



## ***Frequently Asked Questions***

The American Polygraph Association welcomes the opportunity to present in this brief document a few essential facts about polygraph testing. We hope you will find the information to be of interest and will be pleased to supply you with additional materials and information you may need.

### **What is a Polygraph?**

The term "polygraph" literally means "many writings." The name refers to the manner in which selected physiological activities are simultaneously recorded. Polygraph examiners may use conventional instruments, sometimes referred to as analog instruments, or computerized polygraph instruments.

It is important to understand what a polygraph examination entails. A polygraph instrument will collect physiological data from at least three systems in the human body. Convoluted rubber tubes that are placed over the examinee's chest and abdominal area will record respiratory activity. Two small metal plates, attached to the fingers, will record sweat gland activity, and a blood pressure cuff, or similar device will record cardiovascular activity.

A typical polygraph examination will include a period referred to as a pre-test, a chart collection phase and a test data analysis phase. In the pre-test, the polygraph examiner will complete required paperwork and talk with the examinee about the test. During this period, the examiner will discuss the questions to be asked and familiarize the examinee with the testing procedure. During the chart collection phase, the examiner will administer and collect a number of polygraph charts. Following this, the examiner will analyze the charts and render an opinion as to the truthfulness of the person taking the test. The examiner, when appropriate, will offer the examinee an opportunity to explain physiological responses in relation to one or more questions asked during the test. It is important to note that a polygraph does not include the analysis of physiology associated with the voice. Instruments that claim to record voice stress are not polygraphs and have not been shown to have scientific support.



### **Who uses Polygraph Examinations?**

The three segments of society that use the polygraph include law enforcement agencies, the legal community, and the private sector. They are further described as follows:

Law Enforcement Agencies - Federal Law Enforcement Agencies, State Law Enforcement Agencies, and Local Law Enforcement Agencies such as Police and Sheriff's Departments.

Legal Community - U.S. Attorney Offices, District Attorney Offices, Public Defender Offices, Defense Attorneys, Parole & Probation Departments.

Private Sector - Companies and Corporations under the restrictions and limitations of the Employee Polygraph Protection Act of 1988 (EPPA).

Private citizens in matters not involving the legal or criminal justice system.

Attorneys in civil litigation.

### **Why do Critics Figures Vary?**

One of the problems in discussing accuracy figures and the differences between the statistics quoted by proponents and opponents of the polygraph technique is the way that the figures are calculated. At the risk of over simplification, critics, who often don't understand polygraph testing, classify inconclusive test results as errors. In the real life setting an inconclusive result simply means that the examiner is unable to render a definite diagnosis. In such cases a second examination is usually conducted at a later date.

To illustrate how the inclusion of inconclusive test results can distort accuracy figures, consider the following example: If 10 polygraph examinations are administered and the examiner is correct in 7 decisions, wrong in 1 and has 2 inconclusive test results, we calculate the accuracy rate as 87.5% (8 definitive results, 7 of which were correct.) Critics of the polygraph technique would calculate the accuracy rate in this example as 70%, (10 examinations with 7 correct decisions.) Since those who use polygraph testing do not consider inconclusive test results as negative, and do not hold them against the examinee, to consider them as errors is clearly misleading and certainly skews the figures.



**Pre-employment Test Accuracy** - To date, there has been only a limited number of research projects on the accuracy of polygraph testing in the pre-employment context, primarily because of the difficulty in establishing ground truth. However, since the same physiological measures are recorded and the same basic psychological principles may apply in both the specific issue and pre-employment examinations, there is no reason to believe that there is a substantial decrease in the accuracy rate for the pre-employment circumstance. The few studies that have been conducted on pre-employment testing support this contention.

While the polygraph technique is not infallible, research clearly indicates that when administered by a competent examiner, the polygraph test is one of the most accurate means available to determine truth and deception.

For an excellent review of the research involving validity and reliability, including pre-employment screening, see: *The Accuracy and Utility; of Polygraph Testing.* (1984) Washington, DC: U.S. Department of Defense, 1984. Complete reprints may be purchased from the APA National Office.

**Polygraph Screening in Police Agencies** - The Employee Polygraph Protection Act of 1988 (EPPA) prohibits most private employers from using polygraph testing to screen applicants for employment. It does not affect public employers such as police agencies or other governmental institutions. In the testimony regarding EPPA it became clear that there were no current and reliable data on a variety of important issues about police applicant screening, although polygraph testing had reportedly been used for that purpose since at least the early 1950's. In recognition of this gap, the APA Research Center at Michigan State University embarked on a survey of police executives in the U.S. to determine the extent of, and conditions in which, polygraph testing is being used for pre-employment screening. The survey population included 699 of the largest police agencies in the United States, excluding federal agencies, and produced usable returns from 626 agencies, a response rate of 90%. The major results of the survey showed the following:

Among the respondents, 62% had an active polygraph screening program, 31% did not and 7% had discontinued polygraph screening, usually because of prohibitive legislation. These results make it clear that a great majority of our largest police agencies do have a polygraph screening program in effect. These agencies employ, on average, 447 officers and service a population averaging 522,000 citizens. They primarily use the polygraph to screen applicants for sworn positions, although 54% also screen persons interested in non-sworn positions.



Approximately 25% of the persons tested are disqualified from police employment based on the information developed during polygraph testing which, by the way, is used both to verify information provided in an application form and to develop information that cannot be gotten by other means. Only a very small proportion (2%) of agencies use polygraph testing as a substitute for a background investigation. A rank ordered listing of topics covered during polygraph testing revealed that investigation of illegal drug usage, employment related dishonesty, and involvement in felonies are the most important.

When asked to indicate what their reasons were for using polygraph screening, the great majority of the agencies indicated that it reveals information that cannot be obtained by other selection methods. Closely following this item in order, was that polygraph testing makes it easier to establish background information, that it deters undesirable applicants, and that it is faster than other methods of selection. The three leading benefits of polygraph screening were that applications were more honestly completed; that higher quality employees were hired; and that there were fewer undesirable employees. Over 90% of these agencies expressed either moderate or high confidence in their polygraph screening program and 80% of them reported that in their experience the accuracy of the testing ranged between 86%-100%. The only procedure that was considered to be as useful as polygraph screening was a background investigation; all others, including written psychological tests, psychological or psychiatric interviews, personal interviews, and interviews by a selection board were judged to be less useful. Finally, this survey also showed that polygraph screening revealed applicant's involvement in serious, undetected criminality. For example, 9% of the agencies said that polygraph screening detected involvement by some applicants in unsolved homicides; 34% indicated some applicant involvement in forcible rape; and 38% showed some applicant participation in armed robberies. Other serious, unsolved crimes, such as burglary, arson and drug offenses were also revealed by polygraph screening.

### **Are there Errors in Polygraph Examinations?**

**False positive, False negative** - While the polygraph technique is highly accurate, it is not infallible and errors do occur. Polygraph errors may be caused by the examiner's failure to properly prepare the examinee for the examination, or by a misreading of the physiological data on the polygraph charts. Errors are usually referred to as either false positives or false negatives.



A false positive occurs when a truthful examinee is reported as being deceptive; a false negative when a deceptive examinee is reported as truthful. Some research indicates that false negatives occur more frequently than false positives, other research studies show the opposite conclusion. Since it is recognized that any error is damaging, examiners utilize a variety of procedures to identify the presence of factors which may cause false responses, and to insure an unbiased review of the polygraph records; these include:

### **Protective Procedures**

- an assessment of the examinee's emotional state
- medical information about the examinee's physical condition
- specialized tests to identify the overly responsive examinee and to calm the overly nervous
- control questions to evaluate the examinee's response capabilities
- factual analysis of the case information
- a pre-test interview and detailed review of the questions
- quality control reviews

**Examinee's Remedies** - If a polygraph examinee believes that an error has been made, there are several actions that may be taken including the following:

- request a second examination
- retain an independent examiner for a second opinion
- file a complaint with a state licensing board
- file a complaint with the Department of Labor under EPPA
- file a request for the assistance of the American Polygraph Association

### **What is the Scope of Test Questions and Dissemination of Test Results**

**Prohibitive Inquiries** - Personal and intrusive questions have no place in a properly conducted polygraph examination. Many state licensing laws, the Employee Polygraph Protection Act, as well as the American Polygraph Association, has so stated in language similar to the following:



NO EXAMINER SHOULD INQUIRE INTO ANY OF THE FOLLOWING AREAS DURING PRE-EMPLOYMENT OR PERIODIC EMPLOYMENT EXAMINATIONS:

- religious beliefs or affiliations
- beliefs or opinions regarding racial matters
- political beliefs or affiliations
- beliefs, affiliations or lawful activities regarding unions or labor organizations
- sexual preferences or activities

In a law enforcement preemployment polygraph examination, the questions focus on such job related inquiries as the theft of money or merchandise from previous employers, falsification of information on the job applications, the use of illegal drugs during working hours and criminal activities. The test questions are limited in the time span they cover, and all are reviewed and discussed with the examinee during a pre-test interview before any polygraph testing is done. There are no surprise or trick questions.

In a specific issue polygraph examination the relevant questions focus on the particular act under investigation.

### **Who Gets the Test Results?**

According to the various state licensing laws and the American Polygraph Association's Standards and Principles of Practice, polygraph results can be released only to authorized persons. Generally those individuals who can receive test results are the examinee, and anyone specifically designated in writing by the examinee, the person, firm, corporation or governmental agency which requested the examination, and others as may be required by due process of law.

### **What is EPPA?**

On December 27, 1988, the Employee Polygraph Protection Act (EPPA) became law. This federal law established guidelines for polygraph testing and imposed restriction on most private employers. The following is a brief summary of the essential elements of the law.



### **Who is affected by EPPA?**

This legislation only affects commercial businesses. Local, State and Federal governmental agencies (such as police departments) are not affected by the law, nor are public agencies, such as a school system or correctional institution. In addition, there are exemptions in EPPA for some commercial businesses. These are:

1. Businesses under contract with the Federal Government involving specified activities (e.g., counterintelligence work).
2. Businesses whose primary purpose consists of providing armored car personnel, personnel involved in the design, or security personnel in facilities which have a significant impact on the health or safety of any state. Examples of these facilities would be a nuclear or electric power plant, public water works, or toxic waste disposal.
3. Companies which manufacturer, distribute or dispense controlled substances.

### **How does EPPA affect businesses which are not exempt?**

In general, businesses cannot request, suggest or require any job applicant to take a pre-employment polygraph examination. Secondly, businesses can request a current employee to take a polygraph examination or suggest to such a person that a polygraph examination be taken, only when specific conditions have been satisfied. However, the employer cannot require current employees to take an examination, and if an employee refuses a request or suggestion, the employer cannot discipline or discharge the employee based on the refusal to submit to the examination.

What are the conditions that an employer must meet in order to ask a current employee to take a polygraph? The American Polygraph Association is furnishing the following information, which it believes is in good faith, and conforms with the Department of Labor's Regulations relating to polygraph tests for employees. This information is considered only as a guideline to assist in complying with the Act and Regulations, and the American Polygraph Association is disclaiming any liability in connection therewith. Employers should develop their own forms, using their own company name, and should also review their final forms through their own legal counsel.





## **I. Checklist for the Employer**

1. The incident must be an ongoing, specific investigation.
2. It must be an identifiable economic loss to the employer.
3. Obtain a copy of the Employer Polygraph Protection Act of 1988.
4. Provide the employee with a written statement that includes: a. identification of the company and location of employee b. description of the loss or activity under investigation c. location of the loss d. specific amount of the loss e. type of economic loss f. how the employee had access to the loss  
Note: access alone is not sufficient grounds for polygraph testing g. what kind of reasonable suspicion there is to suspect the employee of being involved in the loss
5. The Statement provided to employee **MUST** be signed by someone other than the polygraph examiner, who is authorized to legally bind the employee, and **MUST** be retained by the employer for at least 3 years.
6. Read the Notice to Examinee to the employee, which should be signed, timed, dated and witnessed.
7. Provide the employee with 48 hours advanced notice (not counting weekends or holidays) to the date and time of the scheduled polygraph test.
8. Provide employee with written notice of the date, time and location of the polygraph test, including written directions if the test is to be conducted at a location other than at the place of employment.
9. Maintain a statement of adverse actions taken against the employee following a polygraph test.
10. Conduct an additional interview of employee prior to any adverse action following a polygraph test.
11. Maintain records of ALL of the above for a minimum of 3 years.
12. Employees may not waive their rights.





13. Police and investigators are not exempt and must comply if they are conducting an employment related polygraph test, i.e., when conducting a polygraph test on an internal theft for a missing deposit. Information about a polygraph provided to the employer by a police officer or investigator is prohibited under the Act, since employers are not allowed to use, accept or inquire about the results.

14. There is a \$10,000 penalty for EACH violation of the law.

15. Check out the credentials of the polygraph examiner that you use and verify that the examiner meets EPPA requirements. Never hesitate to ask for written proof of licensing, liability insurance, etc.

16. Use your company letterhead on all forms you provide to the employee. Have your corporate attorney review your actions to assure your compliance of EPPA.

## **II. Checklist for the Polygraph Examiner:**

1. Provide the employer with a copy of EPPA guidelines. Do not just try to explain what has to be done during a phone conversation with the employer.

2. The examiner should not get involved in assisting the employer to determine who should or should not be tested, or who does or does not have access or reasonable suspicion.

3. Obtain a copy of the signed statement of advance notice provided to the employee, along with a copy of the explanation of their rights and written directions/appointment PRIOR to the Interview. Obtain a photo I.D. of the employee. RULE OF THUMB: No form, no test! No identification, no test!

4. Provide the employee with a written explanation of the polygraph test and procedures. Have it signed by the employee and be sure to include the date and time it was provided.

5. Read and explain the rights to the employee. Have it signed, dated and timed.

6. Advise the employee of any taping and/or one-way mirrors.

7. Carry a minimum of \$50,000 or equivalent professional liability coverage.



8. Conduct no more than 5 polygraph tests during one calendar day, even if only 1 test is under EPPA. This includes ALL tests for all employers and/or lawyers you conducted during the day!
9. Administer no test that is less than 90 minutes in duration.
10. Provide the employee with the polygraph test questions in writing. Have the employee write out their answers and sign the question sheet for verification of review.
11. Have an appropriate license, if so required, in the state where the test is to be conducted.
12. Keep a log of company name, employee name, date and times for all polygraph tests during the course of a day when 1 test is given under EPPA.
13. Inform the employee of the results of the test and allow him/her an opportunity to explain any reactions.
14. Provide any opinion of deception or non-deception in writing.
15. Results must only be based on the polygraph test results, and should NOT be based on behavior.
16. Do not include any information not relevant to the original purpose of the test to the employer.
17. Keep a copy of ALL reports, notes and records for a minimum of 3 years.
18. Provide a copy of charts, questions and reports to the employee upon request.
19. Provide a copy of charts, questions and reports to the employer when results are deceptive.
20. Provide the Department of Labor with copies of the same, within 72 hours, upon request of the Secretary of DOL, or other authorized person of DOL.



### **III. Pre-employment Testing under EPPA**

For preemployment testing under EPPA, refer to the Act for exemptions. Even though an employer may be exempt and able to use preemployment polygraph testing, the guidelines under EPPA still apply. Follow the Checklist for both the employer and examiner use, omitting the step for preparation of the employer's statement with respect to an ongoing investigation, which would apply for specific testing only. ALL OTHER GUIDELINES WILL APPLY.

US Code : Title 29, Chapter 22

#### **Related EPPA links:**

US Department of Labor EPPA Poster

**Website:** <http://www.dol.gov/esa/regs/compliance/posters/eppa.htm>

#### **What Legislation dictates Polygraph?**

**Licensing** - Currently there are 29 states and 3 counties which have laws requiring licensure or certification for polygraph examiners. Most laws require formal instruction, an internship training period and successful completion of a licensing examination. For example, the following are basic requirements for licensure in one state:

A person is qualified to receive a license as an examiner:

- (a) who establishes that he or she is a person of good moral character; and,
- (b) who has passed an examination conducted by the Licensing Committee, or under its supervision. to determine his or her competency to obtain a license to practice as an examiner and
- (c) who has conferred upon him or her an academic degree, at the baccalaureate level, from an accredited college or university; and,
- (d) who has satisfactorily completed 6 months of study in the detection of deception, as prescribed by rule.

**Prohibitive Legislation** - In addition to the Employee Polygraph Protection Act, to date there are 20 states and the District of Columbia which have enacted legislation designed to regulate an employer's use of the polygraph. No state prohibits polygraph testing in all settings. A typical statute states:

No employer may require a prospective or current employee to take a polygraph examination as a condition of employment or continued employment.



Most of these states make exceptions for testing of certain occupational groups. Commonly exempted are law enforcement agencies and companies that manufacture, distribute or dispense drugs and controlled substances.

The American Polygraph Association has consistently supported licensing efforts throughout the country. The APA encourages efforts to establish proper qualifications for polygraph examiners and criteria for testing procedures.

The Employee Polygraph Protection Act of 1988 prohibits much, but not all pre-employment polygraph testing. Testing of employees is permitted to solve an employer's "economic loss." There are exemptions for guards, armored car personnel and those who handle drugs and narcotics. EPPA does not affect testing for attorneys or local, state or federal agencies. See: PL 199 437. Final Rules in the Federal Register, 56 (42). Monday, March 4 1991, 29 CFR Part 801.

**Admissibility** - Polygraph results (or psychophysiological detection of deception examinations) are admissible in some federal circuits and some states. More often, such evidence is admissible where the parties have agreed to their admissibility before the examination is given, under terms of a stipulation. Some jurisdictions have absolute bans on admissibility of polygraph results as evidence and even the suggestion that a polygraph examination is involved is sufficient to cause a retrial. The United States Supreme Court has yet to rule on the issue of admissibility, so the rules in federal circuits vary considerably. The Supreme Court has said, in passing, that polygraph examinations raise the issue of Fifth Amendment protection, [Schmerber v. California, 86 S. Ct. 1826 (1966).] The Supreme Court has also held that a Miranda warning before a polygraph examination is sufficient to allow admissibility of a confession that follows an examination, [Wyrick v. Fields, 103 S. Ct. 394 (1982).] In 1993, the Supreme Court removed the restrictive requirements of the 1923 Frye decision on scientific evidence and said Rule 702 requirements were sufficient, [Daubert v. Metall Dow Pharmaceuticals, 113 S.Ct. 2786.] Daubert did not involve lie detection, per se, as an issue, as Frye did, but it had a profound effect on admissibility of polygraph results as evidence, when proffered by the defendants under the principles embodied in the Federal Rules of Evidence expressed in Daubert, see [United States v. Posado (5th Cir. 1995) WL 368417.] Some circuits already have specific rules for admissibility, such as the 11th Circuit which specifies what must be done for polygraph results to be admitted over objection, or under stipulation, [United States v. Piccinonna 885 F.2d 1529 (11th Cir. 1989).] Other circuits have left the decision to the discretion of the trial judge. The rules that states and federal circuits generally follow in stipulated admissibility were established in [State v. Valdez, 371 P.2d 894



(Arizona, 1962).] The rules followed when polygraph results are admitted over objection of opposing counsel usually cite [State v. Dorsey, 539 P.2d 204 (New Mexico, 1975).] Primarily because of Daubert, as well as the impact the other cited cases have had, polygraph examination admissibility is changing in many states. Many appeals, based on the exclusion of polygraph evidence at trial are now under review by appellate courts.

**Representative case citations are provided for reference:**

**Alabama:**

Clements v. State, 474 So.2d 695 (1984).  
Green v. Am. Cast Iron, 464 so.2d 294 (1984).

**Arizona:**

State v. Valdez, 91 Ariz.. 274, 371, P.2d 894 (1962).  
State v. Molina, 117 Ariz. 4541 573 P.2d 528 (App.1977).

**Arkansas:**

Hays v. State, 767 S.W.2d 525 (1989).

**California:**

People v. Houser, 85 Cal.App.2d 686, 193 P.2d 937 (1948)  
Robinson v. Wilson, 44 Cal.App.3d 92, 118 Cal.Rptr. 569 (1974).  
Witherspoon v. Superior Court, 133 Cal.App.3rd 24 (1982)

**Delaware:**

Williams v. State, 378 A.2nd 117 (1977).

**Georgia:**

State v. Chambers, 240 Ga. 76, 239 SE.2d 324 (1977).  
Miller v. State, 380 S.E.2d 690 (1989).

**Idaho:**

State v. Fain, 774 P.2d 252 (1989).

**Indiana:**

Barnes v. State, 537 N.E.2d 489 (1989).  
Davidson v. State, 558 N.E.2d 1077 (1990).



**Iowa:**

State v. McNamara, 104 N.W.2d 568 (1960).  
Haldeman v. Total Petroleum, 376 N.W.2d 98 (1985).

**Kansas:**

State v. Roach, 570P.2d 1082 (1978).

**Nevada:**

Corbett v. State, 584 P.2d 704 (1978).

**New Jersey:**

State v. McDavitt, 297 A.2d 849 (1972).  
State v. McMahon 524 A.2d 1348 (1986).

**New Mexico:**

State v. Dorsey, 539 P.2ed 204 (1975).

**North Dakota:**

State v. Newman, 409 N.W.2d 79 (1987).

**Ohio:**

Moss v. Nationwide, 493 N.E.2d 969 (1985).  
State v. Souel, 372 N.E.2d 1318 (1978).

**Utah:**

State v. Jenkins, 523 P.2d 1232 (1974).  
State v. Rebetevano, 681 P.2d 1265 (1984).

**Washington:**

State v. Grigsby, 647 P.2d 6 (1982).

**Wyoming:**

Cullin v. State, 565 P.2d 445 (1977).

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