently. Please complete the survey on your own. All responses will be confidential and will not be released to any party.

### Section 1. Background Information: For each question or statement, please check the box(es) that best describes you.

Name: _____ Age: _____		
Gender: <input type="checkbox"/> Female <input type="checkbox"/> Male		
County where you are attending the smoking cessation classes: <input type="checkbox"/> Maricopa <input type="checkbox"/> Pima <input type="checkbox"/> Yavapai		
1. Is this the first time you have enrolled in a smoking cessation class?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. I have tried to quit smoking <b>at least once</b> before.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. <b>Have you used any tobacco products:</b>		
2a. in the last 24 hours?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2b. in the last 7 days?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2c. in the last 30 days?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. What are your reasons for wanting to quit smoking? <b>(Check all that apply)</b>		
<input type="checkbox"/> Smoking affects my health	<input type="checkbox"/> Family member or friend got ill or died from smoking	
<input type="checkbox"/> My doctor told me to quit smoking	<input type="checkbox"/> Smoking costs too much	
<input type="checkbox"/> Smoking is too inconvenient	<input type="checkbox"/> Pressure to quit from family, friends, and/or society	
<input type="checkbox"/> Other: _____		
5. If health is a reason for wanting to quit smoking, what health condition or disease worries you most? <b>(Check all that apply)</b>		
<input type="checkbox"/> Emphysema	<input type="checkbox"/> Heart Disease	<input type="checkbox"/> Shortness of Breath
<input type="checkbox"/> Chronic Bronchitis	<input type="checkbox"/> Asthma	<input type="checkbox"/> Coughing
<input type="checkbox"/> Cancer	<input type="checkbox"/> Osteoporosis	<input type="checkbox"/> Cold/Flu
<input type="checkbox"/> Other: _____		

### Section 2. Attitudes About Smoking: For each statement, please check the box that best describes your feelings. Please select only **ONE** response for each statement.

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Not Sure</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
6. I am very motivated to quit smoking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Secondhand smoke causes diseases in others who live with me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I will smoke at least once between now and the end of the 6-week program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Listening to a sufferer of chronic disease talk about hardships caused by smoking would motivate me to quit smoking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I get plenty of support from family/friends to help me quit smoking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Thank you for your time and participation in this survey.**



*Lung Health Screening Consent Form*

**Date of Birth:** \_\_\_/\_\_\_/\_\_\_ **Height:** \_\_\_ft. \_\_\_in. **Weight:** \_\_\_lbs.

**Do you consider yourself?**

White Black or African American Hispanic Asian American Indian/Alaskan Native Other

**Are You?** Male Female

During the past 30 days, have you smoked cigarettes? YES NO

In the past 30 days, how many cigarettes per day did you smoke on average? \_\_\_ # **Per day**

**If you quit smoking, when did you quit?** \_\_\_/\_\_\_/\_\_\_ (Approximate date)

**If you ever smoked cigarettes, how many total years did you smoke?** \_\_\_ Years

**What is the average number of cigarettes you smoked per day?** \_\_\_ # Per day

**How often have you been exposed to second hand tobacco smoke in your lifetime?**

Never Rarely Sometimes Frequently Continuously

**Have you ever had a breathing test in the past?**

YES NO

Are you familiar with COPD (chronic obstructive pulmonary disease) which includes emphysema and chronic bronchitis?

YES NO

I wish to participate in the Lung Function Test being offered by the American Lung Association of Arizona. By signing this consent form, I understand that I am requesting and agree to allow the test provider to perform the test. In so doing, I understand and agree to the following:

- This test is a non-invasive procedure that uses the Puritan-Bennett Renaissance II Spirometry System.
- The instrument used for this test has been approved by the FDA for general clinical use. For the test to work effectively, I will be required to hold the device upright and be still until I am instructed to seal my lips around the mouthpiece and breathe into the instrument.
- I understand that this test may possibly generate an inaccurate result. I will discuss the possibility, along with my test results, with my physician.
- The results of the test procedure will be made available to me immediately, so that I can consult with my physician regarding the results, if you chose to do so.
- Participation in this test procedure will not prevent me from having asthma or other lung problems.
- I am responsible for any follow-up examinations with my physician that may be indicated from the results of this test.

I hereby release American Lung Association of Arizona and their affiliated and subsidiary companies, divisions, directors, officers, employees, agents and contractors and any and all other organizations involved in the program, their affiliates and subsidiaries, and all of their past and present officers, employees and agents, and the successors of each, from any liability and responsibility for any and all manner of actions, causes of actions, individual and class action claims or demands of any kind whatsoever, whether known, suspected or unknown in law or in equity including, but not limited to, all claims or potential claims arising out of my voluntary participation in or any injury loss or death substantiated from or arising as a result of this program.  
By signing below, I acknowledge that I have read, understand and accept all of the statements on this consent form.

Signature of Participant

Date

Please Print Name

If you have further questions about lung health you may contact  
**The American Lung Association's Call Center at (800) 548-8252**

# **COPD Community Feedback and Needs Survey**

To better assist the Arizona Lung Association with future community trainings related to Chronic Obstructive Pulmonary Disease (COPD), we would appreciate your feedback. In addition to providing feedback on this training, we would like to provide you with an opportunity to elaborate on your COPD concerns and/or needs. Your comments will help us better understand and address the needs of our community.

## **Section 1. Contact Information:** In order to contact you for future surveys, please complete the following:

Name \_\_\_\_\_ Age \_\_\_\_\_

## **Section 2. Comments and Needs:** Your comments and concerns are vital to the success of our workshops. Please provide us with at least one comment so that we can address the needs of workshop participants and continually identify areas of improvement.

What can we do to improve this workshop?

---

---

---

---

---

Briefly describe how you might apply what you have learned from this workshop to your daily life:

---

---

---

---

---

What else do you need or want to know about COPD? Please be specific.

---

---

---

---

---

Other comments or concerns:

---

---

**Section 3. COPD Workshop Feedback: Please use the following criteria to rate the workshop.**

*1= It was not satisfactory to my needs; 2= It met only a few of my needs; 3= It was satisfactory for my needs; 4= It was more than satisfactory for my needs; 5= It far exceeded my expectations*

**Thank you for attending the workshop. Please tell us how we did with each of the following:**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Explanation of what COPD is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of symptoms related to COPD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of COPD causes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of different ways to treat COPD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Usefulness of material covered in my daily life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of time on each topic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall rating of this workshop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Thank you for completing this survey.**

# **COPD Provider Feedback and Needs Survey**

To better assist the Arizona Lung Association with future community trainings related to Chronic Obstructive Pulmonary Disease (COPD), we would appreciate your feedback. In addition to providing feedback on this training, we would like to provide you with an opportunity to elaborate on your COPD concerns and/or needs. Your comments will help us better understand and address the needs of providers in our community.

## **Section 1. Contact Information:** In order to contact you for future surveys, please complete the following:

Name \_\_\_\_\_ Age \_\_\_\_\_ Job Title \_\_\_\_\_

## **Section 2. Comments and Needs:** Your comments and concerns are vital to the success of our workshops. Please provide us with at least one comment so that we can address the needs of workshop participants and continually identify areas of improvement.

What can we do to improve this workshop?

---

---

---

---

---

Briefly describe how you might apply what you have learned from this workshop to your occupation (i.e., How do you plan to change your practice?)

---

---

---

---

---

What are the biggest concerns or most glaring needs among providers related to COPD?

---

---

---

---

---

Other comments or concerns:

---

---

**Section 3. COPD Workshop Feedback: Please use the following criteria to rate the workshop.**

*1= It was not satisfactory to my needs; 2= It met only a few of my needs; 3= It was satisfactory for my needs; 4= It was more than satisfactory for my needs; 5= It far exceeded my expectations*

**Thank you for attending the workshop. Please tell us how we did with each of the following:**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Explanation of what COPD is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of symptoms related to COPD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of COPD causes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of different ways to treat COPD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applicability of material covered to my occupation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of time on each topic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall rating of this workshop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Thank you for completing this survey.**