



# FULL FACE MASK DIVER

INSTRUCTOR GUIDE



**PADI**  
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## **PADI Full Face Mask Diver Instructor Guide**

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# INTRODUCTION

This section includes suggestions on how to use this guide, an overview of course philosophy and goals, a flow chart that shows you how course components and materials work together for success, and ways you can organize and integrate student diver learning.

## How to Use this Guide

This guide speaks to you, the PADI Full Face Mask Diver Specialty Instructor. The guide contains three sections: the first contains standards specific to this course; the second contains knowledge development presentations; and the third considers the training dives. All required standards, learning objectives, activities and performance requirements specific to the PADI Full Face Mask Diver course appear in **boldface**. **The boldface assists you in easily identifying those requirements that you *must* adhere to when you conduct the course.** Items not in boldface are recommended for your information and consideration. General course standards applicable to *all* PADI courses are located in the General Standards and Procedures section of your PADI *Instructor Manual*.

## Course Philosophy and Goals

There are several reasons a diver would want to dive with a full face mask. Many recreational divers like diving with a full face mask because they can breathe from their nose. Public safety divers consider full face masks standard gear because they protect the eyes and nose from contaminants in the water, and allow for communication. A full face mask provides more comfort and protection in extremely cold water – when combined with a dry suit (including dry gloves and boots), a diver can enjoy the beauty of cold-water dive sites in full comfort. Because full face masks can be fitted with communication gear, these masks let divers talk with each other and surface support. This is an essential benefit for some types of public-safety diving, but can also be a useful feature for recreational divers. Several organizations devoted to adaptive diving use full face masks for divers who are unable to clear a standard mask.

With this in mind, the philosophy of this course is to focus on enjoying full face mask diving by learning accepted safety practices, potential hazards, problems, techniques and skills in a controlled, supervised environment.

To achieve this, there are several goals: The first is to develop the diver's knowledge of the full face mask, its features and benefits, correct fit and adjustment, correct installation of the regulator (if applicable), as well as care and maintenance. The second goal is to develop the diver's mastery of the full face mask diving skills. The third goal is to enable the diver to plan, organize and use a full face mask as trained.

The best way to learn how to dive in a full face mask is by doing it. This course philosophy, therefore, emphasizes diving in a full face mask. Student divers apply the knowledge they gain through your instruction in a confined water session, followed by at least two open water dives.

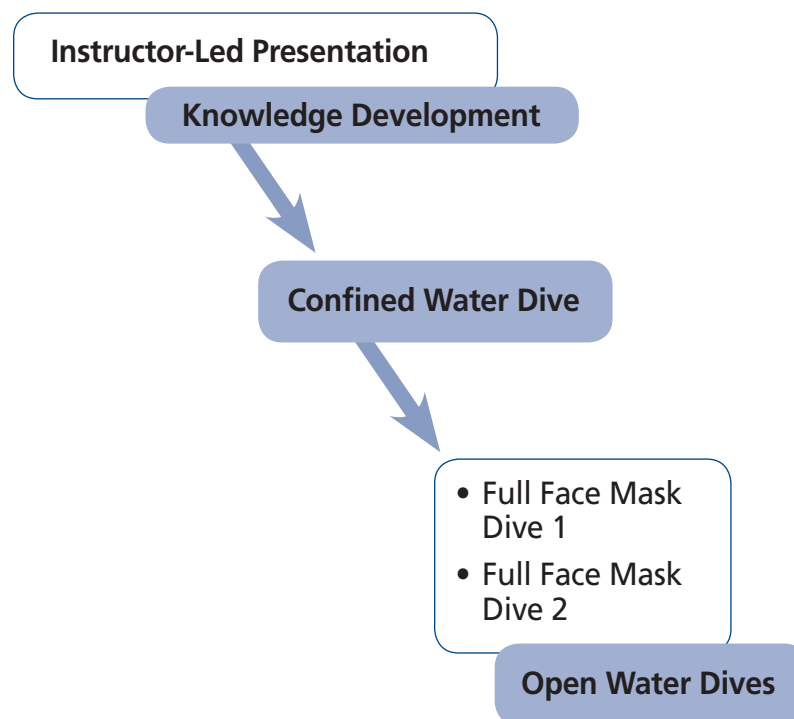
## Course Flow Options

The Course Flow Options diagram above shows how knowledge development and confined water and/or surface practice sessions support open water dives.

When possible, it's preferable to have student divers complete and review the Knowledge Review you provide them before participating in the confined water dives. Students complete a confined water full face mask practice session as part of the course; this practical session allows student divers to practice skills such as preparing a full face mask for diving, proper adjustment and safety checks, equalizing a full face mask, clearing a flooded mask, removing the mask underwater and breathing from an alternate air source, and more.

**Before the first confined water dive, set aside time to conduct a student readiness "preassessment" to determine whether the diver is ready for inwater full face mask training (more about this later).**

There are two open water dives to complete. You may add more dives as necessary to meet student diver needs. Organize your course to incorporate environment-friendly techniques throughout each dive, to accommodate student diver learning style, logistical needs and your sequencing preferences.



# Section One

## Course Standards

This section includes the course standards, recommendations and suggestions for conducting the PADI Full Face Mask Diver course.

## Standards at a Glance

Topic	Course Standard	
<b>Minimum Instructor Rating</b>	PADI Full Face Mask Specialty Instructor	
<b>Prerequisites</b>	PADI Open Water Diver	
<b>Minimum Age</b>	12 years*	
<b>Ratios</b>	Confined Water: 8:1 Open Water: 8:1	
<b>Site, Depths and Hours</b>	Depth: For open water dives, 18 metres/60 feet, maximum; 6-12 metres/20-40 feet, recommended Minimum Confined Water Dives: 1 Minimum Open Water Dives: 2 Hours Recommended: 10	
<b>Materials and Equipment</b>	Instructor: PADI <i>Full Face Mask Specialty Course Instructor Guide</i>	Student Diver: Full face mask (with appropriate accessories) and standard (backup) mask

\* Full face mask fit can be an issue on smaller faces. Follow manufacturer guidelines to confirm proper fit.

## Instructor Prerequisites

**To qualify to teach the PADI Full Face Mask Diver Specialty course, an individual must be a Teaching Status PADI Specialty Instructor or higher.** PADI Instructors may apply for the Full Face Mask Diver Specialty Instructor rating after completing a Specialty Instructor Training course with a PADI Course Director, or by providing proof of experience and applying directly to PADI. For further detail, reference PADI Professional Ratings in the Professional Membership Guide section of your PADI *Instructor Manual*.

## Student Diver Prerequisites

By the start of the course, a diver must be:

- 1. Certified as a PADI Open Water Diver or in the process of taking the PADI Open Water Diver course – with stipulations noted below – or have a qualifying certification from another training organization.**
- 2. At least 12 years old.**

## Supervision and Ratios

### Confined Water Dive

**Completion of a confined water full face mask training session is required of student divers. This confined water session must be completed prior to making the first open water dive of this specialty course. During the confined water session, the Specialty Instructor must directly supervise.** Additional confined water sessions may be added at your discretion.

**The maximum inwater ratio for confined water sessions is eight student divers per instructor (8:1), with four additional student divers allowed per certified assistant.**

#### Note to Instructor

Helping students practice full face mask skills underwater often requires ample time and close supervision, so be conservative in determining ratios. The confined water dive includes a full face mask diver readiness assessment.

### Open Water Dives

**A Teaching Status PADI Full Face Mask Diver Specialty Instructor must be present and in control of all activities, and must ensure that all performance requirements are met. The Specialty Instructor must directly supervise the open water dives during skill demonstration by the students.** After all student divers have successfully demonstrated the required skills for open water training dives, the instructor may exercise indirect supervision over the balance of the dive.



**The maximum inwater ratio for open water dives is eight divers per instructor (8:1), with four additional student divers allowed per certified assistant (4:1).**

## Site, Depths and Hours

### Site

Choose sites with conditions and environments suitable for completing requirements. Shallow dives will provide divers with more time to complete the training requirements. Use different open water dive sites, if possible, to give students divers experience in dealing with a variety of environmental conditions (incorporate environment friendly techniques throughout each dive) and logistical challenges.

### Depths

Recommended: 6-12 metres/20-40 feet

**Maximum: 18 metres/60 feet**

### Hours

**The PADI Full Face Mask Diver Specialty course includes one confined water training session and two open water dives, which may be conducted in one day. Conduct dives during daylight hours.** Recommended course hours: 10.

## Materials and Equipment (Instructor and Student)

### Required

- **PADI Full Face Mask Diver Specialty Diver Course Instructor Guide (instructor only)**
- **Student and instructor equipment as outlined in the PADI *Instructor Manual, General Standards and Procedures Guide*.** Snorkels are optional, but are recommended when there is a long surface swim or a long surface wait during which a standard mask might be used.
- **Standard mask**– Although students wear full face masks, they need standard masks (a.k.a. “half masks” or “conventional masks”) for use with alternate-air-source breathing in gas-emergency situations. They will practice these skills in training. Snorkels may be used with standard (backup) masks.
- **Full Face Mask** – For the purpose of training, a full face mask is defined as any mask that encloses the whole face to include the eyes, nose and mouth. A full face mask must have a first stage and second stage regulator.
- **Alternate Air Source** – All students are required to have an alternate air source as described in the General Standards and Procedures section of the PADI *Instructor Manual*.

## Recommended

- Specialty equipment and supplies, including:
  - The manufacturer's manual for operation of the full face mask.
  - Recommended repair kit and adjustment tools for the full face mask.
  - A spare parts kit specific to the full face mask(s) being used.
- Extra weights, in small increments, for student trim.

### Note to Instructor

Since you may be training divers who own full face masks from different manufacturers and in different configurations, it is recommended you be aware of and have available the various tools, adapters, etc. that may be required to make field adjustments or minor repairs.

## Assessment Standards

**To assess knowledge, have divers complete the Full Face Mask Diver Knowledge Review (located in the Appendix of this guide) and review missed questions until they demonstrate accurate and adequate knowledge. During open water dives, divers must perform all skills – procedures and motor skills – in a reasonably comfortable, fluid, repeatable manner as would be expected of a diver at this certification level.**

## Certification Requirements and Procedures

**To qualify for certification, student divers must complete all performance requirements for the Full Face Mask Diver Confined Water Dive, as well as Full Face Mask Diver Open Water Dives One and Two. The instructor certifying the student diver must ensure that all certification requirements have been met.**

## Links to Other Courses

Divers who successfully complete all full face mask training dives may receive credit for an Adventure Dive toward the PADI Adventure Diver and/or Advanced Open Water Diver certifications. The student may also credit the specialty certification toward the PADI Master Scuba Diver rating. The Full Face Mask Diver Specialty course may be taught concurrently with the PADI Open Water Diver course. **If taken concurrently with the PADI Open Water Diver course, follow this sequence:**

1. Knowledge development for full face mask may occur at any time during the PADI Open Water Diver course.

2. Confined water skills specific to using a full face mask may be introduced at any time after students successfully complete Open Water Diver course Confined Water Dive Three. Add additional confined water training dives as necessary.
3. Five open water dives are required to earn both PADI Open Water Diver and PADI Full Face Mask Diver certifications. Student divers must first complete Open Water Diver course open water dives one, two and three using conventional scuba equipment. Student divers then make two dives using a full face mask.
4. On the first of these dives, student divers complete the required full face mask skills for Full Face Mask Dive One (as detailed later).
5. For the second of these dives, have student divers plan the dive as outlined for Open Water Diver course Open Water Dive Four, but using a full face mask. They will also complete the required full face mask skills for Full Face Mask Dive Two (as detailed later).
6. Students may complete Open Water Dive Four using conventional equipment, and then complete the two open water training dives from the PADI Full Face Mask Diver course.

# Section Two

## Knowledge Development

### Conduct

Use the following teaching outline as a road map of the conduct, content, sequence and structure for the Full Face Mask Diver Specialty course. The result should be student divers with theoretical knowledge and pragmatic experience who can adapt what they have learned to safely and reliably dive with a full face mask.

Divers complete the Knowledge Development for the PADI Full Face Mask Diver course through your formal or informal presentations based on the following outline. These presentations are the only knowledge development method for this course.

Because the PADI Full Face Mask Diver course is primarily a motor skills course, knowledge development prepares students to develop and practice those skills under your direction. Demonstrating motor skill mastery during practical application and the training dives, combined with asking students questions and other verbal interactions, and completion and review of the Knowledge Review, allow you to assess knowledge development mastery.

### I. Introduction

#### Note to Instructor

Have students and staff introduce themselves and provide a bit of background.

#### A. Course Goal – To qualify and certify you to set up, plan and make dives with a full face mask within your present certification and experience limit.

1. Certification means that you will be qualified to plan, organize and make dives using a full face mask in conditions generally comparable, or better than, those in which you are trained.
2. Upon successfully completing the course, you will receive the PADI Full Face Mask Diver Specialty certification.

#### B. Course Overview and Schedule

#### Note to Instructor

Discuss the course sequence, assignments, meeting times, places and other information about all class and practical application settings, and training dives. Build excitement about the course, particularly the training dives.

## C. Costs, Equipment Requirements and Paperwork

### Note to Instructor

Explain all costs, equipment requirements and logistical details as necessary. Reconfirm prerequisites if appropriate, ensure all paperwork is completed – see Section One, and Paperwork and Administrative Procedures, General Standards, PADI *Instructor Manual*. Collect outstanding fees.

## D. Performance Requirements and Certification

1. To qualify for any PADI certification, you must meet specific performance requirements.
  - a. You pay for the course, but must earn the certification.
  - b. This requirement exists because your ability to dive safely depends on your ability to master and apply what you learn in this course.
  - c. Performance-based learning is the objective – a student either meets a requirement or not; your instructor is not arbitrary in assessing performance.
2. Although you must meet all performance requirements, having difficulty does not mean you will be unsuccessful.
  - a. You take a course to learn – making mistakes and needing time to master knowledge and skill is part of learning.
  - b. You may pick up some things quickly, and others slowly; what matters is that you demonstrate mastery – not how long it takes.
  - c. You move at the pace you learn – you may need extra dives or other practice.

## II. Benefits of Diving with a Full Face Mask

### Learning Objectives

By the end of this section, you should be able to answer the following questions:

1. What are the three types of full face mask, and what are the major differences in their design?
  2. What are six advantages of diving with a full face mask?
  3. What are one safety benefit and three potential problems for diving with a full face mask?
1. What are the three types of full face mask, and what are the major differences in their design?
  - A. Each of the three designs has advantages and disadvantages. Before purchasing a full face mask, potential users should research which style suits their type of diving best.
    1. The first style of full face mask allows you to attach your own second stage regulator.
      - a. This style of mask can best be described as a standard dive mask that extends to below the chin.
      - b. There is no specific design feature that allows for defogging of the mask.
      - c. Gas flows directly from the second stage regulator to the diver through the oral-nasal pocket.

2. The second style of full face mask has an integrated second stage regulator specific to the mask, making it a complete system.
  - a. Typically, gas flow is directed through the visor area of the mask, resulting in natural defogging and a cooling of the diver's face.
  - b. The gas is then directed through check valves in the oral-nasal pocket, inhaled by the diver and then exhaled through the regulator.
  - c. This one-way flow of gas through the mask results in more effective removal of CO<sub>2</sub> (carbon dioxide). Most integrated full face masks are designed with the exhaust through the diaphragm assembly of the second stage.
  - d. This system allows for high performance because there is no effect of the pressure differential between the diaphragm and the exhaust. Full face masks with separate exhaust valves have a tendency to freeflow when inverted, if they have no means of restricting the exhaust.
3. The third style of full face mask has a separate "pod" for the second stage regulator.
  - a. The upper part of the mask is similar to a standard mask, with the lower part being a removable/interchangeable pod for the second stage.
  - b. This style of mask is easy to use in gas-sharing emergencies because the lower pod can be removed and shared. Also, the full face mask user can accept any conventional second stage regulator from a buddy (who might not be diving with a full face mask).

## **2. What are six advantages of diving with a full face mask?**

- B. Full face masks are becoming more popular with recreational divers for four major reasons.
  1. Breathing comfort. Many divers enjoy being able to breath from their nose, which is more natural and reduces jaw fatigue because they don't need to keep a mouthpiece between their teeth.
  2. Communicating with a buddy or support team. When equipped with a communications device, full face masks allow divers to talk to each other. Because of this, full face masks are also indispensable for public-safety divers, who are able to communicate not only with buddies underwater but also with support staff on the surface.
  3. Cold-water diving. Some cold-water environments are physically too cold to dive in without adequate exposure protection for the skin. Dry suits allow you to keep your body warm, hoods keep the head warm and full face masks provide coverage for your entire face.

4. Polluted environments. Most recreational divers won't be exposed to waters with many contaminants. Public-safety divers and commercial divers, however, regularly dive in polluted waters that could prove harmful if ingested or through skin contact. If you're learning full face mask diving as part of progressing toward public safety diving, a full face mask provides some protection against this, and you will learn more about this in training specific to public safety diving.
5. Physiological advantages. If a full face mask diver becomes unconscious underwater, the breathable air space in most masks assists in rescue. This is especially so for divers who use dentures, disabled divers and divers with temporomandibular joint disorders (for whom keeping a second stage regulator in the mouth is more difficult).
6. It's fun! Diving with a full face mask offers a different experience than diving with a conventional mask. Add the ability for communicating with a buddy, and diving with a full face mask is fun!

**3. What are one safety benefit and three potential problems for diving with a full face mask?**

- C. If you become unresponsive, a full face mask has a benefit that a standard mask does not: Provided you have adequate gas remaining in your cylinder, the mask seal is intact and your equipment still functions normally, you would probably still be able to breathe.
- D. That said, the full face mask does have some drawbacks that you should be aware of, though you'll discover how to deal with them as you learn in this course and through practice after certification.
  1. Unconscious diver at the surface. There is a high risk of suffocation for an unresponsive full face mask diver with an exhausted gas supply if someone doesn't or can't remove the mask.
  2. Carbon dioxide (CO<sub>2</sub>) retention and buildup. Because a full face mask has a significantly higher volume, there's potential for carbon dioxide to build up, especially if you fail to breathe slowly and deeply. This can result from insufficient air exchange due to the additional dead air. It primarily presents a problem with a full face mask that lacks a design that reduces the effect of dead air, but there's some potential with most full face masks.
  3. Sharing gas is more complicated. In a low-on-air or out-of-air emergency, sharing gas is more complicated when one or more of the buddies is using a full face mask. To receive shared gas, you must remove most full face masks (there are some exceptions) – leaving you with impaired vision as well as no gas source while trying to get an alternate air source in the mouth and finally put on a standard mask.

### III. Components of a Full Face Mask

#### Learning Objectives

By the end of this section, you should be able to answer the following questions:

1. What are 13 features and highlights to look for when purchasing a full face mask?
2. What is a head harness (or harness), and what four features should the strap system contain?
3. What are the features and cautions regarding the face shield?
4. What are the most important features of the mask skirt?
5. What considerations need to be made if using a full face mask that permits you to install your own second stage?
6. What is the main difference between an ambient mask and a positive pressure mask, and what is the rationale for use of each?

#### 1. What are 13 features and highlights to look for in purchasing a full face mask?

- A. Full face masks have many features you need to consider when choosing which one suits your needs.
  1. Fit, comfort and sealing. Not all full face masks are the same. Obviously, how a mask sits on your face, how comfortable it is and how well it seals is of utmost importance. Some masks fit smaller faces better; some masks are a better fit with larger faces. Try different masks on to see which suit your face better.
  2. Ease of equalization (e.g. adjustable nostril-plug device or equalization assembly/device). With many full face masks, you can't equalize the same as you would using a standard dive mask – by pinching your nose with your fingers and blowing gently. Full face masks feature nose blocks, with varying forms of adjustability. Other masks have different devices that allow you to block your nostrils for equalization. How easy these devices are to use is an important personal choice. (Equalization devices like these make it easier for an adaptive dive buddy to gently press the full face mask in place, allowing adaptive divers to equalize.)
  3. Ability to use underwater communications systems. Most full face masks are equipped with a communications port for the installation of various types of underwater communications. Where and how this communications unit installs differs, depending on the mask and the communication hardware.
  4. Ease of putting on/taking off both underwater and on the surface. Getting the mask off quickly underwater is perhaps the most important factor in handling a gas-sharing emergency. This mostly depends on the mask strap and mask skirt, but each mask has a different fit and feel.
  5. Ease of adjustment. Again, how easy it is to adjust a full face mask will depend mostly on the mask strap and mask skirt, along with how it fits on your face.



6. Ability to attach corrective lenses. Masks with glass faceplates can be fitted with either glued-in or custom-ground lenses, polycarbonate faceplates generally cannot; reading lenses can also be put in the corners for close-up viewing.
  7. Whether the mask comes with complete, clear instructions (whether in a manual or on a website). Different full face masks have different features. Knowing how to properly use and service your full face mask is important.
  8. Ease of maintenance, with parts and service readily available. Full face masks are not as common as other recreational scuba gear and don't share as many common parts, with the exception of the low-pressure hose, which is fairly standard. Therefore, you need a source – like a local dive shop – for the brand/model-specific parts, and where service is more readily available.
  9. Reliability. Check whether the mask has a reputation for poor reliability, or if it works out of the box and keeps performing for years. Also consider the company's reputation for customer service.
  10. Cost. Masks with more features usually cost more. Take into account the diving you plan to do with a full face mask, and what you want to invest.
  11. Gas conservation at the surface. Any time you seal a full face mask to your face, you'll be breathing off the cylinder, unless the mask is fitted with a surface air valve that allows you to breathe ambient air. Note that these valves are not snorkels, and need to be closed prior to diving.
  12. Second stage quick-disconnect. Some full face mask systems have a second stage fitted with a quick-disconnect hose. This hose is useful for a number of reasons, including:
    - a. In an emergency, it allows you to quickly disconnect the hose and attach a secondary gas source without having to remove your full face mask.
    - b. If your mask has a surface air valve, after a dive you can disconnect the hose and hand up the BCD/cylinder system to crew on a boat (for example), keeping your mask on.
    - c. Quick-disconnect hoses are useful in adaptive diving situations.
  13. Direction of exhaled bubbles. Some full face masks have an adjustable exhalation valve that allows you to direct exhaled bubbles in a desired direction.
- 2. What is a head harness (or harness), and what four features should the strap system contain?**
- B. A "head harness" (it can have different names with different full face mask systems) is a series of straps, or a harness, that converge in a junction at the back of the head.
    1. The harness is typically made up of three to six straps, depending on the mask.
    2. You need a harness with a full face mask to ensure correct positioning to avoid gas leaks. Even in the event of accidental bumping, it helps prevent the mask from dislodging.

3. Adjustment tabs, straps and fasteners should be large enough to permit easy adjustment, even when wearing gloves.
  4. Straps should be long enough to allow you to put the mask on easily, and account for fitting with a wet suit or dry suit hood if one will be worn.
- 3. What are the features and cautions regarding the faceplate?**
- C. There are a number of features and cautions regarding the faceplate.
1. One feature most divers like is the extra wide field-of-view.
  2. If the faceplate is made of lexan or polycarbonate, take care to prevent scratching. Do not use something abrasive, like a beach towel that's been on sand, to wipe it clean or dry it.
    - a. Minor scratches on the outside of the faceplate will fill with water when diving and shouldn't interfere with your field-of-vision.
    - b. Scratches on the inside, however, will be visible.
  3. Some masks have plastic faceplates treated with a special scratch-resistant coating; even still, use care when handling the mask.
  4. If your mask comes with a removable protective face shield, use it when the mask isn't in use.
  5. Certain masks come with a padded, ventilated bag. Fit the protective face shield back onto the faceplate and put the whole mask into the bag when putting it away for storage or when transporting it. Divers sometimes store the mask with a soft cloth on the inside of the faceplate to protect it from scratches when not in use.
- 4. What are the most important features of the mask skirt?**
- D. Note three main features of the mask skirt.
1. The skirt should offer a *wide* sealing surface to ensure a comfortable, gas- and watertight fit.
  2. Check that the seal actually seals with and without a hood, if you plan to use the mask with a hood.
  3. Usually made of soft, smooth silicone, full face mask skirts are available in different sizes to fit different-sized faces. Ask your PADI Professional for help with choosing the correct size for your face.
- 5. What considerations need to be made if using a full face mask that permits you to install your own second stage?**
- E. How should you install the second stage on suitable masks?
1. Some masks come standard with a factory regulator(s) installed.
  2. Some masks allow installation of various models of second stage regulators.
    - a. Always carefully follow manufacturer's instructions when installing a regulator second stage on your own.

- b. Alternatively, have a qualified PADI Pro at your local PADI Dive Center where you purchased the mask help you install it. Some brands *require* professional installation of the second stage.
    - 3. If you're using a non-adjustable second stage regulator, note the following:
      - a. A regulator lacking adjustment may be more difficult to breathe from.
      - b. An overly sensitive regulator may tend to freeflow.
  - F. What features should you ideally have on the second stage you choose?
    - 1. Some front-mounted second stage regulators may need to be adjusted underwater to prevent freeflow when looking down (a result of positional hydrostatic pressure), while many full face masks with regulators on the side bring the diaphragm assembly closer to the diver's mouth (in relation to the water column), eliminating the need for an adjustable regulator.
    - 2. Equalization features of the full face mask.
      - a. Because gas is being fed into the chamber created by the mask, most full face masks balance pressure inside and outside the mask automatically, with every breath you take. This is not true of split full face masks that separate the upper and lower face; with those, you equalize the upper portion by blowing into it through your nose, just as you would a conventional scuba mask.
      - b. As discussed previously, while some masks allow you to pinch your nose directly to equalize, many full face mask styles have other devices that allow ear equalization. These include fully adjustable nose "blocks" that you push against the nose to equalize, pincer-like devices that allow you to pinch the nose, and more. Your instructor and the manufacturer literature will explain how to equalize with the mask you use in the course.
- 6. What is the main difference between an *ambient mask* and a *positive-pressure mask*, and what is the rationale for use of each?**
- G. There is one main difference between an ambient mask and a positive-pressure full face mask.
    - 1. An ambient-pressure full face mask delivers gas only when you breathe in, keeping the pressure inside the mask balanced with the surrounding pressure. Although these types of mask freeflow gas if the seal leaks underwater (more about this shortly), they do not freeflow gas out of the water with a seal leak. This design is sometimes called "semi-positive pressure." These are by far the most common and popular in recreational full face mask diving, and have widespread use in professional diving as well.
      - a. Pros
        - (1) These types of mask are typically less expensive,
        - (2) Because of their design, these masks are usually simpler to operate.

- b. Cons
  - (1) They may not be suited for certain environments that professional divers may need to enter, such as polluted water.
- 2. A positive-pressure full face mask maintains a pressure slightly above the surrounding pressure by continually delivering gas. *Positive-pressure full face masks are primarily used by professionals for fire fighting and hazmat emergencies.*
  - a. Pros
    - (1) The slight positive pressure of gas helps keep minor contaminants from breaching a mask seal leak by blowing gas out – this is the primary purpose of the design.
  - b. Cons
    - (1) The mask may cost more at initial purchase.
    - (2) You tend to use more gas, all else being equal, with a positive pressure full face mask.

## IV. Diving with a Full Face Mask

### Learning Objectives

By the end of this section, you should be able to answer the following questions:

1. What are the nine steps you should perform to properly prepare a full face mask for diving?
2. What are two general methods you can use to save gas if you have a prolonged wait at the surface before a dive?
3. What are seven basic skills a diver needs to master when using a full face mask?
4. What are 10 important considerations when diving with a full face mask?
5. What are three recommendations for the full face mask diver at the surface?
6. What are six general recommendations when using wireless communications with a full face mask?
7. What are four considerations you should share with a dive buddy who is not diving with a full face mask?

### 1. What are the nine steps you should perform to properly prepare a full face mask for diving?

- A. Preparing the full face mask for diving involves nine steps.
  1. If the mask has a protective face shield on it, remove the shield and secure the mask in a place where it won't get scratched.
  2. Check condition of all parts, including skirt, harness system, surface air valve and second stage regulator.
  3. If your mask has a nostril block or another equalization assembly, adjust it as necessary so that it works effectively with your face.

4. Loosen the harness system fully and apply defog (if/as appropriate for your mask – check the manufacturer literature).
5. Attach the regulator system to the scuba cylinder and check the breathing functions for both inhalation and exhalation, then check the regulator's purge function.
6. Continue normal gear-up and buddy system checks. You normally put your full face mask on last, just before putting on your fins.
7. If using a wet suit hood, you normally seat the skirt of the full face mask under the hood as you would a standard mask.
8. If using a dry suit hood, whether the full face mask skirt goes inside or outside the hood depends on the mask and the type of hood. See the manufacturer literature and get your instructor's guidance if you're not sure.
9. Perform airflow and purge safety checks. Turn on the cylinder to make sure the gas is flowing, then push the purge to confirm it functions properly as well.

**2. What are two general methods you can use to save gas if you have a prolonged wait at the surface before a dive?**

- B. If you anticipate a prolonged wait at the surface, you may choose to reduce surface air consumption by any of these methods:
1. Use the surface air valve. On some masks, you may be able to just remove the mouthpod to breathe. Have your students practice opening and closing the surface air valve before getting into the water.
  2. Loosen the two lower straps and insert a finger under the skirt, creating an opening to allow air to enter.
  3. With some masks and/or situations, neither of these options will be practical and you'll use cylinder gas while waiting on the surface, so you'll want to descend and start the dive as soon as possible.

**3. What are seven basic skills a diver needs to master when using a full face mask?**

- C. There are seven basic skills for using a full face mask.
1. Donning and adjusting the full face mask
    - a. First, loosen all the straps completely.
    - b. Position the mask on your face, chin first, then "wiggle" your face into the mask, ensuring the seal is free from obstruction.
    - c. The key is to make sure the chin is secure – if the top of the oral/nasal pocket is too high over the diver's eyes, you cannot pull the mask down, leaving a gap at the chin. Get the chin right and everything else usually ends up positioned properly.
    - d. Check positioning of the equalization assembly in relation to your nostrils as required. Fit the mask on your face to ensure proper positioning, and adjust if necessary.

- e. Tighten straps as recommended for your mask by the manufacturer, commonly in a sequence like this (or according to manufacturer specifications):
    - (1) Lower (bottom) straps first
    - (2) Lateral (middle) straps second
    - (3) Upper (top) straps last
  - f. Do not fully tighten the straps initially. Get all the straps “loosely snug,” then tighten them further in the same sequence, in small increments, so you have the mask adjusted evenly for a snug fit around the whole mask. With most masks, the fit against the chin and lower face is the critical adjustment. Make sure to not tighten the top strap too much.
  - g. With most masks, once the mask is adjusted you only need to loosen the lower straps to remove the mask.
2. Breathing in a full face mask
- a. With most full face masks, you may breathe through the mouth, nose or both, just like breathing out of the water. With some split masks, you breathe through your mouth and may choose to breathe from a regulator mouthpiece or have the mouthpiece out.
  - b. Carbon dioxide control
    - (1) Many modern full face masks have a second chamber in the mask that isolates your nose and mouth in a dedicated breathing chamber. This oral-nasal pocket reduces carbon dioxide buildup by keeping exhaled gas from mixing with other gas in the mask.
    - (2) As you learned in your Open Water Diver course, your body’s breathing response is triggered by carbon dioxide. The goal of full face mask design is to reduce as much as possible the buildup of carbon dioxide, which tends to make you breathe faster and, at higher levels, can cause other problems including a feeling of air starvation and headache.
    - (3) Most full face masks are designed with an airflow that flushes the exhaled carbon dioxide with fresh gas, effectively keeping carbon dioxide buildup lower. As you’ll see later, it also usually reduces fogging, too.
  - c. As the dive progresses, and after the dive, you may notice less jaw fatigue because you’re not biting on a mouthpiece.
3. Equalizing your air spaces
- a. If your nostril block device is properly adjusted, simply push against the upper part of the mask’s visor to block your nostrils. Some devices allow you to pinch your nose much as you would with a conventional mask.
  - b. Either way, equalize as you normally would. You may need to practice a few times to get a feel for blocking your nostrils.

- c. There is no mask squeeze with most full face masks – with the second stage attached to the mask, the regulator “injects” gas into the mask as you descend, eliminating squeeze.
  - d. If the device isn’t properly adjusted or you find equalization difficult, you may need to ascend to the surface and remove the mask to adjust it – whether they have extensions or another means of adjustment – to get a proper fit. However, some divers can equalize by yawning, swallowing or other techniques that don’t require blocked nostrils.
4. Defogging
- a. Fogging in a standard mask occurs because a diver’s body heats the air inside it. Moisture condenses where the air contacts the faceplate, which is colder due to the water outside the mask.
  - b. Through its design, a properly fitted full face mask prevents the flow of humidified exhaled gas back into the mask, reducing fogging.
  - c. Many full face masks also reduce or eliminate fogging by flowing the cool, dry incoming gas over the faceplate with each breath.
  - d. Other full face mask designs, especially those that allow for the installation of a second stage, require defogging like a standard mask.
  - e. See the manufacturer literature for your mask’s defog requirements.
5. Clearing a flooded full face mask
- a. A full face mask is difficult to flood because of the way it seats on the diver’s face with the regulator positioned lower than the mask’s air space.
    - (1) A minor leak due to improper fit, hood/hair under the seal, etc. will normally cause gas to freeflow and escape; water doesn’t usually enter.
    - (2) Flooding can occur when a surface air valve is left open and the diver inverts, if the mask is dislodged from the face, or if the mask is intentionally removed. Flooding is rare but can happen, so you will practice clearing a flooded full face mask.
  - b. It’s easy to clear water from a full face mask simply by pushing the regulator purge and allowing the inflow of air to displace the water. Be in a relatively upright position that puts the exhaust valves at the lowest point.
    - (1) Keep your mouth closed and do not breathe through your nose until the water level in the mask has dropped sufficiently.
    - (2) When purging water from the mask, gently push the purge. The purge on most masks is powerful, so go carefully at first as you learn how sensitive your purge flow is.
    - (3) Depending on the full face mask you have, follow the manufacturer recommendations for mask clearing. For masks that exhaust through

the regulator, for example, when purging you will also be closing the exhaust as well; with this type of mask, look up at a 45-degree angle and purge with the bottom of the mask jutting slightly out. If you have a lot of air in your lungs, you can also exhale forcefully to displace some of the water. When you've sealed the mask after purging, draw a tentative breath and exhale to clear any remaining water.

- (4) If the mask isn't sealed, the mask may not clear when you purge. If the harness has loosened, hold the mask with your hand to create the seal and restore your gas supply, then readjust and tighten the straps while maintaining the seal.
6. Removing the full face mask underwater and sharing air.
  - a. Locate the alternate air source (your buddy's second stage, your pony bottle second stage, etc).
  - b. Loosen the lower straps.
  - c. Take a deep breath (if possible – may not be if you've exhausted your gas supply, obviously).
  - d. While continuously exhaling a small stream of bubbles, remove the full face mask and bring it to the side of your body to prevent hoses tangling.
  - e. Secure the alternate air source, clear it and breathe normally.
  - f. After establishing normal breathing, put on your backup (standard) mask and clear it.
  - g. With your buddy, begin the ascent to the surface at the normal ascent rate.
7. Replacing the full face mask underwater.
  - a. Orient the full face mask in your hands for donning by following the hose to the mask. Loosen all straps for ease of donning. Move thumbs in at the chin area and face the mask down.
  - b. With thumbs inside the mask, slide the fingers up the respective sides of the mask until the harness straps are gathered.
  - c. Tilt your head back so you're looking up, release the rim of the full face mask and, holding the harness straps, put the mask on like a hood.
  - d. If breathing from an alternate air source, keep it in your mouth until the full face mask is at nose level.
  - e. Keeping your alternate air source in position, begin purging the full face mask by exhaling through your nose so the gas goes into the mask above your face. When you're comfortable and ready, take a deep breath from your alternate air source, remove it (or let it fall away) and place the full face mask in position on your face.
  - f. Press on the mask to seal it against your face and gently push the purge to continue clearing water.



- g. Begin breathing normally as soon as the water has been purged.
- h. While holding the full face mask sealed against your face with one hand, tighten the lower straps to re-seat and seal the mask with your other hand.
- i. Adjust all straps until the mask is secure. One indication the harness is still not properly tightened is that the mask may vibrate as you breathe.

#### 4. What are 10 important considerations when diving with a full face mask?

- D. There are 10 important considerations when diving with a full face mask.
  - 1. Before entering, don the mask and perform a quick system check, verifying the mask works and your gas is turned on. Close the surface air valve, check your pressure gauge and take two to three deep breaths to ensure there is no drop in pressure.
  - 2. When entering the water, hold your mask firmly.
  - 3. If fogging occurs while waiting on the surface, the fog should disappear quickly as soon as the regulator is used. If the fogging persists, or you want to speed up the process, with appropriate masks press the purge and the gas flow should quickly clear the fogging away.
  - 4. Equalize early and often, as appropriate for your mask, as you descend.
  - 5. If descending head down, you may find it necessary to turn down the sensitivity of the regulator to prevent freeflow.
  - 6. If you're using a full face mask without an adjustable second stage regulator, descending with your head above your feet helps prevent regulator freeflow.
  - 7. During the dive, you will notice the position of your body and head in the water may require minor adjustments to the second stage.
  - 8. Depending upon the full face mask and your standard mask, you may find your field of view is wider, narrower or about the same.
  - 9. Your gas consumption tends to be higher with a full face mask, though as you become better acquainted and more comfortable with using it, this should improve.
  - 10. A full face mask contains a larger volume of gas than a standard mask, which can slightly increase your buoyancy. It's recommended to do a weight check the first time you use a full face mask, and adjust your weight accordingly.

#### 5. After a dive, what are three recommendations for using the full face mask at the surface?

- E. After you finish a dive, consider these three recommendations for using a full face mask at the surface.
  - 1. If conditions at the surface are poor (high waves, windy, etc.) it's usually best to breathe in the full face mask, much as you might use your regulator instead of your snorkel with a standard mask in these conditions. **Note: Remember to plan for this gas use prior to the dive in your dive gas management plan.**

2. If conditions at the surface are calm, the diver may loosen the lower straps and remove the full face mask.
3. The diver may remove the full face mask and use the backup (standard) mask and a snorkel, though in rough surface conditions this might not be as desirable an option.

**Note to Instructor**

Discuss options specific to student masks, such as surface air valves.

## 6. What general recommendations and considerations may apply to using underwater communications with a full face mask?

- F. Divers must consider these recommendations for using underwater communications with a full face mask:
  1. Before integrating a communications (comm) unit with your full face mask, fully read the manufacturer literature for the specific comm unit you are using because there are several different types.
    - a. Some comm units feature “push-to-talk” (PTT) technology.
    - b. Some units are voice-activated (VOX).
    - c. Some high-end units may offer the ability to switch between the two.
  2. Underwater comm isn’t like a telephone; rather, it works more like a walkie-talkie, with only one person able to talk at a time.
  3. The more you talk, the faster you use gas.
  4. When someone is talking, inhale very slowly so you can hear, but *don’t hold your breath*.
  5. Before you go on a dive with your full face mask and comm unit, make sure you and your buddy(ies) agree on a communications protocol. The standard practice is to use one similar to marine radio.
    - a. Say the name of the person you’re calling two times followed by your name, because it’s unlikely you’ll be heard clearly on the first try. If there are only two of you using communication, saying your name isn’t necessary, but it reduces confusion with three or more divers using comm.
    - b. Follow any statement by saying “Over,” which essentially means that you’re finished talking and expect a reply.
    - c. To signal an end to the thread of conversation, or the broadcast entirely, say “Out.”

Example:

Pat, Pat, this is Sandy. How much gas do you have, over?

Sandy, Sandy, Pat. I have 100 bar, over.

Pat, Pat, Sandy. That sounds good, I have 90 bar. Out.

Sandy, Sandy, Pat. Copy you're at 90 bar, out.

6. Comm works line of sight and can be "shadowed" by your body, the reef and other objects. Although the signal may reflect somewhat, for the best signal ensure there's nothing between your transmitter and the other diver(s) receiver(s).
7. If your comm unit uses a separate transceiver (transmitter/receiver) with lines to mic/earphones, *do not* attach the transceiver to your weight system (belt or BCD weight pockets). This could prevent or complicate emergency weight ditching by, practically speaking, attaching your weight to your full face mask.
8. Avoid talking while ascending because you tend to hold your breath to some degree while talking. If you need to transmit, pause your ascent when talking.

#### Note to Instructor

A non-full face mask diver may also have the receive-only unit of an underwater communications system. If this is the case, the full face mask diver should explain how to use the unit and basic communication phrases that might be used.

### 7. What are four considerations you should share with a dive buddy who is not diving with a full face mask?

- G. There are four primary considerations a full face mask diver should share with a buddy who is *not* diving in a full face mask.
  1. Explain and demonstrate how to remove a full face mask.
  2. Go over the steps for sharing air in an out-of-gas situation. Note that a full face mask diver sharing gas for an out-of-air buddy using a standard mask will be the same, since the full face mask diver can share the second stage octopus or second stage attached to a bailout block (if used).
    - a. Full face mask diver will signal out-of-gas to the buddy.
    - b. Full face mask diver will remove the full face mask, blowing bubbles until receiving the alternate air source from the buddy.
    - c. The full face mask diver will breathe from the alternate air source, locating and donning the backup (standard) mask.
    - d. The buddy team will surface together.
  3. Detail the procedures for dealing with an unresponsive full face mask diver underwater.
    - a. Hold the diver's head in a normal position and keep the full face mask in place.
    - b. Raise the full face mask diver's head and bring the diver to the surface.
    - c. At the surface, immediately establish buoyancy and continue with the procedures for an unresponsive diver at the surface. Ask your instructor about the PADI Rescue Diver course to learn more.

4. Detail the procedures for dealing with an unresponsive full face mask diver at the surface.
  - a. Establish that the diver is unresponsive.
  - b. Immediately remove the full face mask.
  - c. Follow the same procedures you've learned for any other unresponsive diver at the surface. To extend and build your abilities in preventing and managing diver emergencies, ask your instructor about the PADI Rescue Diver course, or visit padi.com.

### Note to Instructor

Some full face masks may feature a quick-disconnect hose. In these cases, the full face mask diver should explain to the buddy any variations in handling out-of-air procedures using a quick-disconnect hose.

## V. Full Face Mask Problems and Solutions

### Learning Objectives

By the end of this section, you should be able to answer the following questions:

1. What are the five most common problems with a full face mask, and how do you manage each?

1. **What are the five most common problems with a full face mask, and how do you manage each?**
  - A. While fogging isn't common in full face mask diving, divers should know how to deal with fogging should it occur.
    1. Fogging is virtually nonexistent in many full face masks.
      - a. As previously discussed, full face masks with integrated second stages generally are designed to vent air across the vision area, preventing fogging.
      - b. Many manufacturers recommend *against* using defog. However, some models – like those that require a user-installed second stage – require defogging solution. Check manufacturer recommendations before using a defog product.
    2. Fogging in a full face mask generally only happens if:
      - a. On the surface, while gearing up, there's been no gas flowing across the faceplate. (Opening the surface air valve and breathing surface air may cause fogging.)
      - b. Underwater, if the mask is not correctly positioned on the face, exhaled air can flow back into the mask (causing fogging).
        - (1) Loosen the harness straps and reposition the mask correctly.
        - (2) Readjust the straps.
      - c. The mask requires defog and has not had it applied.

3. To clear the fogging, follow these steps:
  - a. If fogging persists *at the surface*, the surface air valve might be open and needs to be closed before descent. Breathing ambient air may cause fogging.
  - b. Apply defog if recommended or permitted by the manufacturer.
  - c. *If underwater*, gently push the purge on the regulator to clear the fogging, as well as any water that may have entered during the process.
    - (1) If this doesn't resolve the fogging problem, you can try to wash the cloudiness away.
      - i. Loosen upper strap.
      - ii. Allow a little water to enter the full face mask from the top.
      - iii. Shake the head from side to side to wash the face shield.
      - iv. Confirm proper mask repositioning, especially the chin.
      - v. Purge the mask by gently pushing the purge.
      - vi. Re-adjust the top straps.
- B. Divers may encounter a regulator freeflow and vibration while swimming.
  1. This is usually a sign that gas is leaking from the mask.
  2. The hood may have compressed, causing slack in the harness. Re-adjust the straps while pressing the full face mask against your face.
  3. It can also be hair or a hood that may be trapped under the mask seal – your buddy can check if you can't locate it.
  4. If there are no bubbles from the mask seal and it seems secure, the problem may be the second stage adjustment. Try reducing the gas flow with the adjustment knob until the freeflow/vibration stops.
- C. Water may enter the full face mask while swimming.
  1. Extreme flooding that interferes with breathing usually points to a major problem.
    - a. The mask's skirt may be torn, or the exhaust valve may be damaged or have debris clogging it.
    - b. If using a full face mask with an external second stage, there may be a problem with how the regulator's connected to the mask, such as incorrect mounting or failure of mounting components.
      - (1) If necessary, remove the full face mask, secure and breathe from an alternate air source, put on your backup (standard) mask and end the dive.
      - (2) Do not dive with the full face mask until the problem has been determined and corrected. (If you can't determine the problem, have it serviced by a qualified technician.)

- D. How do you handle a potential second stage regulator malfunction?
1. As you just learned, a mask seal may cause a freeflow, giving the impression that the regulator is the source of the problem rather than the seal. However, the second stage can fail, resulting in a freeflow.
  2. If you encounter an uncontrolled freeflow, follow these procedures:
    - a. Hold the mask in place and continue to breathe.
    - b. Start an immediate ascent, because the gas will be depleted quickly.
    - c. Switch to an alternate supplied by a buddy if you start to run low on gas and may run out before surfacing.
- E. In an out-of-air emergency, full face mask divers have two options.
1. If a buddy is present, follow these procedures:
    - a. Signal "out of air."
    - b. Locate your buddy's alternate air source.
    - c. Loosen the lower straps of your full face mask, remove it and begin breathing from the alternate air source.
    - d. Put on your backup (standard) mask and clear it.
    - e. Place or secure your full face mask where it won't pose an entanglement issue, ascend and end the dive.
  2. One benefit of carrying your own independent alternate air source, like a pony bottle, is that if your buddy isn't close enough to provide an alternate air source you can begin breathing from your own. Follow these procedures:
    - a. Locate your independent alternate air source.
    - b. Loosen the lower straps of your full face mask, remove it and begin breathing from your independent alternate air source.
    - c. Put on your backup (standard) mask and clear it.

**Note to Instructor**

Though it's not commonly used in recreational diving, a bailout block (if available) connected to another gas supply such as a pony bottle or small cylinder is another option used in an out-of-air emergency with a full face mask. There are some considerations that must be taken into account.

- First, the diver should practice using the bailout block in controlled conditions before ever needing to use it in an actual out-of-air emergency, and be completely familiar with its use according to manufacturer instructions.
- Second, during gear setup and pre-dive safety checks, the diver should confirm that the alternate first stage, as well as the regular gas supply, is properly connected to the bailout block, and that the pony bottle valve is open, but the bailout valve closed.
- Third, when using a pony bottle or other small cylinder for the bailout supply, after switching air sources with the block in an out-of-air emergency, it's imperative to ascend immediately due to the small gas supply remaining.

It's most typical to use a bailout block with surface supplied gas as the primary source, and a carried bailout bottle as an emergency supply.

## VI. Maintenance

### Learning Objectives

By the end of this section, you should be able to answer the following questions:

**1. What are the seven steps to properly care for your full face mask?**

**1. What are the seven steps to properly care for your full face mask?**

- A. Properly caring for your mask involves seven steps.
  - 1. Service your full face mask annually, or as recommended by the manufacturer (see the manufacturer literature).
  - 2. After diving, carefully and thoroughly rinse the full face mask inside and out. If using comm, check the comm unit's manufacturer instructions about what components to rinse, and how.
  - 3. Carefully rinse the second stage regulator.
  - 4. Periodically check the full face mask skirt for rips, holes, etc.
  - 5. Periodically check all o-ring seats, hoses and plastic components for wear or damage, as recommended by the manufacturer.
  - 6. If another diver has used your full face mask, sanitize the interior of the mask with an appropriate disinfectant. (Consult the manufacturer literature.)
  - 7. Store the full face mask as directed by the manufacturer, protected from scratches and abrasions on the faceplate, in a cool, dry environment away from direct sunlight.

## Section Three

### Full Face Mask Diver Training Dives

#### Conduct

**The PADI Full Face Mask Diver specialty course has three required training dives: one confined water dive and two open water dives.** You may add training dives as appropriate for additional experience as needed for students to demonstrate mastery. However, **student divers must demonstrate mastery of all performance requirements for each dive prior to progressing to the next training dive. Prior to certification, students must demonstrate mastery of all performance requirements of all dives.**

**Student divers must carry a standard mask as a backup.** Involve student divers in dive-planning activities, giving special attention to those who may be exhibiting higher levels of stress or anxiety. Conduct a thorough briefing, assign buddy teams and establish a check-in/check-out procedure. Make yourself available to answer questions during equipment assembly, safety check and gear-up.

In addition to the typical pre-dive equipment familiarization exercise, dive buddies should orient themselves with their partners' full face mask system – specifically whether the mask is one piece, or has two pods (with the lower breathing pod detachable in an out-of-air situation), and where the backup (standard) mask is secured. During the pre-dive check, dive buddies confirm the second stage regulator is properly connected, and that overall the full face mask functions properly before entering the water.

#### Dives, Times, Depths and Gases

- 1. The minimum number of dives for certification as a PADI Full Face Mask Diver is three – one confined, two open water.**
- 2. All dives must be planned as no stop dives.** Divers may use enriched air to extend no stop time if they are certified as PADI Enriched Air Divers, or have a qualifying certification from another training organization in the use of enriched air nitrox.
3. The maximum depth is the deepest depth to which the student is qualified, or the maximum depth listed for the specific training dive, whichever is shallower. Generally, it's recommended you plan shallower dives to allow more time because students tend to use more gas when learning to dive with full face masks.

*See the PADI Instructor Manual, General Standards and Procedures, for definitions of confined and open water.*



## General Considerations

1. Conduct a readiness assessment (see Confined Water Dive – Performance Requirements) using a standard mask at any time before, or at the beginning of the first confined water dive. When the diver can easily perform this skill in traditional equipment, student divers may begin using the full face mask.
2. Plan ample time. Part of the training in this course is simply learning how to wear and adjust the full face mask. Especially in the confined water dive, give students ample time to experiment, adjust and try again. Keep appropriate tools and accessories at hand to make any adjustments.
3. Choose sites with familiar environments, and sites that aren't particularly challenging so students can focus their attention on the new equipment and new skills.
4. Use certified assistants. Certified assistants are not only helpful during the dives, but they can also help pre-dive assembly and checks go faster because they can assist you in keeping up with details.
5. **Student divers must use the same type of full face mask, dive equipment, and accessory equipment during the confined water session that they intend to use on their open water dives.**

## Sequence Options and Dives

1. **The Knowledge Development must be completed before the confined water dive.**
2. **Training dives must be conducted in order.** You may rearrange skill sequences within a dive.

## Confined Water Dive

### Performance Objectives

By the end of the confined water dive, student divers should be able to, as part of a buddy team and with instructor guidance as appropriate:

1. Plan the full face mask dive.
2. Conduct a pre-dive safety check using proper procedures. This includes:
  - preparing the full face mask for diving – properly adjusting nose block device (if used) and adjusting the full face mask to achieve a watertight fit.
  - assembling the system and cylinder for use.

- performing airflow and purge safety checks.
  - orienting the buddy (who may or may not be using a full face mask) to the type of full face mask being used.
  - noting where the backup mask is secured.
  - preparing the comm unit (if available) according to manufacturer recommendations.
3. Underwater, exhibit the ability to equalize the air spaces while demonstrating a controlled descent.
  4. Adjust the full face mask as needed to ensure a watertight fit.
  5. Breathe comfortably while establishing neutral buoyancy.
  6. Disconnect and reconnect the quick-disconnect hose (if so equipped) in water shallow enough in which to stand.
  7. Partially flood and clear the full face mask.
  8. Open the surface air valve, replace the valve and clear the full face mask.
  9. Fully flood and clear the full face mask.
  10. Remove and replace the full face mask.
  11. Respond to a simulated out-of-air emergency by removing the full face mask, accepting the buddy's alternate air source, and donning a backup (standard) mask.
  12. Throughout the dive, effectively use the comm unit (if equipped with one) following appropriate protocols.
  13. On the surface, perform a rescue removal of the buddy's full face mask system.

## I. Confined Water Dive One Standards

### A. Environment: Pool or confined water

## II. Suggested Sequence

**Diver readiness assessment:** *A diver assessment can help you determine whether the diver is ready for inwater full face mask training. Underwater, with the diver using a standard mask, have the diver remove the mask, remove the regulator and comfortably breathe from an alternate air source – either provided by the diver's buddy, or by you if no buddy is available – while swimming around. Then, have the diver replace and clear the mask. If the diver is comfortable breathing from an alternate air source while swimming without a mask and without blocking the nose, you can continue with the inwater training as specified below; if the diver cannot perform this skill adequately, remediate with the diver until the diver has mastered the ability to swim comfortably underwater without a mask while breathing from an alternate air source.*

**A. Pre-dive planning and equipment setup – take students through basic planning and setup with a full face mask.**

1. Provide an overview of what they will be doing and the time required for planning purposes.
2. Go over the skills you'll be demonstrating and they'll be practicing, and the purpose of each, before they gear up and enter the water.
3. Students assemble their equipment.
4. Dive buddies should orient themselves with their partners' full face mask – whether it has a detachable pod, if it has a quick-disconnect hose, etc. – and where the backup mask is secured.
5. Give a dive site overview for diver comfort and planning purposes.
6. Assist with any problems encountered during dive planning and setup.
7. The pre-dive plan should include gas management – *Note: Remember to emphasize gas management for any time spent on the surface at all* – and turn pressures. Remind divers they will likely use their gas noticeably faster than with a standard mask and regulator.
8. Agree on depth and time limits, emergency signals, etc.
9. Skill briefing – After confirming an appropriate dive plan and initial equipment assembly, student divers should be ready to enter the water.
  - a. Describe each skill, the performance requirements and how you'll conduct it, including signals.
  - b. You may wish to dry-demonstrate some skills during the briefing in addition to your underwater demonstration during the dive.

**B. Confined Water Dive**

1. Pre-dive check
  - a. Properly adjust nose block or other equalization device (as appropriate).
  - b. Buddies conduct the pre-dive check; watch for and correct errors, including whether the second stage regulator is properly connected.
  - c. Demonstrate donning and adjustment of the full face mask for a watertight fit.
  - d. Assist student divers with equipment adjustments for use with the full face mask.
  - e. Buddies should note where backup masks are located.
  - f. Connect and test comm units (if so equipped).
  - g. Properly perform airflow and purge safety checks, making sure the full face mask functions properly before entering
2. Entry, buoyancy check, proper weighting and descent
  - a. Teams and staff enter water shallow enough in which to stand, conduct buoyancy check and confirm everything is okay to proceed.

- b. Students descend using the five-point descent, staying with their buddies.
- c. Make sure students are able to equalize while demonstrating a controlled descent. During the briefing, remind them that you can only know they're having an equalization problem if they signal you, and emphasize stopping the descent and signaling if they have one.

### Note to Instructor

Allow ample time for divers to equalize their air spaces, as those who have equalization devices (nose blocks, e.g.) might take longer. Also consider providing a descent/ascent line for student divers to control their descent when equalizing. To successfully complete the Full Face Mask Diver Specialty course, student divers need to demonstrate they can descend/ascend wearing a full face mask without using the line, but a line can help initially to practice equalization techniques.

- 3. Adjustment
  - a. At depth, allow divers a few minutes to make any fine adjustments to the full face mask.
- 4. Practice breathing, establish buoyancy
  - a. Give students a few minutes get used to breathing in a full face mask.
  - b. Check to make sure they are able to establish buoyancy while breathing in the mask.
  - c. Note any adjustments that need to be made.
- 5. Disconnect and reconnect the quick-disconnect hose (if so equipped).
  - a. Demonstrate the skill.
  - b. In water shallow enough to stand, students disconnect the quick-disconnect hose at the full face mask second stage, then re-connect.
  - c. Students may need to practice the skill more than once, paying particular attention to ensuring the connection is straight and not at an angle (otherwise it won't seat properly).
- 6. Partially flood and clear the full face mask.
  - a. Demonstrate the skill.
  - b. Students lift the mask skirt of the full face mask, allowing water to partially flood the mask. They may need to pull the skirt away from their faces much farther than they're used to with a standard mask.
  - c. Students replace the mask skirt, and use the purge button to clear water from the mask.
- 7. Open the surface air valve underwater (if equipped), replace the valve and clear the full face mask.
  - a. Demonstrate the skill.

- b. Have students locate and open the surface air valve, allowing water to partially flood the mask.
  - c. Students replace the surface air valve, and use the purge button to clear water from the mask.
8. Fully flood and clear the full face mask.
  - a. Demonstrate the skill.
  - b. Students pull the mask from the face, allowing water to fully flood the mask.  
Note: Some masks have high gas flow when unsealed from the face, making it difficult to fully flood the mask. In this instance, have the student tilt the head to the side and flood the mask as much as possible before clearing it.
  - c. Students replace the mask on the face and use the purge button to clear water from the mask, then adjust the mask and mask skirt for fit.
9. Remove and replace the full face mask.
  - a. Demonstrate the skill.
  - b. Students completely remove the mask but keep it in hand.
  - c. Students replace the mask and use the purge to clear water from the mask, then make adjustments to the mask and mask skirt for fit.
10. Simulate an out-of-air emergency using the buddy's alternate air source.
  - a. Demonstrate the skill.
  - b. On your signal, have diver simulate being out of gas and sharing with a buddy's alternate air source.
  - c. Students remove the mask and lightly blow bubbles until securing the buddy's alternate air source.
  - d. After purging water and breathing comfortably, students locate and don backup (standard) mask, and clear water from mask.
  - e. Repeat the exercise until all students have played the role of both donor and receiver.

**Note to Instructor**

If student divers have an independent alternate air source without a bailout block, like a pony bottle, have them perform an out-of-air emergency using this *after* they perform the out-of-air emergency using a buddy's alternate air source (see #10 above). If your student divers *are not* using an independent alternate air source, you may ask them to perform the out-of-air emergency using a buddy's alternate air source a second time. If your students have a bailout block, because using it does not require removing the mask, you may have them practice its use, according to manufacturer directions, before or after sharing gas with a buddy. Confirm the student is back on the primary gas supply and the bailout valve is closed after completing the exercise.

11. Practice using comm units.
  - a. Encourage divers to use their comm units throughout the dive, but not to be overly talkative because of the potential for increased gas use.
  - b. Have students practice PTT/VOX as their full face masks' are equipped and configured.
12. Ascent
  - a. On your signal, all divers ascend to the surface at a rate no faster than 18 metres/60 feet per minute, or slower as required by the diver's computer.
  - b. Divers can keep full face mask on, or release the mask and switch to backup mask with snorkel, or use a surface air valve (as appropriate for the mask) and swim to a designated point.
13. Unresponsive diver at the surface drill
  - a. Divers practice removing the mask of a simulated unresponsive diver.
  - b. Confirm that divers
    1. First establish buoyancy for themselves and the victims
    2. Remove the mask (as appropriate for the mask), open the victim's airway and look, listen and feel for breathing.
    3. Simulate calling for help.
  - c. Optional: Have divers continue with simulated rescue breaths. Use the exercise to encourage PADI Open Water and Advanced Open Water Divers to continue to Rescue Diver.

### **C. Post dive**

1. Debriefing – Have students critique themselves on their performance, discuss any problems (and solutions) they encountered. Add your observations as appropriate.
2. Students log the dive for the instructor's signature.

# Full Face Mask Open Water Dive One

## Performance Objectives

By the end of the Full Face Dive One, student divers should be able to, as part of a buddy team and with instructor guidance as appropriate:

1. Plan the full face mask dive.
2. Conduct a pre-dive safety check using proper procedures. This includes:
  - preparing the full face mask for diving – properly adjusting nose block device (if used) and adjusting the full face mask to achieve a watertight fit.
  - assembling the system and cylinder for use.
  - performing airflow and purge safety checks.
  - orienting the buddy (who may or may not be using a full face mask) to the type of full face mask being used.
  - noting where the backup mask is secured.
  - preparing the comm unit (if available) according to manufacturer recommendations.
3. At the surface, adjust the amount of weight needed to be neutrally buoyant while wearing a full face mask.
4. Underwater, demonstrate a controlled descent and exhibit the ability to equalize the air spaces while descending in a full face mask (using whichever full face mask equalization device/technique appropriate).
5. Adjust the full face mask as needed to ensure a watertight fit.
6. Breathe comfortably while establishing neutral buoyancy.
7. Demonstrate a partial flood and clear of the full face mask.
8. Demonstrate a full flood and clear of the full face mask.
9. Tour for pleasure and experience while demonstrating proper buoyancy using the full face mask.
10. Demonstrate a neutrally buoyant ascent from the bottom at a rate of no faster than 18 metres/60 feet per minute, or the maximum rate allowed by the diver's computer, whichever is slower, and a three-minute safety stop at 5 metres/15 feet.

## I. Full Face Mask Dive One Standards

- A. Environment: Open water
- B. Depth Range: 6 metres/20 feet to 18 metres/60 feet

## II. Suggested Sequence

### A. Pre-dive planning and equipment setup – Take students through basic pre-dive planning specific to full face mask diving.

1. Plan the dive with student divers.
  - a. Provide an overview of what they will be doing, and the time required for planning purposes.
  - b. It's recommended that you provide skill descriptions and details before they gear up and enter the water.
2. Give a dive site overview for diver comfort and planning purposes.
  - a. Depth, temperature, entry/exit points, noteworthy features.
  - b. Facilities – parking, lockers, the boat's dry and wet areas, where to find emergency equipment, etc.
3. Students assemble their equipment.
4. Dive buddies should orient themselves with their partners' full face mask – whether it has one or two pods, if it has a quick-disconnect hose, etc. – and where the backup mask is secured.
5. Full face mask pre-dive check
  - a. Properly adjust nostril block or other equalization device (as appropriate).
  - b. Don and adjust the full face mask for a watertight fit.
  - c. Buddies conduct the pre-dive check; watch for and correct errors, including whether the second stage regulator is properly connected.
  - d. Buddies should note where backup masks are located.
  - e. Connect and test comm units (if available).
  - f. Properly perform airflow and purge safety checks, making sure the full face mask functions properly before entering.
6. Assist with any problems found during the pre-dive planning and setup.
7. The pre-dive plan should include gas management specific to full face mask diving – remind divers to account for time spent on the surface, before or after the dive, if they will be breathing from their gas supply instead of surface air.
8. Agree on depth and time limits, emergency signals, etc.
9. Skill briefing – After confirming an appropriate dive plan and initial equipment assembly, student divers should be ready to enter the water.
  - a. Describe each skill, the performance requirements and how you'll conduct it, including signals.
  - b. All skills will have been practiced in the confined water dive, so remind students you will not be demonstrating unless asked to do so (to refresh/remind, etc.).



**B. Full Face Mask Dive One**

1. Entry
  - a. Teams and staff enter water using a method appropriate for the environment.
2. Buoyancy check, proper weighting
  - a. Have students check their buoyancy and adjust their weight as necessary.
3. Descent
  - a. Students descend using the five-point descent, staying with their buddies. (The “switch to regulator” point may be closing the surface air valve or attaching a mouth pod, or may not apply, as appropriate.)
  - b. Make sure students exhibit ability to equalize their air spaces, while demonstrating a controlled descent.
4. Adjustment
  - a. At depth, allow divers a few minutes to adjust the full face mask for proper fit.
5. Breathing and buoyancy
  - a. Give students a few minutes to practice breathing in a full face mask.
  - b. Check to make sure they are able to establish neutral buoyancy while breathing in the mask.
6. Partially flood and clear the full face mask
  - a. Students lift the mask skirt of the full face mask, allowing water to partially flood the mask.
  - b. Students replace the mask skirt, and use the purge button to clear water from the mask.
7. Fully flood and clear the full face mask
  - a. Students pull the mask from the face, allowing water to fully flood the mask.
  - b. Students replace the mask on the face and use the purge button to clear water from the mask, then make adjustments to the mask and mask skirt for fit.
8. Practice using comm units (if so equipped).
  - a. Encourage divers to use their comm units throughout the dive, but not to be overly talkative because of the potential for increased gas use.
9. Free time
  - a. Under supervision, students explore dive site, time and gas allowing.
  - b. The dive ends upon reaching a planned turn pressure, time depth or other limit.
10. Ascent, safety stop and exit
  - a. Students ascend in teams as appropriate for the local environment, and make a three-minute safety stop at 5 metres/15 feet.
  - b. After the safety stop, teams ascend to the surface following proper procedures and establish buoyancy.
  - c. Divers exit as discussed in the pre-dive planning.

**C. Post dive**

1. Debriefing – Have students critique themselves on their performance, discuss any problems (and solutions) they encountered. Add your observations as appropriate.
2. Students log the dive for the instructor's signature.

## Full Face Mask Open Water Dive Two

### Performance Objectives

By the end of the Full Face Dive Two, student divers should be able to, as part of a buddy team and with little or no instructor guidance:

1. Plan the full face mask dive.
2. Conduct a pre-dive safety check using proper procedures. This includes:
  - preparing the full face mask for diving – properly adjusting nose block device (if used) and adjusting the full face mask to achieve a watertight fit.
  - assembling the system and cylinder for use.
  - performing airflow and purge safety checks.
  - orienting the buddy (who may or may not be using a full face mask) to the type of full face mask being used.
  - noting where the backup mask is secured.
  - preparing the comm unit (if available) according to manufacturer recommendations.
3. Underwater, demonstrate a controlled descent and exhibit the ability to equalize the air spaces while descending in a full face mask (using whichever full face mask equalization device/technique appropriate).
4. Demonstrate a full face mask remove, replace and clear.
5. Demonstrate out-of-gas emergency procedures with the alternate air source supplied by another diver.
6. Demonstrate out-of-gas emergency procedures with a self-supplied alternate air sources (e.g. pony bottle). (Not required if a self-supplied alternate air source isn't available).
7. Tour for pleasure and experience with the full face mask while demonstrating proper buoyancy using the full face mask.
8. Demonstrate a neutrally buoyant ascent from the bottom at a rate of no faster than 18 metres/60 feet per minute, or the maximum rate allowed by the diver's computer, whichever is slower, and a three-minute safety stop at 5 metres/15 feet.

## I. Full Face Mask Dive Two Standards

**A. Environment: Open water**

**B. Depth Range: 6 metres/20 feet to 18 metres/60 feet**

## II. Suggested Sequence

**A. Pre-dive planning and equipment setup – Take students through basic pre-dive planning specific to full face mask diving**

1. Plan the dive with student divers.
  - a. Provide an overview of what they will be doing, and the time required for planning purposes.
  - b. It's recommended that you provide skill descriptions and details before they gear up and enter the water.
2. Students assemble their equipment.
3. Dive buddies should orient themselves with their partners' full face mask – whether it has one or two pods, if it has a quick-disconnect hose, etc. – and where the backup mask is secured.
4. Full face mask pre-dive check
  - a. Properly adjust nostril block or other equalization device (as appropriate).
  - b. Don and adjust the full face mask for a watertight fit.
  - c. Buddies conduct the pre-dive check; watch for and correct errors, including whether the second stage regulator is properly connected.
  - d. Buddies should note where backup masks are located.
  - e. Connect and test comm units (if available).
  - f. Properly perform airflow and purge safety checks, making sure the full face mask functions properly before entering.
5. Give a dive site overview for diver comfort and planning purposes.
  - a. Depth, temperature, entry/exit points, noteworthy features.
  - b. Facilities – parking, lockers, the boat's dry and wet areas, where to find emergency equipment, etc.
6. Assist with any problems found during the pre-dive planning and setup.
7. The pre-dive plan should include gas management specific to full face mask diving – remind divers to take into account time spent on the surface, whether before or after the dive.
8. Agree on depth and time limits, emergency signals, etc.

9. Skill briefing – After confirming an appropriate dive plan and initial equipment assembly, student divers should be ready to enter the water.
  - a. Describe each skill, the performance requirements and how you'll conduct it, including signals.
  - b. All skills will have been practiced in the confined water dive, so remind students you will not be demonstrating unless asked to do so (to refresh/remind, etc.).

## **B. Full Face Mask Dive Two**

1. Entry
  - a. Teams and staff enter water using a method appropriate for the environment.
2. Buoyancy check, proper weighting
  - a. Have students check their buoyancy and adjust their weight as necessary.
3. Descent
  - a. Students descend using the five-point descent, staying with their buddies.
  - b. Make sure students exhibit ability to equalize their air spaces, while demonstrating a controlled descent.
4. Adjustment
  - a. At depth, allow divers a few minutes to adjust the full face mask for proper fit.
5. Full face mask removal and replacement
  - a. Students remove the mask, lightly blow bubbles.
  - b. Students replace the mask and use the purge button to clear water from the mask.
6. Out-of-air emergency, buddy's alternate air source
  - a. On your signal, have diver simulate being out of gas and sharing with a buddy's alternate air source.
  - b. Students remove the mask, lightly blow bubbles until securing the buddy's alternate air source.
  - c. After purging water and breathing comfortably, students locate and don backup mask, and clear water from mask.
  - d. On your signal, the student replaces the full face mask.
  - e. Repeat the exercise until all students have played the role of both donor and receiver.
7. Out-of-air emergency, self-supplied alternate air source
  - a. On your signal, have diver simulate being out of gas and switching to a pony bottle or other independent alternate air source (if available).
  - b. Students remove the mask, lightly blow bubbles until securing the alternate air source.
  - c. After purging water and breathing comfortably, students locate and don backup mask, and clear water from mask.

**Note to Instructor**

If students are using bailout blocks, you may have them practice using them at any time during the dive. Confirm the student is back on the primary gas supply and the bailout valve is closed after completing the exercise.

8. Practice using comm units (if so equipped).
  - a. Encourage divers to use their comm units throughout the dive, but not to be overly talkative because of the potential for increased gas use.
9. Free time
  - a. Under supervision, students explore dive site, time and gas allowing.
  - b. Check to make sure they are able to establish buoyancy, and suggest adjustments if necessary.
  - c. The dive ends upon reaching a planned turn pressure, time depth or other limit.
10. Ascent, safety stop and exit
  - a. Students ascend in teams as appropriate for the local environment, and make a three-minute safety stop at 5 metres/15 feet.
  - b. After the safety stop, teams ascend to the surface following proper procedures and establish buoyancy.
  - c. Divers exit as discussed in the pre-dive planning.

**C. Post dive**

1. Debriefing – Have students critique themselves on their performance, discuss any problems (and solutions) they encountered. Add your observations as appropriate.
2. Students log the dive for the instructor's signature.
  - a. Divers check their buoyancy and adjust their weight as necessary.



# Appendix

## Full Face Mask Diver

### Knowledge Review

Complete this knowledge review to hand in to your instructor for review. If there's something you don't understand, review the related material. If you still don't understand, have your instructor explain it to you.

1. One drawback to full face mask diving is that sharing gas is more complicated.
  - True
  - False
2. Which of the following is/are *not* step(s) you should perform before every dive with a full face mask? (Choose all that apply.)
  - a. Adjust the nostril block or other equalization device.
  - b. Loosen the harness fully.
  - c. Disassemble second stage to check for proper connection.
  - d. Put your mask on last, after buddy system checks.
  - e. Perform airflow and purge safety checks.
3. I finish a dive and am swimming to shore at the surface with my buddy and have ample gas. The wind is strong and has created some chop that breaks over our heads at intervals. The best option is probably to
  - a. remove my full face mask and instead use my backup (standard) mask and snorkel.
  - b. keep my full face mask on and breathe from it.
  - c. open the surface air valve and breathe the fresh air.
4. To ensure good fit with *most* full face masks, the proper order of securing my harness is to first pull the \_\_\_\_\_ straps, followed by the \_\_\_\_\_ straps and finally the \_\_\_\_\_ strap.
  - a. lateral; lower; upper
  - b. lower; lateral; upper
  - c. upper; lower; lateral
  - d. upper; lateral; lower
5. Two options for safely handling an out-of-air emergency include breathing from \_\_\_\_\_ or \_\_\_\_\_.
  - a. my alternate air source; my buddy's alternate air source
  - b. my buddy's alternate air source; my own independent alternate air source
  - c. my buddy's alternate air source; holding my breath and swimming quickly to the surface



6. To clear water from my full face mask, I want to be in a(n) \_\_\_\_\_ position that puts the exhaust valves at the lowest point, then \_\_\_\_\_.
- a. upright; pushing the purge
  - b. upright; exhaling
  - c. face-down; pushing the purge
  - d. face-down; exhaling
7. I find myself in an out-of-gas emergency while diving with a full face mask, and must share gas supplied by my buddy. To do this with most masks, I will loosen the lower straps of the harness, remove the mask and begin breathing from my buddy's alternate.
- True
  - False
8. When dealing with an unresponsive full face mask diver at the surface, I should first confirm the diver is unresponsive, establish buoyancy and then
- a. tow the diver to safety, leaving the full face mask in place.
  - b. unplug the surface air valve.
  - c. remove the full face mask and check for breathing.
9. What are three considerations when using wireless communications with a full face mask?
- a. I should store the communications unit in a pocket for better streamlining.
  - b. Gas consumption is relatively unaffected.
  - c. When someone is talking, I should inhale slowly.
  - d. Wear the communications unit on my weight belt.
  - e. Agree to a communications protocol before diving.
  - f. Ensure line of sight for anyone I want to communicate with.
10. Gas consumption tends to be higher when talking with a full face mask, so I should plan for increased gas use in my dive gas management plan if we're using comm units.
- True
  - False
11. If I'm using a full face mask without an adjustable second stage regulator, it's best to descend \_\_\_\_\_ to prevent regulator freeflow.
- a. feet above head
  - b. head above feet
  - c. rapidly
  - d. slowly

12. A freeflowing regulator is usually a sign that gas is leaking from the mask. Which of the following would be an appropriate response? (Choose all that apply.)
- a. Re-adjust the straps of my harness while pressing the mask against my face.
  - b. Quickly turn the gas supply off and on again a few times.
  - c. Have my buddy check for any hair or part of my hood trapped under the mask seal.
  - d. Reduce gas flow by adjusting my second stage.
13. I'm diving on a reef at 15 metres/50 feet, when my regulator starts to freeflow, and I'm able to confirm it's not the mask seal leaking. What should I do? (Choose all that apply.)
- a. Hold the full face mask in place and continue to breathe.
  - b. Signal to my buddy to find the problem on my mask.
  - c. Start an immediate ascent.
  - d. Switch to an alternate air source provided by my buddy if my gas is too low to safely ascend.
14. Extreme flooding of the full face mask usually indicates a serious problem. If my full face mask floods excessively I should remove the mask, switch to my alternate air source and backup mask, and abort the dive.
- True
  - False
15. I should perform regular maintenance on my full face mask, including (choose all that apply):
- a. periodic checks of the skirt for rips, holes, etc.
  - b. rinsing the mask inside and out after diving as recommended by the manufacturer.
  - c. periodic checks of the o-ring seats, hoses and plastic components.
  - d. a full servicing at intervals recommended by the manufacturer.
  - e. storing the mask in a way to prevent scratches.

**Student Diver Statement:**

I've reviewed the questions and answers, and any I answered incorrectly or incompletely I have had explained to me and/or reviewed the material, so that I now understand what I missed.

Diver Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

# Full Face Mask Diver

## Knowledge Review Answer Key

### Note to Instructor

To assess knowledge, review the Knowledge Review that was given to the student at the start of the course. (Preferably do this prior to participating in inwater skills practice.) Prescriptively teach answers to questions student divers may have missed, or have answered incorrectly or incompletely. Ensure student divers understand what they have missed.

Complete this knowledge review to hand in to your instructor for review. If there's something you don't understand, review the related material. If you still don't understand, have your instructor explain it to you.

1. One drawback to full face mask diving is that sharing gas is more complicated.
  - True**
  - False
2. Which of the following is/are *not* step(s) you should perform before every dive with a full face mask? (Choose all that apply.)
  - a. Adjust the nostril block or other equalization device.
  - b. Loosen the harness fully.
  - c. Disassemble second stage to check for proper connection.**
  - d. Put your mask on last, after buddy system checks.
  - e. Perform airflow and purge safety checks.
3. I finish a dive and am swimming to shore at the surface with my buddy and have ample gas. The wind is strong and has created some chop that breaks over our heads at intervals. The best option is probably to
  - a. remove my full face mask and instead use my backup (standard) mask and snorkel.
  - b. keep my full face mask on and breathe from it.**
  - c. open the surface air valve and breathe the fresh air.
4. To ensure good fit with most full face masks, the proper order of securing my harness is to first pull the \_\_\_\_\_ straps, followed by the \_\_\_\_\_ straps and finally the \_\_\_\_\_ strap.
  - a. lateral; lower; upper
  - b. lower; lateral; upper**
  - c. upper; lower; lateral
  - d. upper; lateral; lower

5. Two options for safely handling an out-of-air emergency include breathing from \_\_\_\_\_ or \_\_\_\_\_.
- a. my alternate air source; my buddy's alternate air source
  - b. my buddy's alternate air source; my own independent alternate air source**
  - c. my buddy's alternate air source; holding my breath and swimming quickly to the surface
6. To clear water from my full face mask, I want to be in a(n) \_\_\_\_\_ position that puts the exhaust valves at the lowest point, then \_\_\_\_\_.
- a. upright; pushing the purge**
  - b. upright; exhaling
  - c. face-down; pushing the purge
  - d. face-down; exhaling
7. I find myself in an out-of-gas emergency while diving with a full face mask, and must share gas supplied by my buddy. To do this with most masks, I will loosen the lower straps of the harness, remove the mask and begin breathing from my buddy's alternate.
- True
  - False**
8. When dealing with an unresponsive full face mask diver at the surface, I should first confirm the diver is unresponsive, establish buoyancy and then
- a. tow the diver to safety, leaving the full face mask in place.
  - b. unplug the surface air valve.
  - c. remove the full face mask and check for breathing.**
9. What are three considerations when using wireless communications with a full face mask?
- a. I should store the communications unit in a pocket for better streamlining.
  - b. Gas consumption is relatively unaffected.
  - c. When someone is talking, I should inhale slowly.**
  - d. Wear the communications unit on my weight belt.
  - e. Agree to a communications protocol before diving.**
  - f. Ensure line of sight for anyone I want to communicate with.**
10. Gas consumption tends to be higher when talking with a full face mask, so I should plan for increased gas use in my dive gas management plan if we're using comm units.
- True**
  - False

11. If I'm using a full face mask without an adjustable second stage regulator, it's best to descend \_\_\_\_\_ to prevent regulator freeflow.
- a. feet above head
  - b. head above feet**
  - c. rapidly
  - d. slowly
12. A freeflowing regulator is usually a sign that gas is leaking from the mask. Which of the following would be an appropriate response? (Choose all that apply.)
- a. Re-adjust the straps of my harness while pressing the mask against my face.**
  - b. Quickly turn the gas supply off and on again a few times.
  - c. Have my buddy check for any hair or part of my hood trapped under the mask seal.**
  - d. Reduce gas flow by adjusting my second stage.**
13. I'm diving on a reef at 15 metres/50 feet, when my regulator starts to freeflow, and I'm able to confirm it's not the mask seal leaking. What should I do? (Choose all that apply.)
- a. Hold the full face mask in place and continue to breathe.**
  - b. Signal to my buddy to find the problem on my mask.**
  - c. Start an immediate ascent.**
  - d. Switch to an alternate air source provided by my buddy if my gas is too low to safely ascend.**
14. Extreme flooding of the full face mask usually indicates a serious problem. If my full face mask floods excessively I should remove the mask, switch to my alternate air source and backup mask, and abort the dive.
- True**
  - False
15. I should perform regular maintenance on my full face mask, including (choose all that apply):
- a. periodic checks of the skirt for rips, holes, etc.**
  - b. rinsing the mask inside and out after diving as recommended by the manufacturer.**
  - c. periodic checks of the o-ring seats, hoses and plastic components.**
  - d. a full servicing at intervals recommended by the manufacturer.**
  - e. storing the mask in a way to prevent scratches.**

## PADI Specialty Training Record

### Full Face Mask Diver

#### Instructor Statement

I verify that this student diver has satisfactorily completed all academic and confined water training sessions as outlined in the PADI Full Face Mask Diver Specialty Course Instructor Guide. I am a renewed, Teaching status PADI Instructor in this specialty.

Instructor Name \_\_\_\_\_ PADI # \_\_\_\_\_

Instructor Signature \_\_\_\_\_ Completion Date \_\_\_\_\_

#### Open Water Dives

##### Dive One

I verify that this diver has satisfactorily completed Dive One as outlined in the PADI Full Face Mask Diver Specialty Instructor Guide, including:

- Conducting a full pre-dive safety check using proper procedures
- Demonstrating a partial flood and clear of the full face mask
- Demonstrating a full flood and clear of the full face mask

I am a renewed, Teaching status PADI Instructor in this specialty.

Instructor Name \_\_\_\_\_ PADI # \_\_\_\_\_

Instructor Signature \_\_\_\_\_ Completion Date \_\_\_\_\_

##### Dive Two

I verify that this diver has satisfactorily completed Dive Two as outlined in the PADI Full Face Mask Diver Specialty Instructor Guide, including:

- Demonstrating a full face mask removal, replace and clear
- Demonstrating out-of-gas emergency procedures with the alternate air source supplied by another diver
- Demonstrating out-of-gas emergency procedures with a self-supplied alternate air source (if available)

I am a renewed, Teaching status PADI Instructor in this specialty.

Instructor Name \_\_\_\_\_ PADI # \_\_\_\_\_

Instructor Signature \_\_\_\_\_ Completion Date \_\_\_\_\_

#### Student Diver Statement:

I verify that I have completed all performance requirements for this Full Face Mask Diver specialty. I am adequately prepared to dive in areas and under conditions similar to those in which I was trained. I agree to abide by PADI Standard Safe Diving Practices.

Student Diver Signature \_\_\_\_\_ Date: \_\_\_\_\_

## PADI Adventure Dive Training Record

### Full Face Mask Diver

#### Skills Overview

- Knowledge Review
- Briefing
- Suiting up
- Preparing the full face mask for diving
- Pre-dive safety check (BWRAF)
- Entry and check for proper weighting
- Equalize air spaces while descending
- Establish Neutral Buoyancy
- Partial flood and clear of the full face mask
- Full flood and clear of the full face mask
- Exit/debrief
- Log dive – complete training record

#### Instructor Statement

I verify that this student diver has satisfactorily completed the Knowledge Review and Performance Requirements (as described in the PADI Advanced Open Water Diver Instructor Guide) for this PADI Adventure Dive.

I am a renewed, Teaching status PADI Instructor for the current year.

Instructor Name \_\_\_\_\_ PADI # \_\_\_\_\_

Instructor Signature \_\_\_\_\_ Completion Date \_\_\_\_\_

#### Instructor Contact Information (Please Print)

Instructor Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

#### Student Diver Statement:

I verify that I have completed all of the Performance Requirements for this Adventure Dive. I realize that there is more to learn about full face mask diving, and that completion of a full face mask course is highly recommended. I also agree to abide by PADI Standard Safe Diving Practices.

Student Diver Signature \_\_\_\_\_ Date: \_\_\_\_\_

