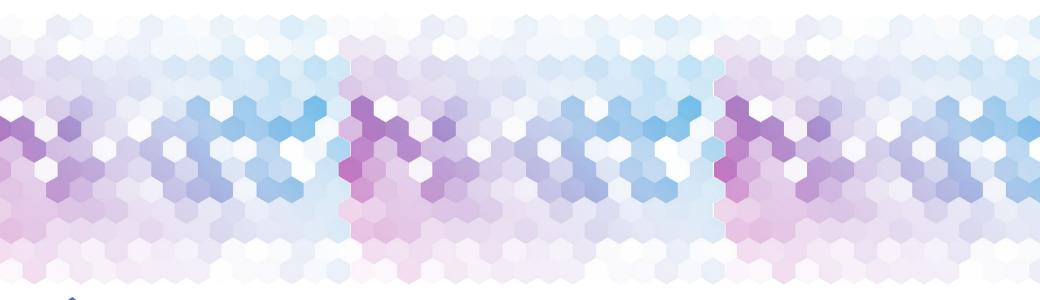
## Welcome to Training

Manual Vacuum Aspiration (MVA) for Early Pregnancy Loss







## Ground Rules



### Introduction

#### Why are we here?

1

Demonstrate acquisition of knowledge in the background for EPL

2

Demonstrate patient counseling skills that are focussed on supporting the patient through decision making and informed consent

3

Demonstrate competency in performing MVA and providing essential pre- and post-procedure care



#### Contents

- ( ) Early Pregnancy Loss Background
- Manual Vacuum Aspiration (MVA)
  - Key facts
  - Pre-procedure management
  - MVA How to perform uterine aspiration
  - Post-procedure management
- Ipas MVA Product Portfolio
  - Marketing Overview
  - Assembly and Disassembly
- Assessment



1

This training will not cover other forms of miscarriage management namely expectant management or the 'wait and see' approach or medical management. A competent provider of EPL services should be able to counsel on these and provide treatment if they are eligible to do so.

2

This training will provide not provide information on instrument processing

3

Drugs and procedures related to conscious sedation, general anaesthesia and details of management of post abortion complications are beyond the remit of this training.



### **Competency Based Assessment**

- Objective method of assessing whether a baseline level of knowledge and skills has been achieved after training
- ( ) Outcomes
  - Pass: Provide independently without the need for direct supervision
  - Pass but Requires direct supervision before independent practice
  - Not able to provide service independently
  - Opportunity to plan next steps with your trainer
- What is supportive supervision?
  - Process of helping staff to improve their own work performance continuously\*
  - Identify who this will be in your practice prior to training

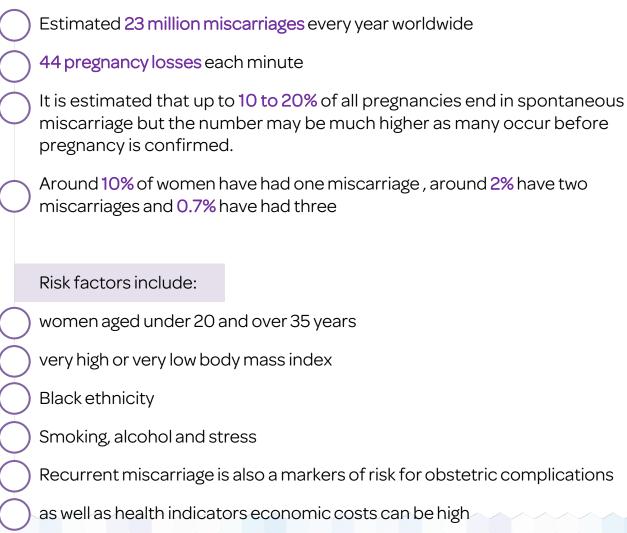
<sup>\*</sup> Training for mid-level managers (MLM). Module 4: supportive supervision, WHO 2020



# Early Pregnancy Loss (EPL)



### Early Pregnancy Loss: Key Facts





Majority of miscarriages are not caused by anything the woman has done and cannot be prevented



Most are 'one off' events and women go on to have healthy pregnancies



Treatment or investigation are not routinely required



### Miscarriage: definitions



Defined as the loss of a pregnancy before viability up to 20 weeks

- The word miscarriage is used to define a pregnancy that is lost spontaneously
  - This can also be described as a spontaneous abortion but this wording can be controversial
- Induced abortion is the termination of an ongoing pregnancy using drugs or uterine aspiration
- ( ) Incomplete miscarriage and incomplete abortion (postabortion care)
  - Are the same thing i.e. uterine contents not fully expelled or removed
  - Management the 'wait and see' approach or surgically with MVA





### Miscarriage: further definitions



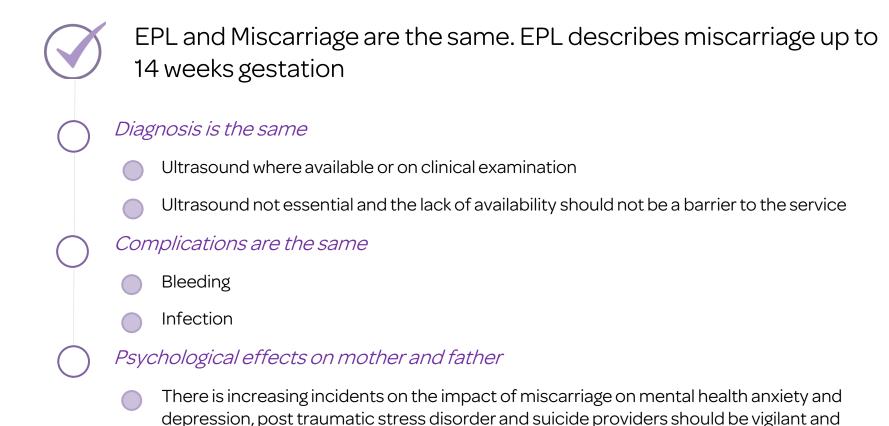
Defined as the loss of a pregnancy before viability up to 20 weeks

- Missed miscarriage (silent)
  - The baby has died or not developed but there is not physical loss
  - No pain or bleeding can be a big shock to the mother
- Spontaneous miscarriage
  - The non induced loss of a pregnancy before 20 weeks gestation
  - The woman experiences pain and bleeding
- Threatened miscarriage
  - Confirmed intrauterine pregnancy with bleeding
  - Women may still go on to have a healthy pregnancy





### Miscarriage vs EPL





manage problems in a timely way locally or with referral to a specialist

# Manual Vacuum Aspiration (MVA)



# What do providers need to know about MVA

### What is an MVA procedure?

- Manual Vacuum Aspiration (MVA) is a minor surgical procedure that uses gentle suction to remove the contents from the uterus using a handheld device (the aspirator). This procedure should be performed by a trained health care provider (HCP). It can be performed under local anesthesia in a hospital or health center. It has a short recovery time and is typically performed on an outpatient basis.
- It is a safe and effective method for EPL up to 14 weeks since the last menstrual period.

MVA can also be used for endometrial biopsy



aspirator

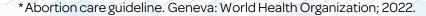
cannula

### Advantages of MVA <14 weeks



Likely to be a 'one off' intervention with predictable bleeding patterns

- Expectant Management 'wait and see' approach & Medical with mifepristone and misoprostol
  - Both medical and expectant management may require multiple visits, domestic situation, distance to clinic should be considered.
  - Miscarriage timing will be unpredictable but will occur sooner with medical management
- Dilatation and curettage (D&C) as a method of surgical abortion and as a sharp curettage 'cavity check' following vacuum aspiration
  - Should be replaced by vacuum aspiration alone.
  - 'D&C causes pain and suffering to women and is not recommended for use, its use is incompatible with numerous human rights including the right to health'\*





### Remember:



Ultimately it is patient choice after a detailed discussion of each if she can choose an acceptable treatment option that will increase her satisfaction with the service.



### Risks of MVA <14 weeks

For a MVA procedure performed at less than 14 weeks the risks are small



Failure of procedure 1 in 1000



Incomplete evacuation 35 in 1000



Infection less than one in 100



Severe bleeding requiring transfusion less than one in 1000



Cervical injury from dilation less than one in 100



Uterine perforation 1-4 in 1000

Infection after abortion is highly unlikely and is usually associated with pre-existing infection.



### counseling: Rights Based Approach

Principles of a rights-based approach: clients or end-users must not only have access to safe, effective, acceptable care - there should effort to increase access, equity and availability in a healthcare environment that is acceptable.

Examples of how to promote a rights-based service for EPL services:

- Promote acceptability of services by providing an environment where there is visual and auditory privacy, confidentiality, dignity and respect
- Help the patient consider the benefits, disadvantages, and consequences of available options. Confirm that any decision the patient makes is informed, well-considered, and voluntary
- Increase access by changing appointment times or have walk-in clinics to suit local populations
- Ensure safety and effectiveness by ensuring that all provider skills and knowledge are up-to-date and there is a steady supply of high quality equipment



# IPAS Manual Vacuum Aspiration Counseling



## Counseling: MVA checklist

# COUNSELING CHECKLIST FOR MVA FOR EPL Benefits of MVA v medical management v expectant management Risks and complications Pain management options and methods of anesthesia Explanation of the MVA procedure itself What to expect after the procedure Taking verbal and written consent



## Pain relief: non pharmacological

Dilation of the cervix causes pain

	Discuss pain relief and leave options open. It her choice based on clinical information		
	Reducing perceptions of pain and of anxiety and when effective there is an increased likelihood that the patient will require fewer pharmacological interventions		
	Create a de-medicalised physical environment which is calm and reassuring from the moment the patient arrives.		
	Open communication techniques by all staff explaining clearly what she can expect in the waiting room and in the procedure room and afterwards.		
	Bring the focus entirely on the patient and her needs, increase her confidence in your care, responding to all her concerns and needs.		
$\bigcirc$	Role of 'Vocal local' or verbal anaesthetic or distraction techniques.		
	During the procedure prevent pain by using gentle techniques		



## Pain relief: pharmacological

Discuss options as part of clinical assessment

Offer NSAIDs 20 minutes pre procedure

Paracervical block

- Awake and aware of procedure but
- Can go home without delay if no complications

MAC or deep sedation or general anaesthesia

- Unaware of intraoperative procedure
- Required recovery time, discharge will take longer
- Requires specialist skills and equipment

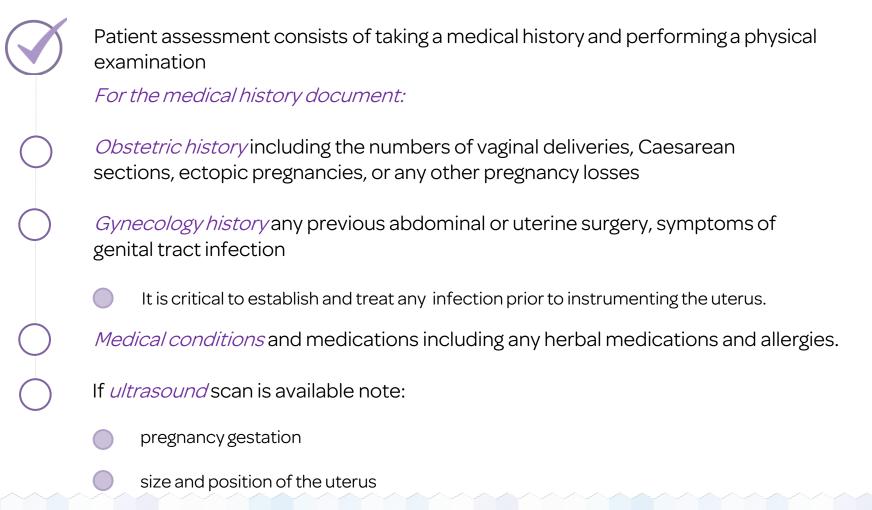


# IPAS Manual Vacuum Aspiration

Pre-Procedure Care

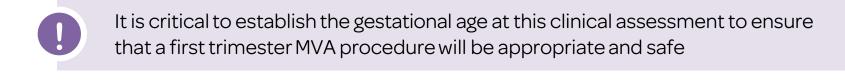


### Patient assessment





### Determining gestational age



- Establish the first day of her last menstrual period to assess gestation of the pregnancy.
  - By ultrasound
  - By abdominal palpation and bimanual examination
- If there is any suspicion of ectopic pregnancy either with a definitive diagnosis on ultrasound scan or an empty uterus, or the size of the uterus being incompatible with dates on physical examination refer for further assessment.



# Tests and interventions EPL management with MVA

#### Check local protocols for:



Routine laboratory testing pre procedure



Administration of anti-D rhesus prophylaxis



Routine prophylaxis with oral antibiotics



### Cervical preparation <14 weeks gestation

- Aim to soften the cervix making dilation easier and shorten operation time
  - Misoprostol drug of choice
- Useful in women with previous surgery or nulliparous but not routinely required for first-trimester surgical procedures unless local guidance differs
- But side effects of misoprostol may outweigh benefits
  - Such as shivering and fever and the risk of bleeding while waiting for the MVA Procedure.



### Before the patient comes in...



Procedure room must confirm to local standards and should be clean, well ventilated and adequately equipped.



Bed for dorsal lithotomy position



Ensure that all necessary equipment and supplies are ready and laid out before the patient enters the room to reduce the risk of anxiety.



## Essential equipment and supplies

$\bigcirc$	Instruments:	O—	Waste disposal: (fetal remains) Waste disposal dry waste
O	Sponge holding forceps	0-	Sharps disposal
<u> </u>	Bivalve speculum	$\bigcirc$ —	Decontamination solution
$\bigcirc$ —	Tenaculum		
$\bigcirc$ —	MVA sets with cannula		Drugo
$\bigcirc$ —	Gauze		Drugs:
<u> </u>	Kidney dish for tissue	O-	Lidocaine 1% without adrenaline for paracervical block
$\bigcirc$ —	Gallipot for antiseptic solution	<u> </u>	Misoprostol for cervical preparation
$\bigcirc$ —	Sponge forceps	<u> </u>	Oral analgesia, nonsteroidal anti-inflammatory drugs
$\bigcirc$ —	Sterile and disposable gloves	$\widetilde{\bigcirc}$	Drugs for sedation as per local protocol
$\bigcirc$ —	Needles and syringes		(not covered in this training)
<u> </u>	Personal protective equipment: aprons goggles	$\bigcirc$ —	Emergency drugs box containing
0-	Sanitary napkins		e.g. drugs for management of anaphylaxis. see local protocols and requirements



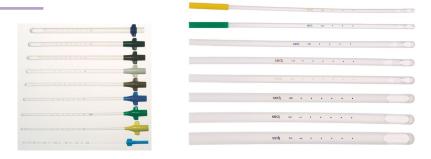
### Determining appropriate cannula size



The size of the cannula should be appropriate for the application and size of the uterus and amount of cervical dilation present.



Using a cannula that is too small may result in retained tissue or loss of suction.

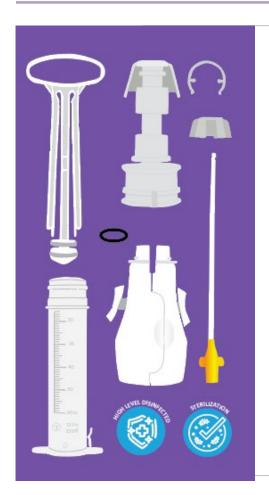


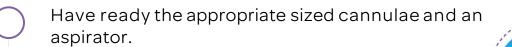
For uterine evacuation, the range of suggested cannula size is relative to uterine size as follows:

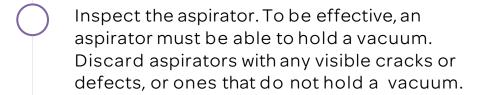
UTERINE SIZE (weeks since LMP*)	SUGGESTED CANNUAL SIZE (mm)
4-6	4-7
7-9	5 - 10
9 - 12	8 - 12
12 - 14	10 - 14

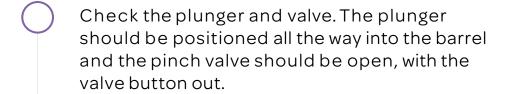


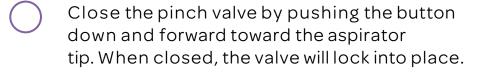
### **MVA** Preparation







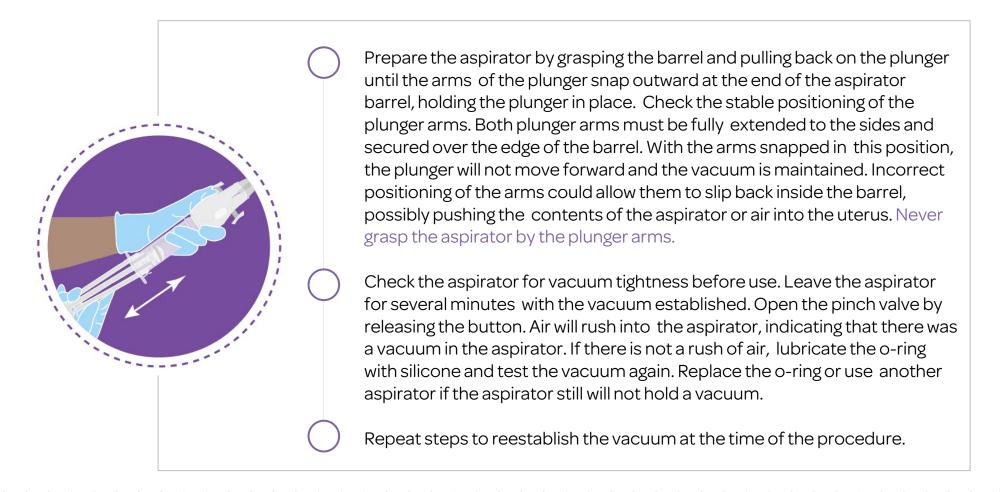








### MVA Preparation: create and test the vacuum





## When to replace aspirators

When Ipas PLUS aspirators are processed using the recommended methods, the number of uses can be expected to be up to 25.

Aspirators should be discarded and replaced if any of the following have occurred:





The cylinder becomes brittle or cracked or mineral deposits inhibit plunger movement



The valve parts become cracked, bent or broken



The buttons are broken



The plunger arms do not lock



The aspirator no longer holds a vacuum



# IPAS Manual Vacuum Aspiration

Procedure



## Inviting patient into procedure room



Patient preparation: holistic



Invite her in, greet warmly



introduce staff that are present



Cover the instruments



Assist getting on the couch and positioning her correctly



Maintain dignity throughout





### MVA Procedure: physical examination

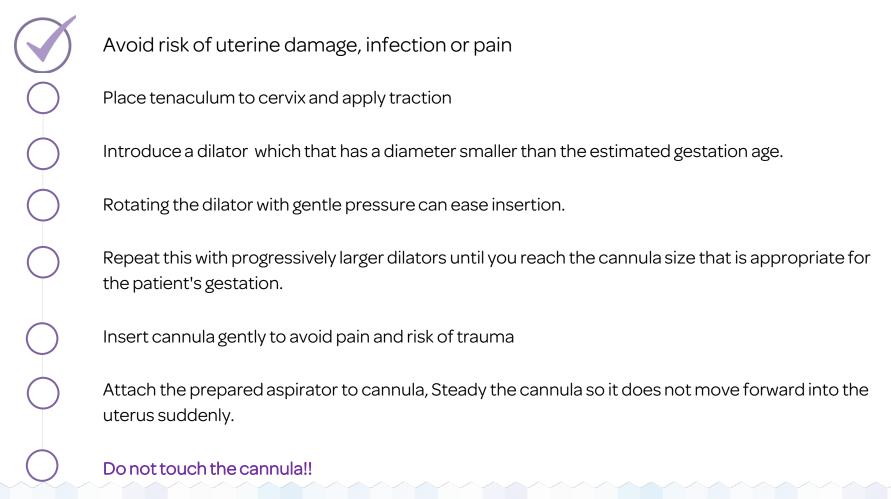
Palpate the abdomen and check for scars, masses and uterine size. Assess the size and position of the uterus by bimanual examination consider ultrasound is gestation is queried assess any pelvic tenderness Insert a bivalve speculum check the genital tract and cervix for signs if infection such as abnormal vaginal discharge and discuss treatment if required. Clean the cervix with antiseptic solution twice from the os to the edge of the cervix

### MVA Procedure: paracervical block

$\bigcirc$	Inject 1 - 2 ml of local anaesthetic at the cervical site where the tenaculum will be placed (either at 12 o'clock or 6 o'clock, depending on your preference or the presentation of the cervix
$\bigcirc$	Stabilise the cervix with the tenaculum at the anaesthetised site
$\bigcirc$	Use slight traction to move the cervix and define the transition of smooth cervical epithelium to vaginal tissue. This delineates the sites for additional injections.
$\bigcirc$	Slowly inject $2-5$ ml lidocaine into a depth of $1.5-3$ cm at $4$ points at the cervical/vaginal junction $2$ and $10$ o'clock, and $4$ and $8$ o clock.
$\bigcirc$	Move the needle while injecting OR aspirate before injecting to avoid intravascular injection
	The maximum dose of lidocaine in a paracervical block is 4.5mg /kg /dose or generally 200 - 300mg (approximately 20ml of 1%or 40 ml of 0.5%)

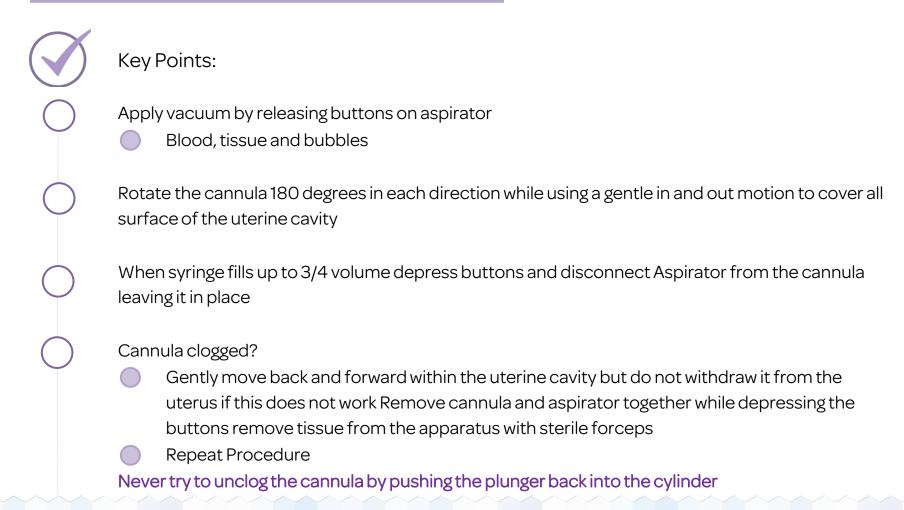


#### MVA Procedure: cannula insertion



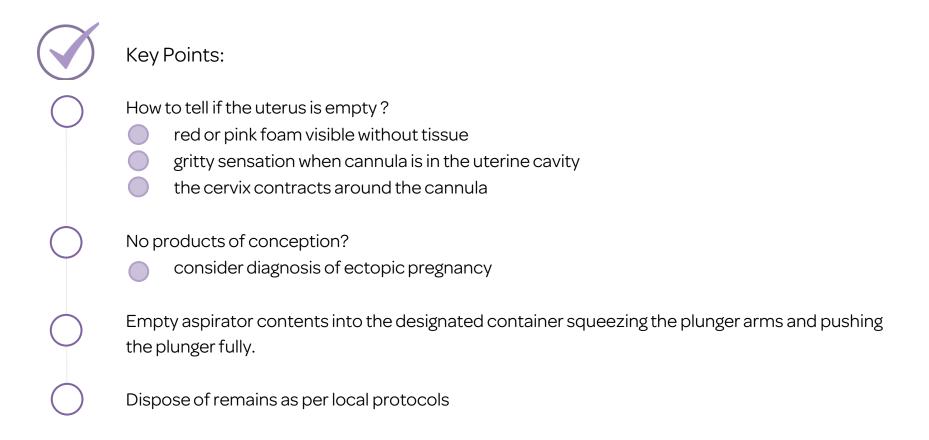


#### MVA Procedure: Aspirating uterine contents





#### MVA Procedure: completing uterine aspiration



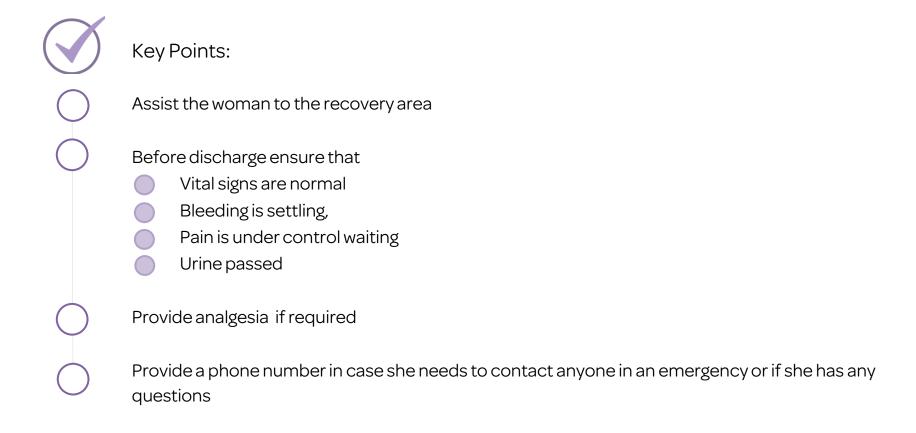


## IPAS Manual Vacuum Aspiration

Post-Procedure Care

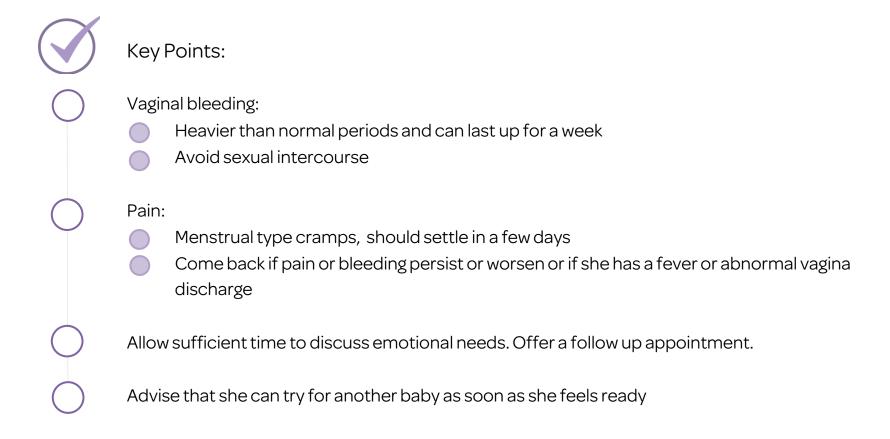


#### Patient support and counseling:





#### Patient support and counseling:





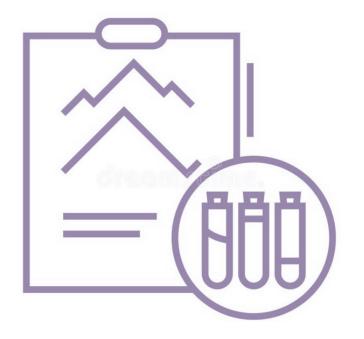
### Managing complications of pregnancy loss

Key Points:
Complications can occur when a woman spontaneously miscarries elsewhere or during the procedure
The risk of these are very low with pregnancies less than 14 weeks
Key is to be prepared
Protocols in place for managing emergencies
Skilled personnel who can assess diagnose and treat.
Importance of emergency drills
Access to essential tests, intravenous fluids, antibiotics, blood
Referral protocol if higher level care is required



#### Documentation





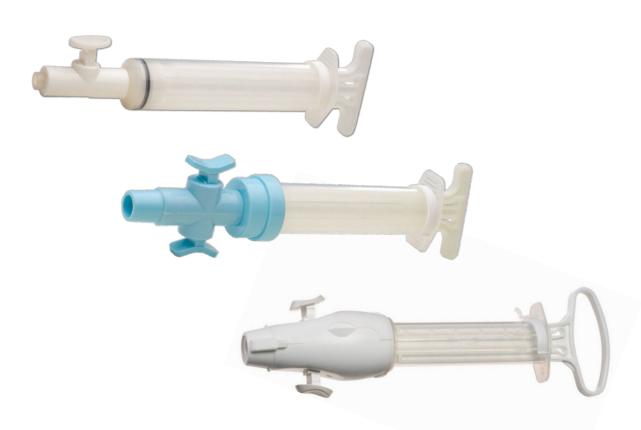


## IPAS Manual Vacuum Aspiration

Product Portfolio



#### Ipas MVA





The Ipas Manual Vacuum Aspiration is an effective, safe patient-centered solution, that uses suction for uterine evacuation



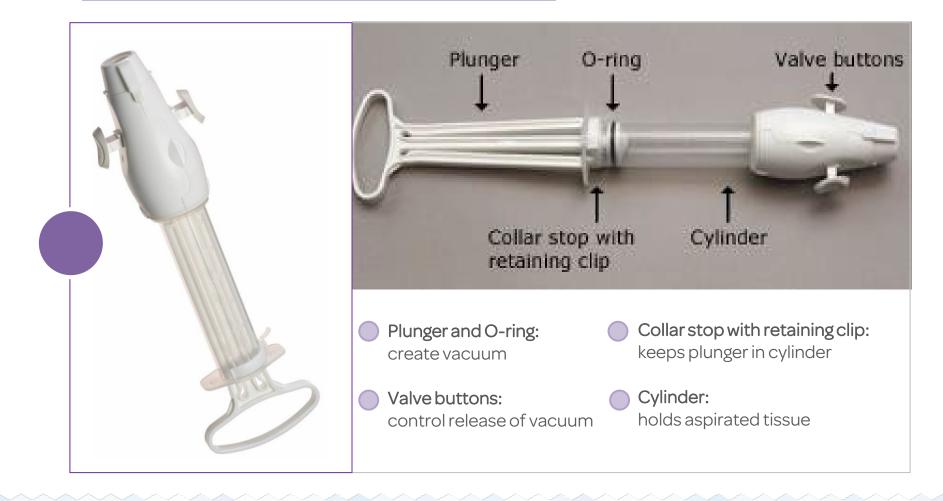
The Ipas aspirators are the most-widely distributed manual vacuum aspirators in the world. They hold quality certifications from some of the most demanding regulators and have been marketed in over 100 countries for more than 40 years.



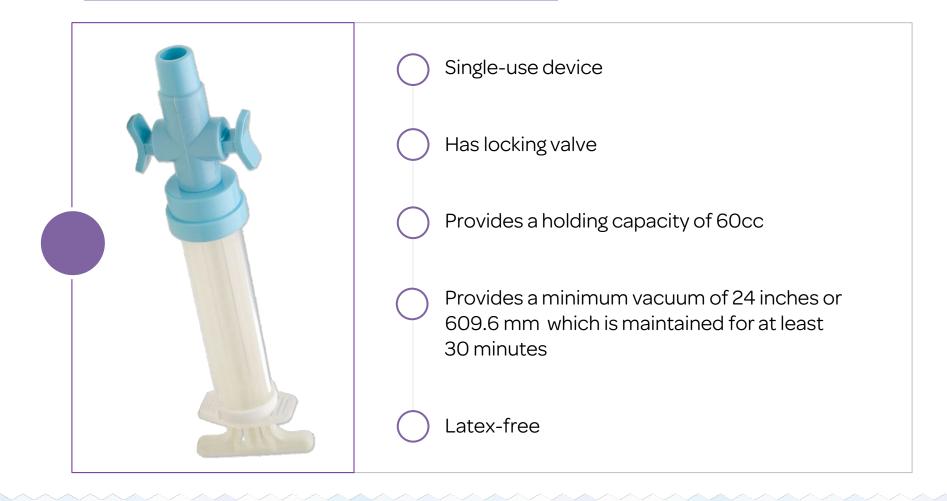


- Provides a minimum vacuum of 22 inches or 558.8 mm which is maintained for at least 30 min
- Provides a holding capacity of 60cc and it is latex free
- Easy disassembly and reassembly
  - Removable valve liner and a continual fluid path enhance ease of processing
- Ergonomic design of valve and plunger enhances ease of use
- Multiple-use device that supports steam autoclave (at 121°C or 250°F) as well as standard cold processing methods such as glutaraldehyde

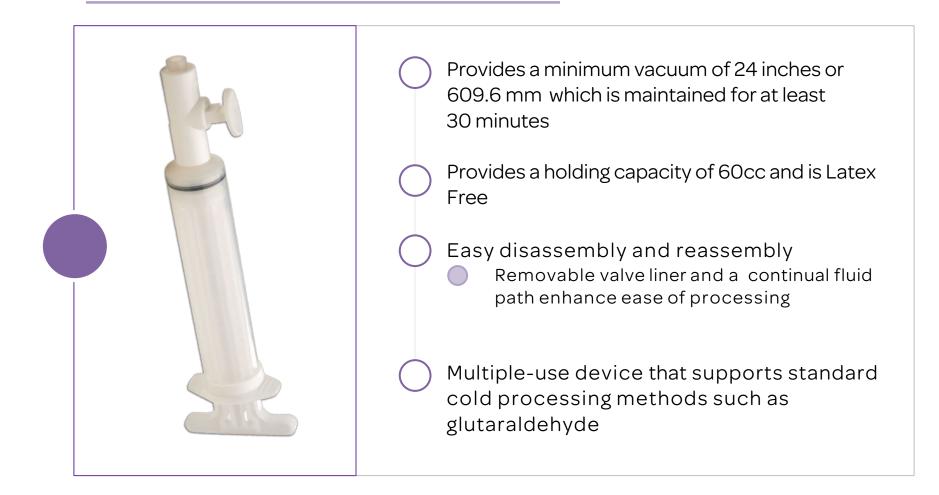




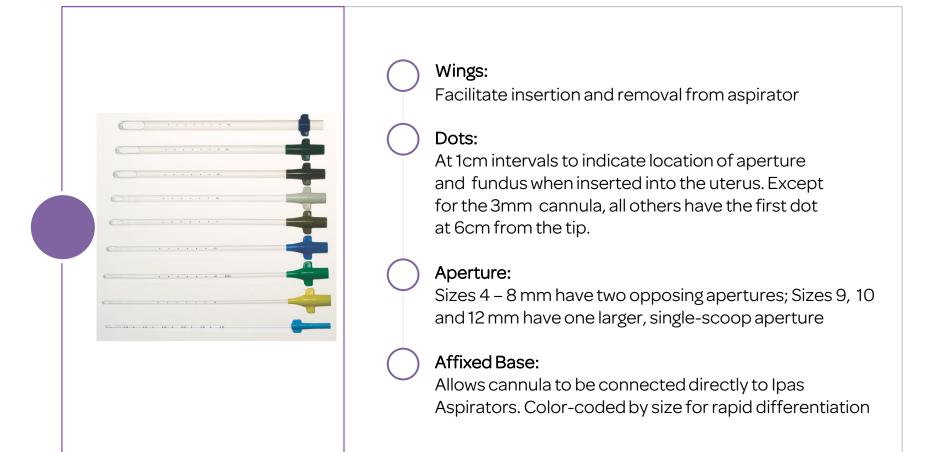














	Semi-rigid flexibility	Two opposing apertures (4 –8 mm)
$\bigcirc$	Multiple-use device that supports steam autoclave (at 121°C or 250°F)	Large single scoop aperture (9,10,12 mm)
	as well as standard cold processing methods such as gluteraldehyde	Length: Approx. 24 cm or 9.5 in
	Reusable up to 25 times	Made of latex-free polypropylene
	Sterile packed	plastic
	Permanently-integrated winged	Cannot be used with single valve aspirator
	Adapters Color-coded by size	



#### Flexible Karman Cannula





### Compatibility of aspirators and cannulae

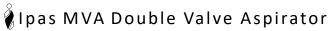


🕯 Ipas MVA Plus® Aspirator



No adapter required Ipas EasyGrip® all sizes Flexible Karman 12mm

Adapter required Flexible Karman 4-10mm 3mm cannula (6mm adapter)





No adapter required Ipas EasyGrip® all sizes Flexible Karman 12mm

Adapter required Flexible Karman 4-10mm 3mm cannula (6mm adapter)



No adapter required Flexible Karman 4-6mm 3mm cannula



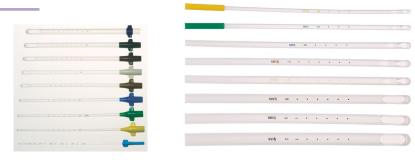
#### Determining appropriate cannula size



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For uterine evacuation, the range of suggested cannula size is relative to uterine size as follows:

UTERINE SIZE (weeks since LMP*)	SUGGESTED CANNUAL SIZE (mm)
4-6	4-7
7-9	5 - 10
9 - 12	8 - 12
12 - 14	10 - 14



#### **Denniston Dilators**





#### Cannulae Adapter Sets



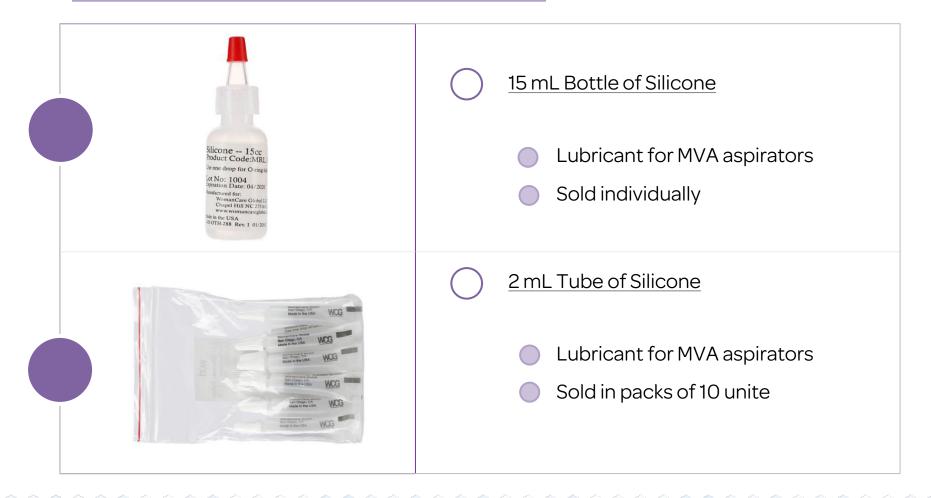
- Adapter Set
  - Includes 1 of each adapter size 6-10 mm
  - Required for Flexible Karman Cannula when used with Ipas MVA Plus® or Double Valve Aspirator
- 6 mm Adapter Set
  - Includes 5 units of the 6 mm adapter
  - Required for 3mm Cannula when used with Ipas MVA Plus® or Double Valve Aspirator
- Multiple-use devices that support steam autoclave (at 121°C or 250°F) as well as standard cold processing methods such glutaraldehyde

#### Aspirator Accessory Kits





#### Aspirator Accessory Kits





## IPAS Manual Vacuum Aspiration

Marketing Overview



#### DKT WOMANCARE GLOBAL IS INCREASING THE AVAILABILITY, ACCESSIBILITY AND AFFORDABILITY OF SEXUAL AND REPRODUCTIVE HEALTH PRODUCTS FOR WOMEN ALL AROUND THE WORLD.



Vision

Be recognized as the leader in increasing access to safe and innovative sexual and reproductive health technologies for women across the globe.

Mission

Create a customer-centric platform that expands access to existing and new sexual and reproductive health (SRH) technologies through synergies within DKT International programs worldwide, and other partners across all markets and segments.

#### Ipas MVA for Uterine Aspiration





#### Ipas MVA for Uterine Aspiration

#### Segments

#### Primary: (LS2S Strategy)

- HCPs who use an unsafe method as sharp curettage
- Untrained HCPs who use a safe method

#### Secondary:

 Untrained HCPs who use unsafe method as sharp curettage (U2S)

#### Main Stakeholders in decision making



*HCPs:* uterine evacuation is mainly performed by gynecologists. However, in some countries nurses, midwives can be trained to perform this procedure.



**Patients:** when available, they can be involved in decision making about the type of procedure



**Procurement manager:** when purchasing, they usually analyse cost-effectiveness and budget restrictions.



MoH and other health institutions: regarding national laws, MoH or other health institutions can have their own guidelines and protocols for uterine evacuation procedure.



#### Technology Landscape

#### **TECHNOLOGY**



#### MAIN CHARACTERISTICS

At home/No anesthesia needed / Longer procedure

Similar to natural early pregnancy loss / Not supervised procedure

Minimum risks / Effective method



Outpatient setting / Local anesthesia / Short procedure and recovery time

Less pain/Quiet procedure/No need for electricity

Minimum risks / Effective method



Outpatient setting / Local anesthesia / Short procedure and recovery time

Less pain/ Noisy procedure/ Need for electricity

Minimum risks / Effective method



Inpatient setting / Anesthesia required / Long procedure and recovery time

Less pain/Quiet procedure/No need for electricity

Higher risks compared to the other methods / Less effective method



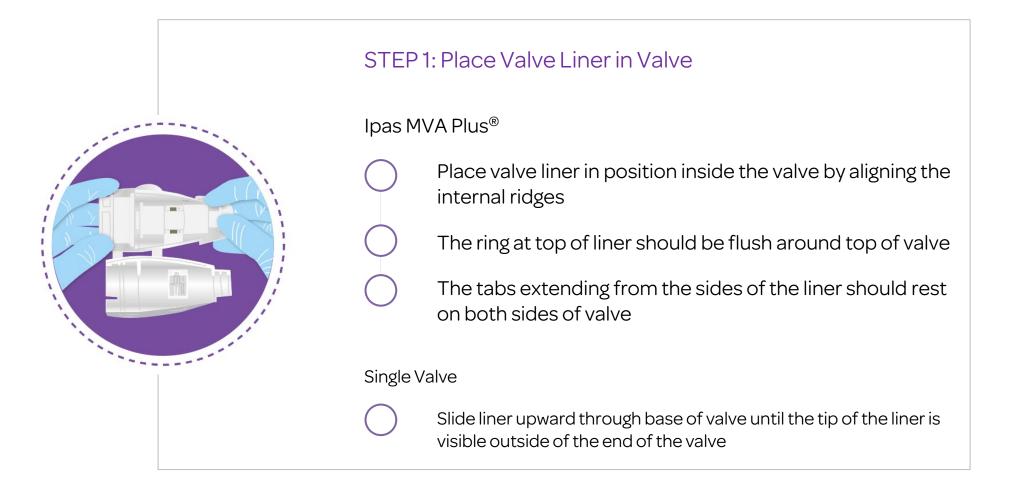
## IPAS Manual Vacuum Aspiration

Additional Information

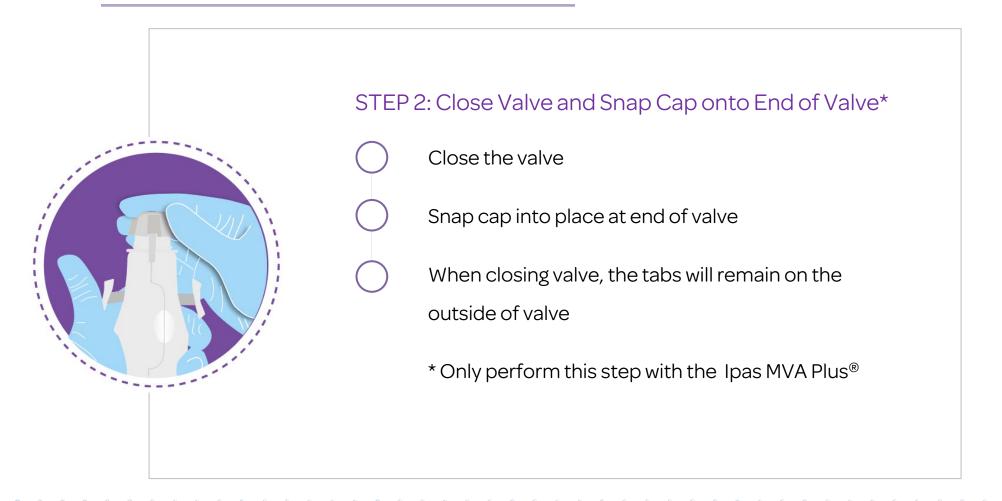


## IPAS Manual Vacuum Aspiration Assembly

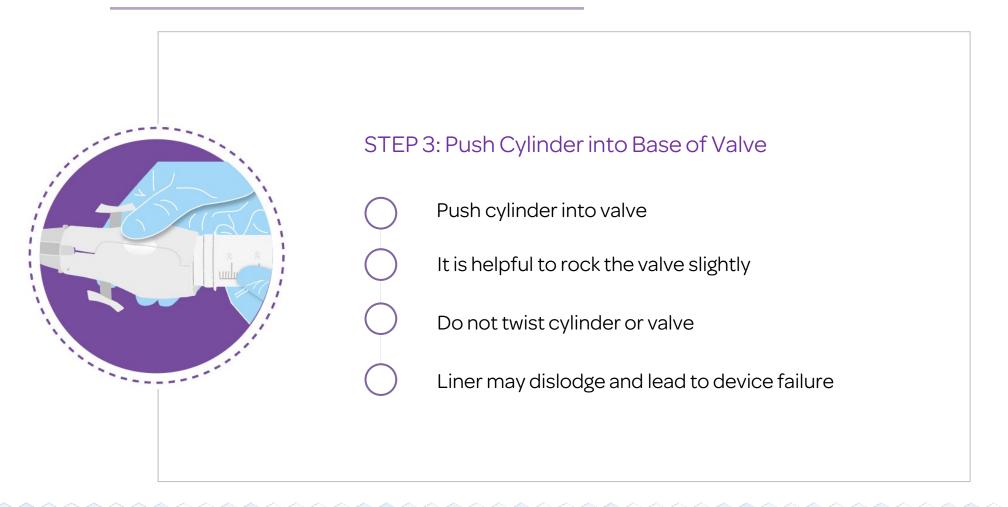




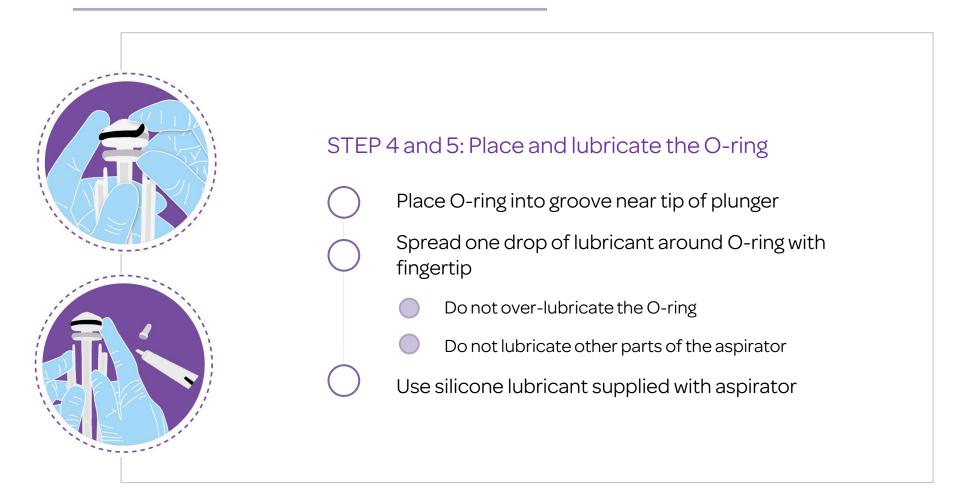




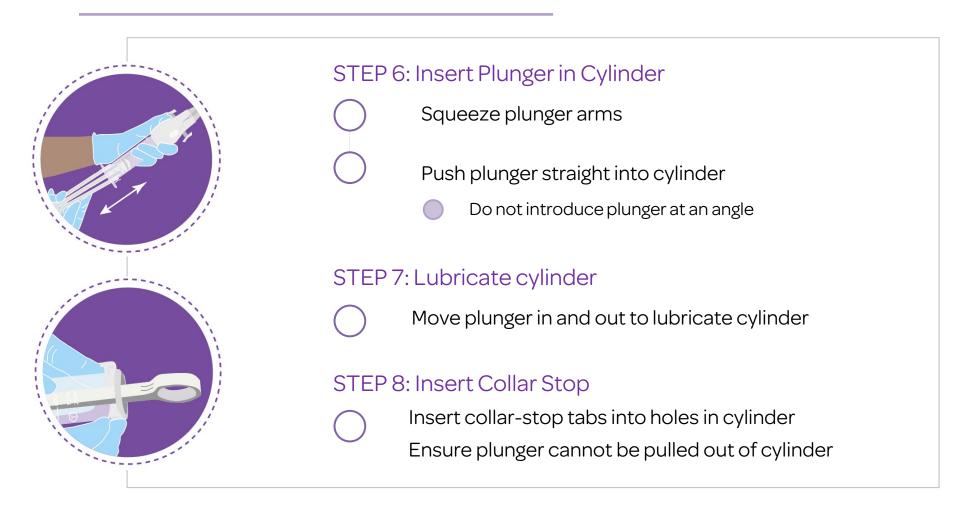




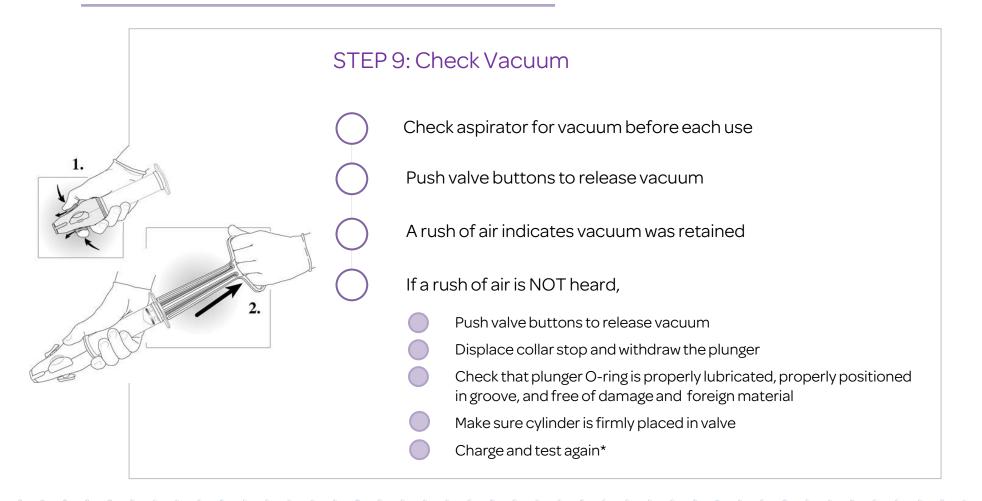










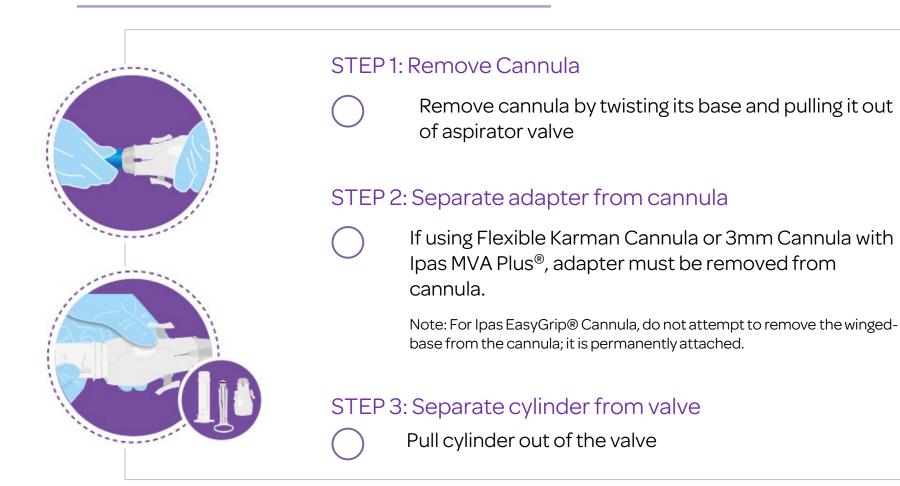




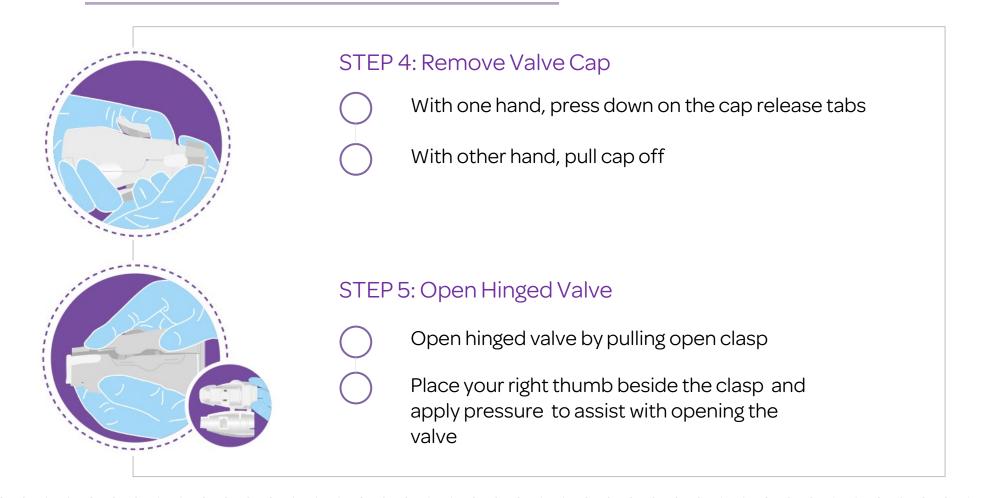
## IPAS Manual Vacuum Aspiration

Disassembly

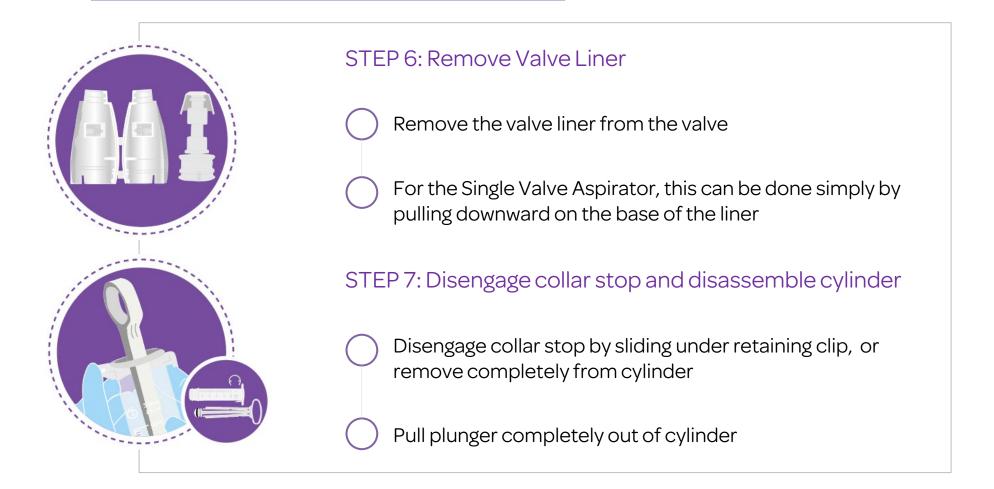














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Questions, Comments, Or Concerns?



We want to hear about it ...



# Woman Care GLOBAL INTERNATIONAL

Email: contact@dktwomancare.org www.dktwomancare.org

