American Academy of Health Physics
American Board of Health Physics

CHP N·E·W·S

THE 1999 CHP SALARY SURVEY

Gary Lautenschlager

Introduction

This year marks the first time the survey was available on the *Internet*, which greatly simplified the process for everyone. A notice directing the AAHP membership to complete the survey at the AAHP website was included with the AAHP maintenance fee notice, which was mailed in August.

The survey was also available in hardcopy form for those who preferred to fax or mail their responses.

Questions about this survey should be directed to Gary Lautenschlager, via email: **glauten@hotmail.com** Telephone: (630) 840-8360 (W) or (815) 748-4539 (H). You may also post your questions and comments on the AAHP Bulletin Board at the AAHP website: **http://www.aahp-abhp.org**

Data Analysis

The salary ranges marked by CHPs on the completed survey forms were rounded to the midpoints of those ranges before statistical analyses were performed. For example, if a CHP marked the salary range $50,000 to $54,999, their salary was rounded to the midpoint value of $52,500.

Responses from CHPs who were either part time or retired were not analyzed, since the data did not appear to allow meaningful comparisons to be made.

Data Presentation

In an effort to make the results of the survey as interesting and useful as possible, CHPs were subcategorized in several ways by education, primary job responsibility, years of experience, and combinations of these subcategories.

Readers are cautioned that for statistical validity, results were usually given only if there were 10 or more CHPs within that subcategory. Data presented for one subcategory of CHPs may not be possible for another subcategory. However, some exceptions were made for general interest.

The subcategories in the tables may also change from year to year, depending on the number of responses received. Every effort was made to keep the subcategories consistent with previous surveys, but if there were an insufficient number of CHPs the results were not given.

Tables and Figures

Tables show results for full-time CHPs who received health, vacation, and retirement benefits from their primary employer unless otherwise noted.

Histograms of Table 1 data is included as Figure 1, and Table 2, Masters Health Physics data is included as Figure 2

Contributions to the *CHP News* and the "CHP Corner" should be sent to Gary Kephart or Steve Rima.
(See AAHP ADMINISTRATIVE ROSTER, at the web page: http://www.hps1.org/aahp.)

Table 1: All CHPs

All CHPs	Count	Average	Median	Max	Min	Std Dev
CHPs	253	$80,818	$77,500	$162,500	$27,500	$19,334

Table 2: CHPs by Education and Field

Education	Count	Average	Median	Max	Min	Std Dev
Bachelors Health Physics	19	$79,868	$77,500	$122,500	$62,500	$15,126
Bachelors Other Field	25	$77,700	$77,500	$122,500	$57,500	$13,500
Masters Health Physics	118	$80,081	$77,500	$142,500	$27,500	$18,449
Masters Other Field	37	$75,338	$72,500	$132,500	$47,500	$17,738
Ph.D. Health Physics	22	$87,727	$82,500	$132,500	$42,500	$23,067
Ph.D. Other Field	28	$89,821	$82,500	$162,500	$42,500	$26,158

Table 3: CHPs by Education and 6-10 Years Experience

Edu & 6-10 Yrs Experience	Count	Average	Median	Max	Min	Std Dev
Masters Health Physics	17	$64,559	$62,500	$92,500	$57,500	$8,489
Masters Other Field	9	$61,944	$62,500	$77,500	$47,500	$10,138

Table 4: CHPs by Education and 11-15 Years Experience

Edu & 11-15 Yrs Experience	Count	Average	Median	Max	Min	Std Dev
Masters Health Physics	27	$71,759	$72,500	$97,500	$27,500	$14,392

Table 5: CHPs by Education and 16-25 Years Experience

Edu & 16-25 Yrs Experience	Count	Average	Median	Max	Min	Std Dev
Bachelors Other Field	12	$76,667	$75,000	$87,500	$57,500	$10,188
Masters Health Physics	49	$80,969	$77,500	$117,500	$52,500	$15,042
Masters Other Field	12	$76,250	$72,500	$102,500	$57,500	$12,990
Ph.D. Health Physics	9	$89,722	$82,500	$127,500	$77,500	$17,341
Ph.D. Other Field	10	$93,500	$90,000	$132,500	$67,500	$18,529

Table 6: CHPs by Education and NRRPT

Education & NRRPT	Count	Average	Median	Max	Min	Std Dev
Bachelors Health Physics	10	$75,000	$77,500	$87,500	$62,500	$7,546
Bachelors Other Field	17	$77,000	$75,000	$87,500	$62,500	$7,976
Masters Health Physics	11	$78,864	$77,500	$97,500	$52,500	$14,158

Table 7: Masters Health Physics and Primary Employer

Masters Health Physics & Primary Employer	Count	Average	Median	Max	Min	Std Dev
Commercial	15	$95,133	$92,500	$142,000	$62,500	$22,275
Federal Government	12	$77,083	$75,000	$107,500	$57,500	$15,588
Government Contractors	13	$75,192	$72,500	$107,500	$57,500	$14,946
National Laboratory	20	$84,250	$82,500	$127,500	$62,500	$16,244
Nuclear Power Facility	13	$84,808	$82,500	$122,500	$62,500	$18,213
State Government	9	$69,167	$67,500	$92,500	$27,500	$20,000
University	8	$66,250	$62,500	$87,500	$52,500	$10,938

Table 8: Masters Other Field and Primary Employer

Masters Other Field & Primary Employer	Count	Average	Median	Max	Min	Std Dev
National Laboratory	9	$84,167	$82,500	$102,500	$57,500	$12,748

Table 9: Masters Health Physics and Primary Job Responsibility

Masters Health Physics & Primary Job Responsibility	Count	Average	Median	Max	Min	Std Dev
Administration	14	$96,750	$92,500	$142,500	$67,500	$21,208
Applied Health Physics	28	$79,821	$77,500	$132,500	$57,500	$18,078
Dosimetry	10	$79,000	$77,500	$92,500	$57,500	$12,259
Radiation Safety Officer	14	$73,214	$72,500	$102,500	$52,500	$14,657
Regulations/Standards	9	$83,611	$82,500	$102,500	$67,500	$11,396

Table 10: CHPs with Medical Physics as Primary Job Responsibility

Medical Physics Primary Job	Count	Average	Median	Max	Min	Std Dev
Medical Physics CHPs	12	$92,083	$92,500	$162,500	$62,500	$28,720

Figure 1: Histogram of Table 1 Data

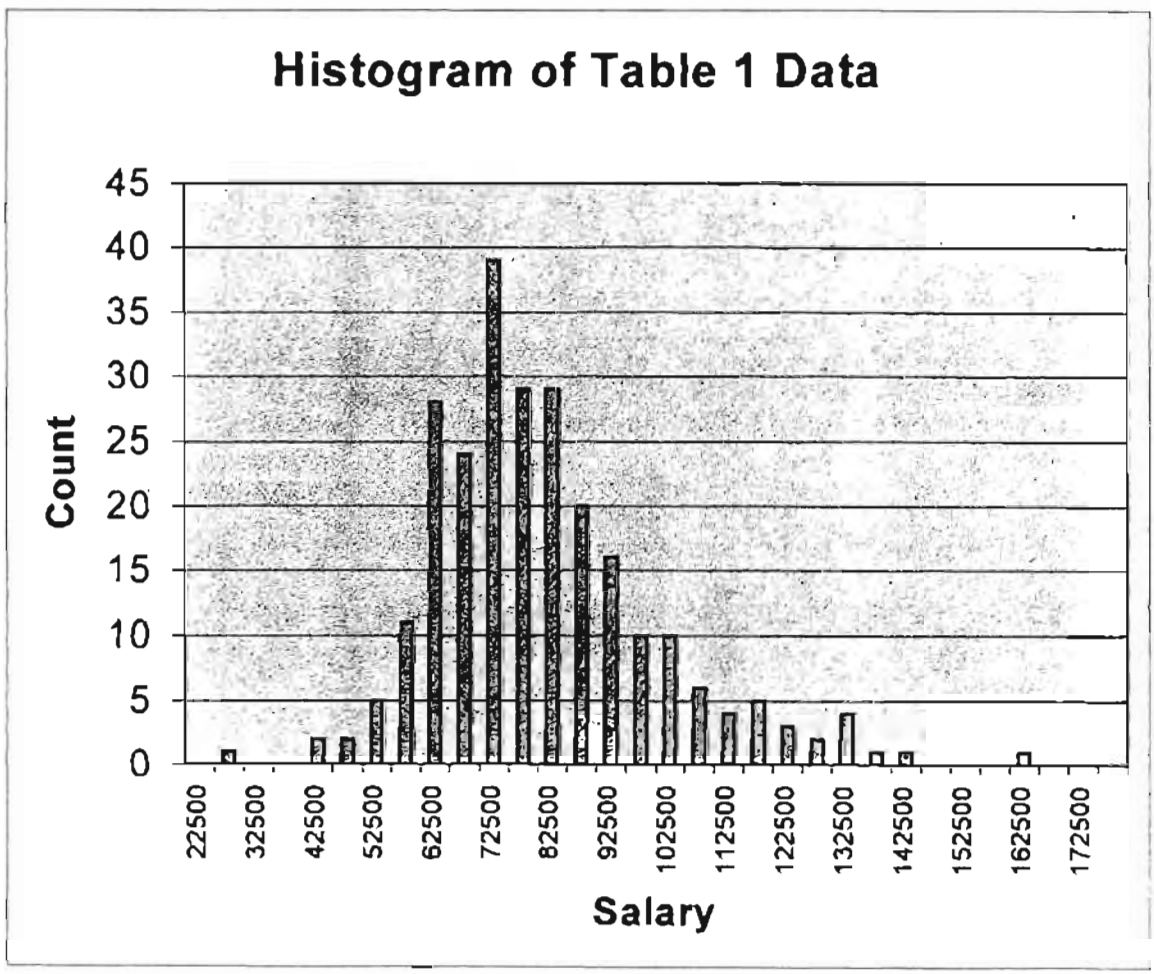
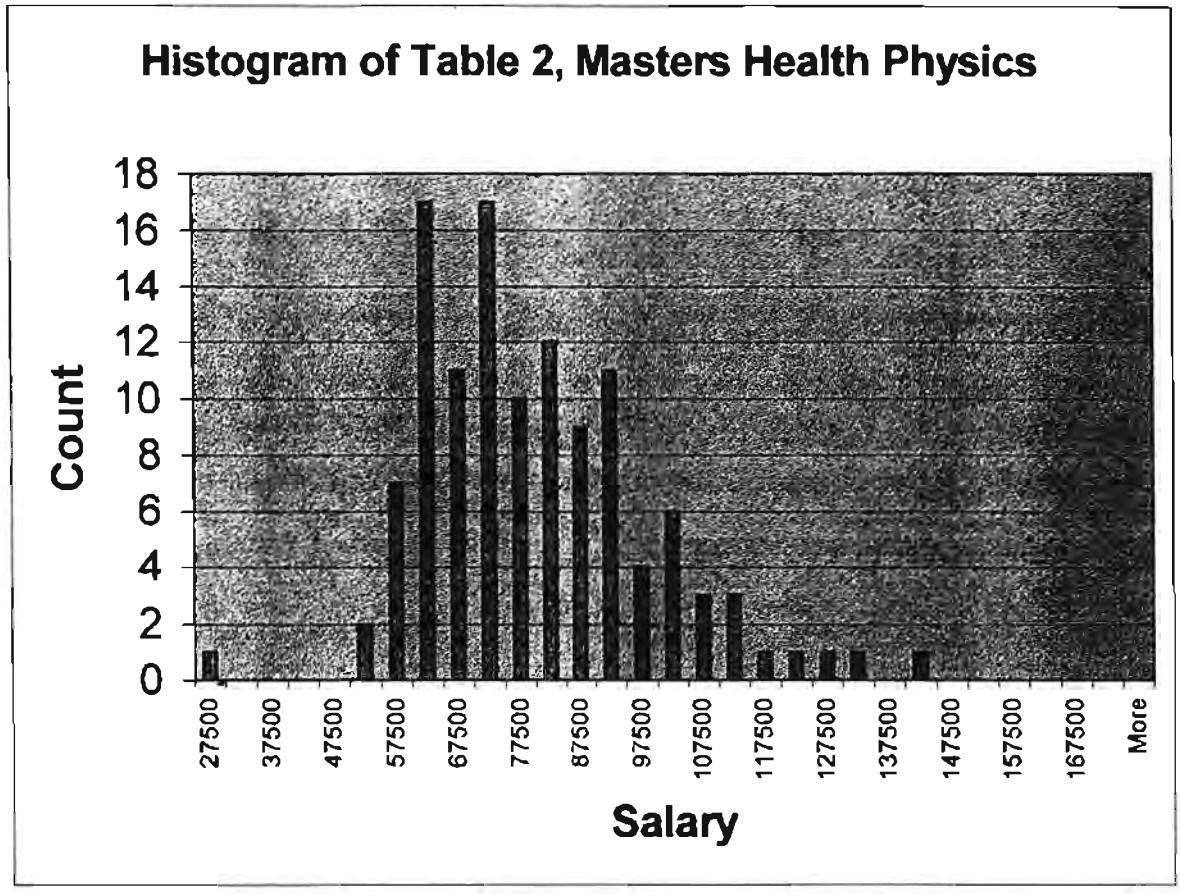


Figure 2: Histogram of Table 2 Data, Masters Health Physics CHPs



The Optional Question

The number and quality of comments were better this year than ever before. The convenience of submitting comments on the Internet perhaps encouraged many to provide thoughtful comments on the optional question "What do you feel is the most important issue facing the health physics certification process today?"

Many CHPs were concerned with exam consistency from year to year, the value of certification, the future of our profession, reciprocity agreements with other safety certifying organizations, and the job market.

All of your comments have been forwarded to the AAHP for review.

Closing Comments

Thanks all who contributed to this survey, your input is invaluable. Special thanks to Scott Medling who coded the survey and made it available on the Internet.

Presidents Report To the Membership

Herman Cember

June 1999

In this report, I will give my opinion about what I believe to be important challenges that professional health physicists face as we enter into the 21st century. I will also summarize the present status of health physics accreditation at the professional level and in academia.

There are several major challenges to the health physics profession and to the professional health physicist. The challenge that has the most direct and immediate impact on health physicists is driven by economics. Increased competition in the marketplace and concern for cost cutting in industry, government, and academia have led to increasing operating efficiency and to downsizing by merging related or similar activities. This new approach is leading to the coalescence of health physics and industrial hygiene functions. Radiation sources constitute merely another category of noxious agents that are present in the working environment. It therefore is not unreasonable to integrate health physics functions and industrial hygiene functions into a single group... and to lay off those persons who are unable to operate in both areas.

If we are to remain marketable during the next decade, we must not only be technically competent in health physics. We must also be sufficiently knowledgeable in the technical and regulatory aspects of industrial hygiene and industrial safety to be able to recognize and assess non-radiation health and safety hazards. This, of course, implies more education and training than can fit into the already crowded academic health physics and industrial hygiene curricula. It seems to me that at the very minimum, university health physics programs should include at least one overview course each in industrial hygiene and safety. Furthermore, many of the activities that health physicists and industrial hygienists perform in the course of their usual duties, such as surveying, air sampling, ventilation evaluation and testing, waste management, dealing with Derived Air Concentrations (DACs) and Permissible Exposure Levels (PELs) etc., require the same or very similar skills. Therefore, with relatively simple modifications in our health physics course content, we could apply these principles and techniques to industrial hygiene situations. With such simple modifications the knowledge base of health physics graduates would be broadened to include the fundamentals of non-radiation based safety; thereby increasing the marketability of the graduates of university health physics programs. However, although necessary, I believe this to be insufficient. The process of enhancing our technical expertise in these non-radiation areas of health and safety is a professional responsibility. In this context, I believe that our professional organizations ... the AAHP and the HPS... Should sponsor an increasing number of professional development courses in industrial hygiene and safety. We must not only be literate in these sister fields; we should also be able to perform in these fields.

Technical competency is a necessary, but insufficient qualification for the practice of health physics. It is important to recognize the "soft underbelly" of professional practice. We must be able to communicate, in writing and orally, with our supervisors, our clients, the government, our colleagues, and the lay public. In addition to the use of technical language, we must be able to clearly present our findings and conclusions in plain, clear and accurate non-technical English.

Another challenge to the health physicist is the decreasing number of professional opportunities due to the leveling off and decreasing use of nuclear energy, and to the political incorrectness of anything dealing with radiation (nuclear or otherwise) or radioactivity... except, of course, in perpetuating the legend of its irreparable harm to man and to the environment. This challenge will, I believe, be successfully met when society eventually realizes that the benefits of nuclear energy outweigh the societal harm from forgoing

this source of energy. To this end, I urge all CHPs to examine their children's textbooks for anti-nuclear bias, and then to take the appropriate action; to respond to baseless anti-nuclear articles in the media with letters to the editor; to communicate their opinions to elected officials; and to make presentations at public events such as PTA meetings, fraternal organizations, etc.

An important question with which we are wrestling, but which has yet to be resolved, deals with recognition of certification of health physics by the American Board of Medical Physics. Discussion of this item is on our current agenda. In this context I wish to describe the activities of the Intersociety Credentialing Task Force.

Currently there are more than 100 professional certifications for practitioners in the several aspects of environmental health and safety. Many certifications seem to be redundant, such as the Certified Industrial Hygienist (CIH) from the American Board of Industrial Hygiene, and the Registered Professional Industrial Hygienist from the Association of Professional Industrial Hygienists. Some of the certifying agencies are perceived as the equivalent of "diploma mills". Several of these certifying organizations are accredited, either by the Council of Engineering and Scientific Specialty Boards (CESB) or by the National Commission for Certifying Agencies, but most, including the ABHP, an\re not accredited. However, the ABHP currently is in the process of being accredited by the CESB. Because of the multiplicity of certifying agencies, overlapping certifications, diverse requirements for certification, and because of proposed regulatory requirements in several states that would impact the working credentials in environmental and occupational health and safety, the American Society of Safety Engineers (ASSE) organized an ad hoc Intersociety Credentialing Task Force to assist environmental health and safety professionals in understanding the various certifications. Representatives from 12 different organizations met in the ASSE Headquarters in Des Plaines, IL, in January (I was invited, but was unable to attend because of icy road conditions), and again in May 1999. Ruth McBurney and I represented Health Physics interests at the second meeting. The Task Force established two sub-committees to:

Define "practice and educational standards"

Learn how we decide the minimum body of knowledge needed to practice the profession

Learn what are the actual activities of a practitioner … as seen by the individual practitioner,

Summarize current credentials and develop definitions of credentialing.

The certification of sub-specialties within a larger general area of practice was also addressed. This question is currently of interest to the AAHP in the context of certification of medical health physicists. During the ensuing discussion, I said that I believe that specialists are a sub-set of generalists. A candidate for specialty certification should therefore first be certified as a generalist before sitting for the specialty examination. This is the model used in the medical profession, where a medical school graduate first qualifies to practice medicine. Then, after further training, he (or she) qualifies for certification as a specialist. Further training then qualifies this certified specialist to sit for an examination in a sub-specialty, such as a surgeon qualifying in neurosurgery or an internist in cardiology. This is the model used by the National Commission for Certifying Agencies, where the candidate must first be certified in the general area before being allowed to qualify for the specialty examination.

As a profession, we are faced with another accreditation question… that of accrediting academic health physics programs. A year ago I represented the AAHP at a meeting in Las Vegas that was called by the Academic Education Committee to discuss this topic and to make recommendations. This issue is important for us for legal and regulatory reasons, similarly to that of medical and engineering school accreditation. The American Nuclear Society is prepared to accredit academic health physics programs based on its set of criteria if the Health

Physics Society fails to take the lead as the accrediting agency. An HPS subcommittee on accreditation, which is chaired by Rich Brey, has developed a set of criteria using the ABET 2000 model. ABET 2000 is based on outcome assessment criteria rather than on prescriptive criteria. (The "classic" prescriptive criteria -- which academia is more accustomed to -- inherently make the smaller health physics programs nervous; they argue that they continue to turn out quality graduates, more in-line with the measure that the ABET 2000 model targets.)

I believe that favorable action taken by our Society and Academy to meet these challenges will allow professional health physicists to continue to play the crucial role in the safe use of radiation for the benefit of society.

Notes from President-Elect Chuck Roessler

Nominations for AAHP committee chairpersons and committee vacancy replacements have been approved by the Executive Committee. Watch for the listing of chairpersons in the CHP NEWS and the listing of committee members in the AAHP section of the next issue of the Radiation Protection Professional's Directory and Handbook. We thank all those who agreed to serve in these positions. For each committee there were many more names of persons who had indicated an interest than there were vacancies. Thank you for your interest, this is a health sign for the Academy. Please make your interests known for the next round of appointments which will be selected in the year 2000 for service beginning in 2001.

Deadline Reminder!!

Candidates for the 2000 certification examination must have their applications complete not later than January 15, 2000.

Who have you encouraged to sit for the exam in the new millennium?

Deadline Reminder!!

American Academy of Health Physics

1999 Membership Opinion Survey

Summary Using the May 1999 edition of the CHP Corner column in the HPS Newsletter, the membership of the Academy was polled on a variety of topics, primarily via the Academy web page.

It could also be said that the San Antonio strategic planning workshops implied a leadership commitment to poll the membership for additional input... a commitment which has now been fulfilled.

As we had already recognized from the ABMP experience, there are differences of opinion regarding how the Academy should interface with other professional credentialing organizations. There appears to be more membership interest in title protection and licensing than might have been anticipated. Floating the mentoring program idea did not capture any clear consensus. There is some strong anti-specialty examination sentiment.

Of the nearly 300 responses to the survey, only 6 (<2%) were snail-mailed. Virtually all participation was on-line via the web page. Scott Medling built the on-line survey to automatically sort and accumulate responses such that the compilation of results was very straightforward.

Probably most useful to our interest in moving the Academy forward is a careful consideration of the various ideas and opinions provided in the responses to the open-ended questions.These responses were provided to the Executive Committee and Committee Chairpersons immediately prior to the annual meeting in Philadelphia.

Scott has recently built a web page link for submission of materials to the newsletter; it may be appropriate to have a similar mechanism for on-line feedback to the Executive Committee.

Hopefully the various committees and Executive Committee members who submitted survey questions will find some responses that spur further committee discussion or generate new ideas and initiatives. The membership/readership is challenged to come up with additional ideas and feedback and input to the leadership of the Academy and the Board.

Membership Survey

Academy members were encouraged to share their thoughts with the Academy and Board leadership via completion of the survey. The results were provided to the Academy Executive Committee at the Health Physics Society (HPS) Annual Meeting in Philadelphia, 27 June-1 July 1999, and will be used to direct and prioritize ongoing Academy initiatives.

1a.

The current requirements for admission to Part I of the ABHP exam are adequate.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	32	55	6	4	0

1b.

Part II ?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	30	54	7	5	1

2.

Election slates offered by the Academy Nominating Committee have been consistently strong.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	14	42	36	5	0

3.

The Academy, through its Professional Development Committee, is developing Standards of Qualification/Practice (SQ/P). The first of these SQ/Ps is related to qualifications for university RSOs. It is currently undergoing peer review. The Committee plans to promulgate this SQ/P jointly with the RSO Section of the HPS. This is an appropriate area for the Academy to serve the profession.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	29	48	13	5	3

4.

The current continuing education (CE) requirements and recertification process are adequate.

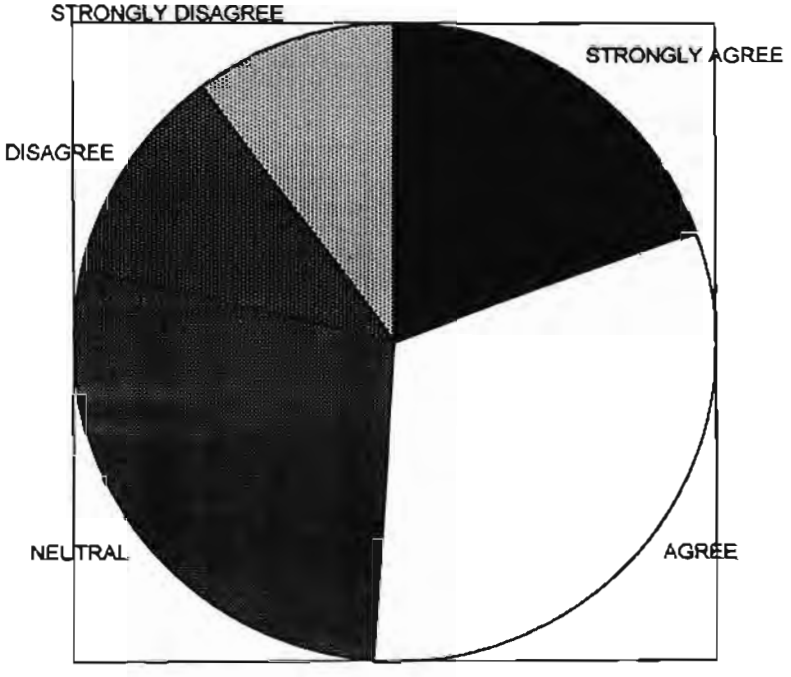
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	24	57	11	5	1

5.

With the proliferation of certifications in the allied health and safety professions, the Academy should establish continuing education credits for completion of CIH, CSP, QEP, etc.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	19	31	27	11	10

5 The Academy should establish CECs for completion of CIH, CSP, QEP, etc.



6.

Mutually supportive relationships should be pursued with those certifying agencies in allied safety professions, and other forms of reciprocity should be pursued in the continuing education/re-certification area.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	28	41	14	11	3

7.

Academy-sponsored opportunities for the membership to obtain continuing education credits should be expanded to include more independent study and distance learning opportunities.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	27	36	21	11	1

8.

CHPs should be required to maintain records of participation in CE activities for possible random audit.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	16	26	25	21	10

9.

I have heard enough about licensure initiatives in my state to be concerned about eventual impact on my practice of HP. The AAHP should give high priority to the areas of title protection and recognition of ABHP certification.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	48	28	19	3	0

10.

The Academy should establish a Fellows program or other means to recognize persons who have made significant contributions to the profession.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	14	40	30	10	4

11.

With the development of the AAHP web page, the information flow to the membership is adequate and meets my needs as a member.

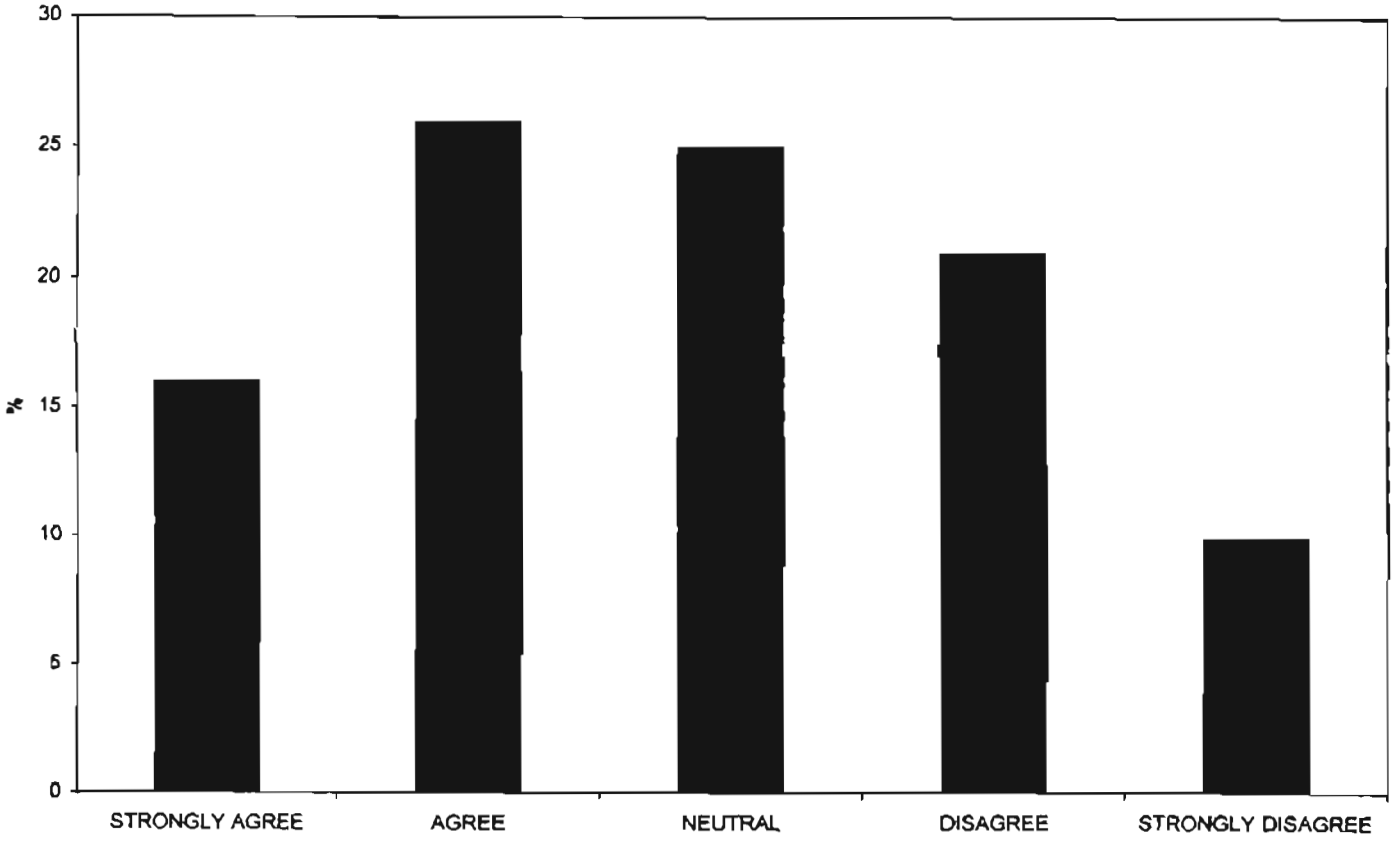
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	9	55	27	6	1

12.

The special Academy technical sessions at the HPS annual meetings are a valuable addition to the program and should be continued.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	28	42	25	3	0

8 CHPs should be subject to random audit of CEC records.



13.

The Academy luncheon recently initiated at the HPS annual meeting is an appropriate recognition of new members and should be continued.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	13	41	40	3	1

14.

A mentoring program could benefit my professional development and I would take advantage of it if offered by the Academy.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	7	18	43	23	7

15.

I would appreciate the opportunity to mentor a young health physicist and would like to see the Academy establish a mentoring program for the associate members and young health physicists.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	10	32	40	13	2

16.

The power reactor specialty certification no longer exists. However, it would help my professional recognition if specialty areas of certification were available.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	7	10	30	35	16

17.

Specialty certifications should only be available to persons who already hold comprehensive certification in HP.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	34	34	14	9	6

18.

The Standards of Professional Responsibility for CHPs are appropriate and adequate.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	22	65	8	1	1

19.

Pursuing independent accreditation of the ABHP certification process from the Council of Engineering and Scientific Specialty Boards was a prudent action.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	27	43	26	0	1

20.

The Academy should make information available for purchasing a CHP embossing seal or ink stamp.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
%	26	40	26	4	2