Location Data

Note to assessors: Obtain as much of this information as possible before the on-site inspection begins.

L2 Facility details

L2.01	Supply chain level:	L2.02 Administrative area:	
L2.03	Facility Name:	L2.04 Unique code for this facility:	
L2.05	Facility address:		
L2.06	Telephone:	L2.07 Fax number:	
L2.08	Email:	L2.09 Primary contact:	
L2.10	Maximum temperature at site °C:	L2.11 Minimum temperature at site °C:	
L2.12	Facility assessment start date:	L2.13 Facility assessment finish date:	
L2.14	Assessed records start date:	L2.15 Assessed records finish date:	
L2.16	Assessment team members:		
L2.17	Total population (served by the facility):	L2.18 Annual number of births:	

L3 Permanently employed staff in the facility

List permanently employed members of staff, including managers, storekeepers, administrators, drivers, cleaners, etc.

	Name	Job title	Qualifications (see note 1)	Experience (see note 2)	Years in post [Eg. 6.5 (not 6.5 years)]
L3.01					
L3.02					
L3.03					
L3.04					
L3.05					

1) Qualifications: Specify level of education: e.g. technical college vocational qualification, university first degree etc.
2) Experience: In particular record previous experience in the field of vaccine management.

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E0 Complete these facility-specific questions before continuing.

0.1 Answers to these questions switch indicators below on and off.

E0:01a	What type of cold chain equipment is used in the store? [Select one or more options]:					Answers to this question switch later indicators on and off.	x	x	x	x	Z
A	Vaccine is stored in cold room(s) and/or freezer room(s) [Y, N]						x	x	x	x	
B	Vaccine is stored in refrigerators or long-term cold boxes [Y, N]					Including solar refrigerators. 'Long-term cold box' means a device that can reliably store vaccine for over 7 days without power (PQS specification in preparation).	x	x	x	x	
C	Vaccine is stored in freezers [Y, N]					Including solar freezers.	x	x	x	x	
D	Coolant-packs, including ice-packs and/or cool-packs and/or PCM-packs are prepared in the store [Y, N]					Select 'Y' if there is equipment in the store used exclusively for preparing coolant-packs (ice-packs and/or cool-packs and/or PCM-packs). Ignore fridge/freezers with ice-pack compartments or freezer rooms/cold rooms that are also used to store vaccine.	x	x	x	x	
E	Vaccines are kept in standard passive containers only (cold boxes and/or vaccine carriers). There is no active refrigeration. [Y, N]					Some health facilities have no refrigerators and may use cold boxes or vaccine carriers to store vaccine for immunization sessions. In such cases, select 'Y' for option D and 'N' for all others.				x	
Notes:											
E0:02a	Where are vaccines and diluents, syringes and safety boxes stored? [Select one option only]:					It is common for syringes and safety boxes to be stored in separate buildings either in the vaccine store compound, or elsewhere - these sites and buildings need to be checked.	x	x	x		Z
A	Only vaccines are stored. The facility is not responsible for syringes and safety boxes [Y, N]					Syringes and safety boxes may enter the immunization supply chain at a lower level than the primary store if they are received direct from the manufacturer or from another government department or agency. These products will always be stored at lowest delivery and health facility levels.	x	x	x		
B	Vaccines and dry goods are kept in the same building [Y, N]						x	x	x		
C	Vaccines and dry goods are in separate buildings on the same site [Y, N]					Answer "Y" if all or some of the dry goods are stored in separate buildings on the same site.	x	x	x		
D	Vaccines and dry goods are kept on separate sites [Y, N]					Answer "Y" if all or some of the dry goods are stored on separate sites.	x	x	x		
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E0:03a	What type of equipment is used to deliver and/or collect vaccine at this store? [Select one or both options]:						x	x	x	x	Z
A	Cold boxes, vaccine carriers and/or other passive containers [Y,N]					Other passive containers' includes insulated roll containers or palletized containers. These may be used at primary and sub-national levels.	x	x	x	x	
B	Refrigerated vehicles [Y,N]						x	x	x	x	
Notes:											
E0:04a	How are vaccine transport operations organized at this store? [Select at least one option, but not B without A]:					Enter all options that apply. 'Transport' includes bicycles, motorcycles, cars, trucks, boats and aircraft. If the vehicle(s) are shared between programmes, choose the option which best describes the sharing arrangement - for example: 'government agency' - and record arrangement in Notes.	x	x	x		Z
A	Vaccine transport is operated by the government, a parastatal agency, or is directly operated by the store. [Y, N]						x	x	x		
B	Vaccine transport is operated by a PPP or 3PL. [Y, N]					PPP = public-private partnership. 3PL= third party logistics contractor.	x	x	x		
C	This store does not organize any official transport. Either the store does not organize any transport, or informal arrangements (public transport, taxi, private vehicle, …) are made for vaccine transport. [Y, N]					"Official" transport is one or both of A and B. It does not include buses, taxis, private vehicles or other informal arrangements.	x	x	x		
Notes:											
E0:05a	Specify all transport types used for vaccine delivery or collection at this level. [Select at least one option]:					List all transport types: government-operated, parastatal or private.	x	x	x	x	Z
A	On foot [Y, N]						x	x	x	x	
B	Bicycles and/or motorcycles [Y, N]						x	x	x	x	
C	Cars, vans, trucks, refrigerated trucks and other road vehicles [Y, N]						x	x	x	x	
D	Aircraft [Y, N]						x	x	x	x	
E	Railway [Y, N]						x	x	x	x	
F	Boat [Y, N]						x	x	x	x	
G	Other [Y, N. Enter description in notes box]						x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E1 Pre-shipment and arrival procedures ensure that every shipment from the vaccine manufacturer reaches the receiving store in satisfactory condition and with

1.1 The requirements set out in the vaccine arrival report are complied with for all shipments.

1.1.1 Establish how vaccines are supplied to the country.

E1:01a	How are vaccines supplied to this primary store? [Select at least one option].					Answer all sub-questions. There can be more than one answer = 'Y'. If vaccine is received direct from the manufacturer at more than one store, each of these stores should be assessed as a primary store.	x				Z
A	Via a UN source (e.g. UNICEF-SD or PAHO) [Y, N]						x				
B	From an inter-country distribution warehouse [Y, N]					Inter-country distribution warehouses serve a group of countries. They may hold routine vaccines or strategic stocks of epidemic vaccines.	x				
C	Direct from international manufacturer(s) [Y, N]						x				
D	Transfers or donations from a neighbouring country or state [Y, N]					Transfers or donations from a neighbouring country or state' covers the situation where a country in the region, or a separate state within a large country, has excess vaccine with a short expiry date. To avoid unnecessary wastage this may be transferred to another country or state for a supplementary immunization activity or even for routine use.	x				
E	Direct from in-country manufacturer(s) [Y, N]						x				

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.1.2	**A standardised Vaccine Arrival Report form is used, preferably the current standard UNICEF Vaccine Arrival Report (VAR) form.**										
E1:02b	Does the local Vaccine Arrival Report (VAR) form include all the key procedures from UNICEF VAR Parts I to VII?					For international suppliers see UNICEF VAR guidance note (hyperlink below). For in-country manufacturers, the layout of the VAR should reflect local delivery arrangements, but should retain the key checking procedures on the UNICEF VAR. See also EVM Model SOP: EVM-SOP-E1-02: Vaccine arrival procedures.	x				M
A	VAR Part I - Advance notice section [Y, N]					http://www.thephss.org/ppep/resource/VAR_English_2010.pdf	x				
B	VAR Part II - Flight arrival details [Y, N, N/A]						x				
C	VAR Part III - Shipment details [Y, N]						x				
D	VAR Part IV - Documentation checklist [Y, N]						x				
E	VAR Part V - Shipping indicator status [Y, N]						x				
F	VAR Part VI - General condition of shipment [Y, N]						x				
G	VAR Part VII - Inspection supervisor signature [Y, N]				5		x				
Notes:											
E1:03b	Assess vaccine arrival reports (VARs) received during the review period:					Due to differences between vaccines in temperature sensitivity and packaging, only one type of vaccine should be recorded on each VAR. Therefore in the case of combined deliveries, a separate VAR should be completed for each vaccine in the shipment. For deliveries of DTP-HepB+Hib, one VAR should be used for DTP-HepB and another VAR for the lyophilized Hib, again due to differences in temperature sensitivity and packaging.	x				M
A	How many individual vaccine arrivals have there been?					Diluent and droppers must be detailed on the same VAR as the vaccines with which they have been shipped.	x				
B	There should be a VAR accompanying each individual vaccine. Record the number of VARs that were actually received.					In the event of short shipment (quantity received does not match quantity on packing list) of vaccine, diluents or droppers, where the quantity that was short-shipped is delivered at a later date, separate VARs must be completed for each delivery.	x				
C	Record how many of these received VARs were completed correctly by the 'Inspection Supervisor', including a complete and correct record of the status of electronic temperature monitoring devices.					Inspection Supervisor' is the term used in the UNICEF VAR. 'Completed correctly' means that the UNICEF VAR Part III to Part VII, or local equivalent, must have been completed in full. This includes correct and complete reporting of the status of electronic temperature monitoring devices. The VAR and related documents (e.g. pre-shipment advice, lot release, etc.) should be filed together.	x				
D	Record how many of the vaccine arrivals were delayed for more than 6 hours at customs due to lack of storage space in the primary store, or lack of transport.				5	UNICEF-SD indicate that lack of storage space or transport at primary store level can cause last minute customs clearance delays. This is usually the result of poor planning by the country.	x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.1.3	**Immediate action is taken if a shipment arrives in the primary store in unsatisfactory condition, or if vaccine arrival documentation is incomplete.**										
E1:04a	Of the individual vaccine arrivals entered in E1:03b:A:						x				M
A	How many were received in exposed or damaged condition?					Exposed or damaged condition' in this context means that the accompanying shipping indicators showed evidence of exposure to excessive heat or cold (UNICEF VAR Part V), and/or that the shipment was physically damaged (UNICEF VAR Part VI).	x				
B	How many of these exposed or damaged arrivals were correctly followed up with the supplier within three days of receipt?				1	Correctly followed up' means that the supplier (UNICEF-SD or vaccine manufacturer as appropriate) was formally contacted and that arrangements were made to test or replace the vaccine. If all shipments were satisfactory, question B is automatically switched off.	x				
Notes:											
E1:05a	Of the individual vaccine arrivals entered in E1:03b.A:						x				M
A	How many VARs reported incomplete accompanying documentation?					Accompanying documentation' in this context must include the following: Airway Bill (or Waybill for local suppliers), Packing List, Invoice and Lot Release Certificate from the NRA in the country of origin (UNICEF VAR Part IV). Omission of any of these items indicates that the paperwork is incomplete.	x				
B	How many of these incompletely documented arrivals were followed up within 14 days of receipt?				1	Followed up' means that the supplier was formally contacted and that the missing paperwork was supplied.	x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.2	**The NRA and the EPI manager or CMS manager have lot release certificates for all shipments.**										
1.2.1	**International procurement: A lot release certificate accompanies every batch of vaccine. The certificate is issued by the National Regulatory Authority of the country of manufacture. Alternatively**										
E1:06b	CONDITION: If any vaccines come from an international source. Assess international lot release procedures during the review period.	☐				Lot release procedures: 1. The quality of the vaccines must be assured by the National Regulatory Authority (NRA) of the country producing the vaccine (NRA). This NRA must license the product and release it on a lot by lot basis. In addition, the NRA must ensure on-going regulatory oversight through regular inspections of Good Manufacturing Practice (GMP) and monitoring of Adverse Events Following Immunization (AEFIs). 2. The NRA provides a lot release certificate for each batch following detailed review of the documentation from the manufacturer (about raw materials used, GMP inspection, test protocols and results for that particular batch), which may or may not be supported by testing. 3. A procuring country with or without a fully-functioning NRA of its own can rely on the lot release certificate provided by the NRA of the producing country. If a country procures vaccines through the UN, the country may waive the lot release as the pre-qualification process already relies on the lot release certificate of the producing country. However, a procuring country with a fully functioning NRA may still choose to carry out its own lot release procedure.	x				M
A	How many individual vaccine lots were received during the review period?					4. There are cases where a vaccine that is not used in the producing country, will not be licensed in that country. This situation is covered by a Scientific Opinion under Article 58 of the current legislation in Europe - a procedure developed in collaboration with WHO. The Scientific Opinion is given by the European Medicines Agency (EMEA) and the procedure is equivalent to that performed for products licensed for use in the European Community. However, since the product will not be placed in the European market, they cannot issue a Marketing Authorization. EMEA will also evaluate lots and issue an equivalent to a Certificate of Batch Release. A procuring country can use a positive Scientific Opinion to license the vaccine through its own NRA. See: http://www.who.int/immunization_standards/vaccine_regulation/article_58_guidelines_0505.pdf	x				
B	For every lot received there should be a lot release certificate from the NRA in the country of origin, or an EMEA lot evaluation. Record the number actually received.					5. If the procuring country does not have an NRA, or if its NRA is not competent enough to analyze licensing dossiers, it can use the expertise of a fully functional NRA in another country to carry out the protocol review and testing process on its behalf, or to check whether the vaccine has a positive Certificate of Batch Release.	x				
C	Does the country issue its own lot release certificates? [Y, N]					6. WHO recommends that each country carry out lot release and issue lot release certificates, either through a fully-functional NRA or by using the expertise of a fully-functional NRA in another country. In such circumstances, there should be an MoU with the relevant NRA.	x				
D	Answer ONLY if the country issues its own lot release certificates. For every lot received there should be such a lot release certificate. Record the number actually received.				1		x				

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.2.2	**Local procurement: If any vaccines are obtained from local manufacturer(s), the local National Regulatory Authority undertakes lot release procedures.**										
E1:07a	CONDITION: If any vaccines come from a local manufacturer. Assess local manufacturer lot release procedures used for the release of vaccine lots during the review period:	☐					x				M
A	How many individual vaccine lots were received during the review period?						x				
B	There should be a lot release certificate from the local NRA for every lot received. Record the number actually received.				1	There should also be an MoU with the local NRA.	x				
Notes:											
1.2.3	**Inter-country donations or transfers: If any vaccines are obtained from inter-country donations or transfers, the original lot release certificates are transferred with the vaccines and checked upo**										
E1:08a	CONDITION: If any vaccines have been donated or transferred from another country or state. Assess lot release certificates for donated and transferred vaccines during the review period.	☐				Inter-country or inter-state donations and transfers should be treated just like any other vaccine arrival. Lot release certificates are required for quality assurance purposes.	x				M
A	How many individual donated or transferred vaccine lots were received during the review period?						x				
B	There should be a lot release certificate for every lot received. Record the number actually received.				1		x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.3	**There are reliable arrangements to clear vaccines through customs, unless vaccines are obtained from a national manufacturer.**										
1.3.1	**Effective working arrangements are established with the customs authorities and/or with the NRA.**										
E1:09a	CONDITION: If any vaccines come from an international source. Checklist for working arrangements with customs and/or the NRA.	☐					x				M
A	Do working arrangements with customs and/or NRA ensure protection of the cold chain? [Y, N]					Customs/NRA staff must understand the importance of the cold chain and must maintain clear channels of communication with staff at the primary vaccine store.	x				
B	Is there an SOP or MoU document which specifies working procedures with customs and/or the NRA? [Y, N]					An SOP is the best way to detail the responsibilities of the parties. There may also be a Memorandum of Understanding (MoU). However, an MoU is of no operational significance unless it describes the responsibilities of the parties.	x				
C	Do the procedures set out in the SOP or MoU define the responsibilities of the parties, response times and cold chain procedures? [Y, N]					As a minimum, the SOP or MoU must set out the responsibilities of the parties, monitoring procedures and agreed response times and must define cold chain procedures. Wherever possible, vaccine should be moved from the port of entry to the primary vaccine store within 24 hours of arrival.	x				
D	Is there documentary evidence to show that agreed procedures are followed? [Y, N]				1	The best evidence will be obtained from the electronic shipping indicators. If these are downloaded AFTER the vaccine arrives in the primary store, the history will show if there have been temperature excursions whilst the vaccine is held by customs.	x				
Notes:											
1.4	**Procedures and facilities are able to protect the integrity of vaccine during customs clearance.**										
1.4.1	**Vaccine is cleared through customs without exposure to adverse temperatures.**										
E1:10a	CONDITION: If any vaccines come from an international source, requiring customs clearance. Have customs staff received training in how to look after vaccine? [Y, N]	☐			1	Minimum training requirement should include: - Move shipment from apron to covered area immediately after unloading. - If customs clearance takes more than 24 hrs, place vaccines in +2°C to +8°C cold room - NEVER place vaccine or diluents in a freezer room. IATA provides such training (www.iata.org/training/courses/Pages/temperature-sensitive-cargo-tcgp63.aspx).	x				T
Notes:											
E1:11a	CONDITION: If any vaccines require customs clearance. Is there a document or other evidence of a formal contingency plan in place in case of unexpected arrival delays (of more than 6 hours) [Y, N]	☐			5	Delays include 1) flight delay; 2) delay at a border crossing, 3) delay in transport to the primary store. Flight delays are ultimately the responsibility of the shipper but may affect availability of national staff to meet the delayed flight. Contingency plan should include requirement for receiving staff to be available at night or during weekends and emergency arrangements for rapid clearance through customs and/or moving vaccines to a suitable cold room.	x				M
Notes:											

Q no.	EVM QUESTION		Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.4.2	**Equipment and monitoring procedures in the holding store at the point of entry are satisfactory.**										
E1:12a	CONDITION: If any vaccines come from an international source. Does removal of vaccine from the port of entry typically take more than 24 hours? [Y, N] [If Y, complete E1:13a, otherwise go to E1:14a].	☐				The relevant issue here is removal of the vaccine shipment from the port of entry. In some countries customs clearance takes place at the primary vaccine store and this process may take more than 24 hours.	x				Z
Notes:											
E1:13a	CONDITION: If customs clearance takes more than 24 hours. Airport, sea port or border crossing cold room checklist:	☐				Indicator covers arrivals by air, sea or land.	x				M
A	Is a +2°C to +8°C cold room available to hold vaccine before its removal to the primary store? [Y, N]						x				
B	Is the cold room big enough to accommodate the largest anticipated vaccine shipment? [Y, N]					Cold rooms at airports or sea ports are likely to be large enough to accommodate vaccine shipments because they are used for many other purposes. There is unlikely to be a cold room available at a road-based border crossing. Check capacity only if the cold room is small. In some cases the temporary holding store may be operated by the clearing agent or a wholesaler, rather than the port of entry.	x				
C	Does the cold room have a continuous temperature recording device? [Y, N]						x				
D	Can the cold room be locked? [Y, N]						x				
E	Are there credible temperature records showing at least twice daily temperature monitoring? [Y, N]				1	Manual checking twice daily, 7 days a week, with records, is a minimum standard. Check records at known times of vaccine arrival over the past 12 months. Check continuous records, if available. 'Credible' records will show variation in temperature and variations in handwriting.	x				
Notes:											
1.5	**Arrangements for transporting vaccine to the primary store are safe and effective.**										
1.5.1	**Effective and reliable arrangements are in place to ensure the safe transport of vaccine from the customs holding store to the primary store.**										
E1:14a	CONDITION: If any vaccines require customs clearance. Is there documentary evidence that vaccines are transported from the airport or border crossing to the primary store under temperature-controlled conditions (active or passive cooling) [Y, N]	☐			1	Check status of electronic shipping indicator records. These should demonstrate whether temperature excursions have occurred during customs clearance and transport to the primary store. The most likely cause of an excursion is excessive delay leading to loss of coolant in the shipping containers.	x				V
Notes:											

Q no.	EVM QUESTION		Result		Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.6	**Arrangements for receiving, clearing and checking syringes, safety boxes and other consumables are effective.**											
1.6.1	**Establish whether any consumables come from an international source. (Note: Answers to this question will be used to switch on or switch off subsequent questions relating to commodity arriv**											
E1:15a	Are syringes, safety boxes or other consumables procured direct from a supplier or manufacturer? [Y, N]						Supply and distribution of syringes, safety boxes and other consumables such as freeze indicators is not always the direct responsibility of the immunization programme. However, these products are so important that the assessor should make every effort to investigate the supply chain. Answer 'Y' if consumables are received direct from the supplier or manufacturer.	x				Z
Notes:												
E1:16a	From where are these consumables procured?						Complete A to D if the answer to E1:15a is 'Y'.	x				Z
A	Via a UN source (e.g. UNICEF-SD or PAHO) [Y, N]							x				
B	From an international distribution warehouse [Y, N]							x				
C	Direct from international manufacturer(s) [Y, N]							x				
D	Direct from in-country manufacturer(s) [Y, N]							x				
Notes:												
1.6.2	**Effective and reliable arrangements are in place to enable the efficient clearance of consumables through customs.**											
E1:17a	CONDITION: If any consumables require customs clearance. Customs clearance checklist:						Satisfactory' working arrangements may exist with customs staff on an informal basis, but this relies entirely on personal relationships. Ideally there should be a Memorandum of Understanding with Customs, setting out their responsibilities for clearing vaccine and looking after it correctly whilst it is at the port of entry.	x				M
A	Are the working arrangements with customs satisfactory? [Y, N]							x				
B	Does an SOP or MoU document specify working procedures with customs? [Y, N]						An SOP is the best way to detail the responsibilities of the parties. There may also be a Memorandum of Understanding (MoU). However, an MoU is of no operational significance unless it describes the responsibilities of the parties.	x				
C	Are the procedures set out in the SOP or MoU thorough and complete? [Y, N]						Thorough and complete' means that the SOP or MoU sets out the responsibilities of the parties and agreed response times. Consumables should be moved from the port of entry to the primary store as soon as possible, preferably within a defined maximum time period).	x				
D	Are agreed procedures followed? [Y, N]					1		x				
Notes:												

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
1.6.3	**The condition, quality and shelf-life of consumables are checked before they are accepted.**										
E1:18b	CONDITION: If consumables are procured direct from a supplier or manufacturer. Does the local Product Arrival Form (PAR) include the following procedures for checking consumables?	☐				There should be an SOP and a standard form for checking products on arrival. See EVM Model SOP: EVM-SOP-E1-03 - Product arrival procedures.	x				M
A	PAR Part I - Advance notice section [Y, N]						x				
B	PAR Part II - Arrival details [Y, N, N/A]					Syringes have lot numbers and expiry dates which should be recorded and entered in the stock records in order to ensure correct EEFO handling throughout the in-country supply chain.	x				
C	PAR Part III - Shipment details [Y, N]					Electronic temperature indicators have a maximum shelf life before activation - this affects their subsequent operating life. Consequently, they should be distributed and used in order of manufacturing date.	x				
D	PAR Part IV - Documentation checklist [Y, N]						x				
E	PAR Part V - General condition of shipment [Y, N]						x				
F	PAR Part VI - Inspection supervisor signature [Y, N]				5		x				
Notes:											
E1:19a	CONDITION: If consumables are procured direct from a supplier or manufacturer. Assess product arrival reports (PARs) received during the review period:	☐					x				M
A	How many individual product arrivals have there been?					The EVM Model SOP also refers to cold chain equipment. These products need not be included in the PAR assessment.	x				
B	There should be a PAR accompanying each product. Record the number of PARs that were actually received.						x				
C	Record how many of these received PARs were completed correctly by the 'Inspection Supervisor'.				5	Completed correctly' means that the PAR must have been completed in full. The PAR and related documents (e.g. pre-shipment advice, conformity certificates, etc.) should be filed together.	x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E2 All vaccines and diluents are stored within WHO-recommended temperature ranges.

2.1 The quality of the cold chain is systematically and routinely monitored.

2.1.1 A temperature monitoring study is carried out every 5 years in accordance with WHO/IVB/05.01 Study protocol for temperature monitoring in the cold chain.

E2:01a	Temperature monitoring study checklist:					Refer to WHO/IVB/05.01 Rev 1: Study protocol for temperature monitoring in the cold chain	x				M
A	Has a systematic temperature monitoring study been carried out within the past 5 years? [Y, N]					http://whqlibdoc.who.int/hq/2011/WHO_IVB_05.01_REV.1_eng.pdf	x				
B	Have the recommendations in the study report been implemented [Score on a scale of 0-4 based on the proportion of recommendations implemented and the time elapsed since the study. Elaborate in the notes].				5	A temperature study gives an indication of: 1) Environmental challenges along distribution and storage routes/points including average time of distribution/storage; 2) Cold chain efficiency of distribution containers and vehicles; 3) Cold chain efficiency of management/equipment during distribution and storage. Recommendations are typically aimed at route planning, equipment and human resources, management follow-up action and overall reliability of cold chain maintenance. In scoring this indicator, use judgement based on the time elapsed since the study and the extent of implementation of the recommendations.	x				

Notes:

2.1.2 All freezer rooms and cold rooms used for storing vaccine have been temperature mapped.

E2:02a	CONDITION: If there are cold rooms and/or freezer rooms. Temperature mapping checklist:	☐				Cold rooms and freezer rooms should be temperature mapped at the time of commissioning to: 1) Establish the air temperature profile throughout the room both when empty and when fully loaded; 2) Define areas which are unsuitable for vaccine storage; e.g. close to cooling coils; 3) Establish the holdover time after a power failure.	x	x			M
A	How many vaccine cold rooms and freezer rooms are there?						x	x			
B	How many of these rooms have a fully documented temperature mapping study?				1	Mapping should be repeated whenever changes are made which increase loading or affect air circulation, or when refrigeration equipment is replaced. This is essential for cold rooms and desirable for freezer rooms. Enquire whether mapping has been repeated and record in notes box.	x	x			

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
2.2	**Continuous temperature records are kept, and these records demonstrate that vaccine has been stored correctly in both permanent and temporary cold stores.**										
2.2.1	**All vaccines and diluents are stored at the correct temperature.**										
E2:03a	Can the storekeeper(s) or health worker(s) give the correct storage temperature range for each of the vaccines on the schedule? [Y, N].				5	Knowledge of correct storage temperatures is vital. If ANY of the respondents give any incorrect answers, score 'No'. Note also: 1) If s/he says that freeze-dried vaccines should be stored at -20°C record this as 'Yes'. Current WHO advice is to store these vaccines at +2° to + 8°C, but storage at -20°C will not damage these vaccines. 2) If s/he say that freeze-dried vaccines packed with diluents can be stored at -20°C, this answer MUST be scored as 'No'. 3) At service point level, it is correct to say that all vaccines can be stored at +2° to +8°C.	x	x	x	x	T
Notes:											
E2:04a	Do the storekeeper(s) or health worker(s) know which vaccines on the schedule can be damaged by temperatures below 0°C? [Y, N]				5	It is essential that respondents know which of the vaccines should not be exposed to temperatures below 0°C. It is not important that they know the precise freezing temperature of each of these vaccines.	x	x	x	x	T
Notes:											
2.2.3	**Complete temperature records are maintained for every freezer room, cold room, vaccine freezer, vaccine refrigerator and refrigerated vehicle.**										
E2:06a	Can the storekeeper or health worker demonstrate correct reading of all types of thermometer and/or temperature recording device(s) used in the store? [Y, N]				5	Ask the storekeeper or health worker to demonstrate correct practice. A stem or dial thermometer must be held correctly so as to avoid parallax errors. Interpolation of values between the printed numbers on the temperature scale must be accurate. Interpretation of readings taken from chart recorders and electronic recording devices must be correct.	x	x	x	x	T
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E2:07b	CONDITION: If there is refrigeration equipment. Temperature record checklist:	☐				This question does NOT apply in health facilities where cold boxes or vaccine carriers are used to store vaccine temporarily.	x	x	x	x	M
A	Are refrigeration temperatures recorded manually? [Y, N]					Daily manual recording of the temperatures of refrigeration equipment allows the store keeper/health worker/supervisor to: a. verify whether the storage temperature is within the acceptable temperature ranges of +2°C to +8°C in cold rooms and vaccine refrigerators and - 25°C to -15°C in the freezer room and freezers, b. detect temperature alarm conditions which may have caused vaccine damage and to take appropriate action, and, c. assess the performance over time of vaccine handling at each link of the cold chain and to monitor the performance of cold chain equipment.	x	x	x	x	
B	Are the manual temperature records complete (twice daily, every day) for each and every cold room, freezer room, vaccine refrigerator and vaccine freezer throughout the review period? [Y, N]					Complete' means there are temperature records (AM and PM) for every day of the review period for each appliance.	x	x	x	x	
C	Does the temperature record form include space for entering alarm events? [Y, N. Enter n/a if only stem or dial thermometers are used]				5	If 30-day refrigerator loggers are used, the form must be designed to record alarm events. If the form is inadequate please comment in the Notes section.	x	x	x	x	
Notes:											
E2:08a	CONDITION: If there are cold rooms and/or freezer rooms. Is there a complete set of temperature recorder discs and/or temperature logger printouts for each and every cold room and freezer room throughout the review period? [Y, N]	☐			5	This question only applies in facilities with cold rooms and/or freezer rooms.	x	x			M
Notes:											
E2:09a	CONDITION: If refrigerated vehicles are used. Is there a complete set of temperature recorder traces and/or temperature logger printouts for each and every refrigerated vehicle throughout the review period? [Y, N]	☐			5	This question only applies in facilities which directly operate refrigerated vehicles.	x	x			M
Notes:											
E2:10a	CONDITION: If there are cold rooms or freezer rooms. Does a random 7 day sample of temperature recorder traces/logger printouts for each cold room and freezer room agree with the matching manual temperature records? [Y, N. Answer No if there are no temperature recorder traces/logger printouts to review].	☐			5	Select a random 7 day period for each appliance (not the same period for each). Check the twice daily temperature records against the corresponding times on the temperature trace. If the record is consistently within 2°C of the trace, this is acceptable. If there are significant discrepancies, especially if the temperature record is uniform and the trace is not, interview staff to establish the reasons.	x	x			M
Notes:											

Q no.	EVM QUESTION		Result		Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
2.2.4	**Temperature records are kept in a safe place for a minimum of three years.**											
E2:11a	CONDITION: If there is refrigeration equipment. Have temperature records been kept in a safe place for at least three years? [Y, N]	☐				1	Countries should be encouraged to retain such records for tracing purposes. If records are not available for three years, review the records kept since the immunization programme adopted EVSM or EVM.	x	x	x	x	M
Notes:												
2.2.5	**Internal reviews of the temperature records are carried out every month.**											
E2:12a	CONDITION: If there is refrigeration equipment. Temperature and alarm event review checklist.	☐					There must be a written record of these reviews which identifies problems and records actions taken. A verbal assurance is not sufficient.	x	x	x	x	M
A	Are temperature records and alarm events formally reviewed at least once a month in order to identify temperature excursions and their causes? [Y, N]						Check whether records are reviewed and recorded. 'Excursions' are temperatures below +2°C or above +8°C for cold rooms and vaccine refrigerators, and above -5°C for freezer rooms and vaccine freezers.	x	x	x	x	
B	If temperature records and alarm events are formally reviewed at least once a month, is there documentary evidence that remedial action has been taken in response to excursions or breakdowns? [Y, N, n/a if there are no excursions or breakdowns]					5	Interview the responsible person. Discuss and evaluate remedial actions taken. Inspect maintenance records.	x	x	x	x	
Notes:												
2.3	**Temperature recording devices are accurate to +/- 0.5 deg C.**											
2.3.1	**Temperature recording devices comply with the specified level of accuracy.**											
E2:13b	CONDITION: If there are cold rooms and/or freezer rooms or refrigerated vehicle(s).	☐					Since calibration is a relatively complex and technical process it should be avoided wherever possible by choosing temperature monitoring devices which retain their calibration for extended periods, or which can be recalibrated automatically - e.g. by replacing a digital sensor. For service delivery level equipment calibration is impractical. However stem thermometers hold their calibration well and Fridge-tags are effectively calibrated for life (2-3 years). Bi-metallic dial thermometers loose calibration quite easily and are now excluded from PQS.	x	x			M
A	Is there a test calibration record to show that the cold rooms , freezer rooms and refrigerated vehicle (if used) are calibrated every 12 months? [Y,N]							x	x			
B	Check on site with a calibrated device next to the sensor(s). Is the temperature within 1°C of the indicated room temperature(s)? [Y, N]					1	Place a calibrated device in contact with the room sensor(s). Compare the temperature reading with the temperature shown on the temperature display outside the room.	x	x			
Notes:												

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E3 Cold storage, dry storage and transport capacity is sufficient to accommodate all vaccines and supplies needed for the programme.

3.1 Storage capacity is sufficient for maximum stock levels of routine vaccines and related consumables.

3.1.1 Vaccine cold storage capacities are sufficient to meet maximum demand.

E3:01a	CONDITION: If there is refrigeration equipment. Using data from the annual vaccine arrival schedule (primary level) and the annual vaccine delivery schedule (lower levels), establish whether the capacity of the +2°C to + 8°C vaccine store is sufficient over a one year cycle. Where relevant, include other products and supplementary vaccines.	☐				Record the make and model of all refrigeration equipment in the Notes section below, then use the EVM Assistant tool to perform the calculations. Record any equipment which is still in its packaging or has not been installed, and any equipment which is broken but repairable, but do NOT include any of this equipment in the capacity calculation. The net storage capacity is acceptable if it is greater than the estimated maximum volume of vaccine to be stored.	x	x	x	x	C
A	What is the net storage capacity of the +2°C to + 8°C store(s) in litres or m³.					See the Refrig_freezer worksheet in the EVM Assistant for the vaccine storage capacities of refrigerators. If the refrigerator is not listed, measure the net storage capacity of the refrigerator. See the EVM Assistant user guide for calculation methods. Worksheet_A of the EVM Assistant may be used for calculating the net storage capacity of cold rooms.	x	x	x	x	
B	What is the estimated maximum vaccine volume in litres or m³.				5	Use the EVM Assistant to perform this calculation.	x	x	x	x	
Notes:											

E3:02a	CONDITION: If there is refrigeration equipment. Using data from the annual vaccine arrival schedule (primary store) and the annual vaccine delivery schedule (lower levels), establish whether the capacity of the -20°C vaccine store is sufficient over a one year cycle. Where relevant, include other products and supplementary vaccines.	☐				Record the make and model of all refrigeration equipment in the Notes section below, then use the EVM Assistant tool to perform the calculations. Record any equipment which is still in its packaging or has not been installed, and any equipment which is broken but repairable, but do NOT include any of this equipment in the capacity calculation. The net storage capacity is acceptable if it is greater than the estimated maximum volume of vaccine to be stored.	x	x			C
A	Is any vaccine stored at -20°C in this store? [Y, N]						x	x			
B	What is the net storage capacity of the -20°C store(s) in litres or m³.					See the Refrig_freezer worksheet in the EVM Assistant for the vaccine storage capacities of freezers. If the freezer is not listed, measure the net storage capacity of the freezer. See the EVM Assistant user guide for calculation methods. Worksheet_A of the EVM Assistant may be used for calculating the net storage capacity of freezer rooms.	x	x			
C	What is the estimated maximum vaccine volume in litres or m³.				5	Use the EVM Assistant to perform this calculation.	x	x			
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
3.1.2	**Dry storage capacity (for syringes and safety boxes) is sufficient to meet maximum demand.**										
E3:03a	CONDITION: If syringes and safety boxes (consumables) are stored at this level. Using data from the annual consumables arrival schedule (primary level) and the annual consumables delivery schedule (lower levels), establish whether the capacity of the dry store is sufficient over a one year cycle.	☐				Collect site data, then use the EVM Assistant to perform the calculations.The dry store is often housed in a separate building and may be used to store other products in addition to EPI syringes and safety boxes, etc. Judgement and enquiry may be needed to establish whether capacity is sufficient.Ignore diluents in the volume calculation if the dry store is only used to store syringes and safety boxes. Diluents should be stored in the vaccine store itself. The net storage capacity is acceptable if it is greater than the estimated maximum volume of diluent, syringes and safety boxes to be stored.	x	x	x		C
A	What is the net storage capacity of the dry store in litres or m^3.					See the EVM Assistant user guide for calculation methods. Worksheet_A of the EVM Assistant may be used for calculating the net storage capacity of dry stores with shelving.	x	x	x		
B	What is the estimated maximum diluent, syringe and safety box volume in litres or m^3.				5	Use the EVM Assistant to perform this calculation.	x	x	x		
Notes:											
3.3	**Vaccine transport capacity is sufficient to meet maximum demand.**										
3.3.1	**Vaccine transport capacity is sufficient to meet maximum demand.**										
E3:08a	CONDITION: If vaccine transport is directly operated by this store. Using data from the vaccine delivery schedule, establish whether transport capacity is sufficient to meet peak demand levels.	☐				Record the make and model, or provide a description, of all vaccine transport vehicles in the Notes section below, then use the EVM Assistant to perform the calculations. The net transport capacity is acceptable if it is greater than the estimated maximum volume of vaccine to be transported.	x	x	x		C
A	What is the net storage capacity of the delivery vehicle(s) in litres or m^3.					Worksheet_C of the EVM Assistant may be used for calculating the storage capacity of vaccine transport vehicles.	x	x	x		
B	What is the maximum delivery volume in litres or m^3.				5	Use the EVM Assistant to perform this calculation.	x	x	x		
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
3.4	**Capacity of passive containers and capacity for preparation and storage of coolant-packs are sufficient to meet maximum demand.**										
3.4.1	**Coolant pack freezers/coolers have sufficient storage capacities to meet maximum daily demand for coolant-packs.**										
E3:09a	CONDITION: If cold boxes or other passive containers are used. Using data from the vaccine delivery schedule, fixed session size data or outreach session size data, establish whether coolant pack storage capacities are sufficient to meet maximum demand levels.	☐				Coolant packs contain either water (water-packs) or another phase change material (PCM-packs). Water packs are either frozen (ice-packs) or cooled to between +2°C and +8°C (cool-packs). PCM-packs change phase at about +5°C and eliminate the freezing risk associated with ice-packs. Record the make and model of all refrigeration equipment in the Notes section below, then use the EVM Assistant tool to perform the calculations. Record any equipment which is still in its packaging or has not been installed, and any equipment which is broken but repairable, but do NOT include any of this equipment in the capacity calculation. The net storage capacities are acceptable if they are greater than the maximum daily demands.	x	x	x	x	C
A	Are conditioned ice-packs used? [Y, N]					Conditioned ice-packs may be used for the distribution of vaccines to lower levels, for outreach, or for on-site immunization sessions.	x	x	x	x	
B	What is the available ice-pack storage capacity of all ice-pack freezers (litres)?					See the Refrig_freezer worksheet in the EVM Assistant for the coolant-pack storage capacities of freezers. If the freezer is not listed, measure the net storage capacity.	x	x	x	x	
C	What is the maximum daily demand for ice-packs (litres)?					Use the EVM Assistant to perform this calculation.	x	x	x	x	
D	Are cool-packs used? [Y, N]					Cool-packs may be used for the distribution of vaccines to lower levels, for outreach, or for on-site immunization sessions.	x	x	x	x	
E	What is the available cool-pack storage capacity of all cool-pack refrigerators (litres)?					See the Refrig_freezer worksheet in the EVM Assistant for the coolant-pack storage capacities of refrigerators. If the refrigerator is not listed, measure the net storage capacity.	x	x	x	x	
F	What is the maximum daily demand for cool-packs (litres)?				5	Use the EVM Assistant to perform this calculation.	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
3.4.2	**Passive container capacity is sufficient to meet maximum daily demand.**										
E3:10a	CONDITION: If cold boxes or other passive containers are used. Using data from the vaccine delivery or collection schedule, or outreach session size data, establish whether there are sufficient passive containers to meet maximum demand levels.	☐				Record the make and model of all passive containers kept at this facility in the Notes section below, then use the EVM Assistant tool to perform the calculations. The total passive container vaccine storage capacity is acceptable if it is greater than the maximum required capacity.	x	x	x	x	C
A	Are passive containers kept for vaccine collection, delivery or outreach? [Y, N]					Check whether the store is reponsible for keeping cold boxes and/or vaccine carriers, or whether these are supplied by the receiving store when vaccine is collected.	x	x	x	x	
B	What is the total vaccine storage capacity of all available passive containers (litres)?					If passive containers are kept in the store, identify the type(s) and use the Passive_Containers worksheet in the EVM Assistant to find the vaccine storage capacity. If the container is not listed, measure the volume of the container with coolant-packs in place.	x	x	x	x	
C	What is the maximum daily passive container vaccine storage capacity required (litres)?				5	Use the EVM Assistant to perform this calculation.	x	x	x	x	
Notes:											
3.5	**There is a contingency plan to protect the vaccine in an emergency.**										
3.5.1	**There is a contingency plan to protect the vaccine in an emergency.**										
E3:11a	CONDITION: If there is refrigeration equipment. Vaccine store contingency planning checklist:	☐				Contingency plans are context-specific, but should include the following minimum elements: 1) Identify the major sources of risk (e.g. power failure, flood, earthquake, etc.). 2) Prepare a written contingency plan. 3) Post emergency contact details on the noticeboard in the vaccine store. Details must be visible to passers by in case the store is locked 4) Staff must know that the universal safe storage temperature for ALL vaccines in an emergency is +2°C to +8°C.	x	x	x	x	M
A	Is there a satisfactory SOP which sets out a contingency plan in the event of equipment failure or other emergency? [Y, N].					5) Identify at least two alternative cold storage locations. Inspect them to make sure they are large enough, well-managed, and can maintain correct temperatures. At sub-national stores cold boxes are not a satisfactory emergency solution.	x	x	x	x	
B	Are emergency contact details posted in the vaccine store? [Y, N].					6) Ensure that there is a written agreement with the selected emergency providers. If payment will be required, make sure that this can be funded. 7) Regularly rehearse the contingency plan with store staff and the emergency providers.	x	x	x	x	
C	Do staff know what to do in the event of an emergency? [Y, N].				5	All staff should know what to do in the event of fire. Where relevant, staff should also know what to do in the event of temperature alarms, mains power failure and refrigerator failure. Use the Notes section to record responses.	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E4 Buildings, cold chain equipment and transport systems enable the vaccine and consumables supply chain to function well.

4.1 The store building(s) is/are conveniently sited and the standard of construction meets minimum requirements.

4.1.1 The site where the vaccine store building is located is accessible to staff and to transport and is secure.

E4:01a	Vaccine store site checklist:						x	x	x		B
A	Can delivery vehicles reach the store(s) loading area or loading dock? [Y, N].					A loading area is a designated parking bay immediately outside the store. A loading dock is a covered area which the vehicle can back into. In larger stores, it may be raised to the level of the vehicle's load compartment.	x	x	x		
B	Is the site secure? [Y, N].				5	A secure site requires a fenced compound with 24 hour guarding or surveillance.	x	x	x		
Notes:											
E4:02a	CONDITION: Dry storage on a separate site. Dry store site checklist.	☐					x	x	x		B
A	Can delivery vehicles reach the store(s) loading area or loading dock? [Y, N].					A loading area is a designated parking bay immediately outside the store. A loading dock is a covered area which the vehicle can back into. In larger stores, it may be raised to the level of the vehicle's load compartment.	x	x	x		
B	Is the site secure? [Y, N].				1	A secure site requires a fenced compound with 24 hour guarding or surveillance.	x	x	x		
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.1.2	**The quality of the vaccine store building(s) meets minimum requirements.**										
E4:03a	Vaccine store or health facility building checklist:					Vaccine store' in this context includes service point health facilities.	x	x	x	x	B
A	Is the vaccine store building suitable for the climate? [Y, N].					Suitable' means one of the following: 1) Cold or temperate climates: Thermally insulated and heated. 2) Hot, wet climates: Naturally ventilated or air-conditioned. Well protected against rain penetration. 3) Hot, dry climates: Naturally ventilated or air-conditioned and/or passively protected against excessive heat build up. Protected against dust penetration.	x	x	x	x	
B	Is the roof finish in good condition and with no internal evidence of leaks? [Y, N]					Roof leaks': Check for damp stains on ceilings.	x	x	x	x	
C	Are the external walls free of severe cracks or other major damage? [Y, N].					Severe crack': A crack 5mm or greater in width which extends through the thickness of the wall. 'Major damage': Includes distortion due to subsidence or damage caused by earthquakes.	x	x	x	x	
D	Are windows and external doors in good condition and secure (grilles and/or locks)? [Y, N].						x	x	x	x	
E	Are floors dry and reasonably level? [Y, N].					Reasonably level': The floor should not be visibly sloping and it should be smooth enough for small wheeled pallet trucks.	x	x	x	x	
F	Are there any fire extinguishers and have they been tested in the past 12 months? [Y, N, Score n/a for small health facilities].					Fire extinguishers should be tested and certified annually. There should be a label on each one showing the test date. Fire extinguishers are unlikely to be found in small health facilities, so enter 'n/a'.	x	x	x	x	
G	Is the electrical system satisfactory? [Y, N, n/a].					Satisfactory' means that wiring, circuit breakers, electrical sockets and light fittings are in good condition and securely fixed in place. All circuits should be properly earthed. In a full inspection the earthing of sockets can be checked with a ring main tester. If there are any doubts, a professional inspection should be carried out. Lowest delivery and service point facilities may have no electricity. If this is the case, score 'n/a'.	x	x	x	x	
H	Is the drainage system working (both rainwater and foul drainage)? [Y, N].						x	x	x	x	
J	Is the air-conditioning system working? [Y, N. Score 'n/a' in climates where a/c is not required].						x	x	x	x	
K	Is the heating system working? [Y, N. Score 'n/a' in climates where heating is not required].				5		x	x	x	x	

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.1.3	**The quality of the dry store building(s) meets minimum requirements.**										
E4:04a	CONDITION: Separate dry store building. Building checklist:	☐				If there is more than one 'other' building, use this checklist and the notes box to cover them all.	x	x			B
A	Is the dry store building suitable for the climate? [Y, N].					Suitable' - see previous question.	x	x			
B	Is the roof finish in good condition and with no internal evidence of leaks? [Y, N]						x	x			
C	Are the external walls free of severe cracks or other major damage? [Y, N].					Severe crack': A crack 5mm or greater in width which extends through the thickness of the wall. 'Major damage': Includes distortion due to subsidence or damage caused by earthquakes.	x	x			
D	Are windows and external doors in good condition and secure (grilles and/or locks)? [Y, N].						x	x			
E	Are floors dry and reasonably level? [Y, N].						x	x			
F	Are there any fire extinguishers and have been tested in the past 12 months? [Y, N].					Fire extinguishers should be tested and certified annually. There should be a label on each one showing the test date.	x	x			
G	Is the electrical system satisfactory? [Y, N, n/a].					Lowest delivery and service point facilities may have no electricity. If this is the case, score 'n/a'.	x	x			
H	Is the drainage system working (both rainwater and foul drainage)? [Y, N].						x	x			
J	Is the air-conditioning system working? [Y, N. Score 'n/a' in climates where a/c is not required].						x	x			
K	Is the heating system working? [Y, N. Score 'n/a' in climates where heating is not required].				1		x	x			
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.2	**Storage and packing spaces within the vaccine store building are satisfactory.**										
4.2.1	**The layout of the space housing the refrigeration equipment is in-line with WHO recommendations.**										
E4:05a	CONDITION: If there is refrigeration equipment. Refrigeration equipment space checklist:	☐				Ventilation requirements are climate-dependent and also depend on the type of refrigeration equipment installed. Refrigerators, freezers and cold/freezer rooms with through-the-wall (monobloc) cooling units discharge waste heat into the room and must be well ventilated. Split system cooling units discharge waste heat to the outside air, which avoids waste heat build up in the room. Natural ventilation works best if there is a low level air inlet and a high level outlet, preferably on opposite sides of the room. Note: Ventilation will only lower the room air temperature if the outside air is cooler than the inside air. During the daytime in hot dry climates, natural ventilation may actually increase the internal air temperature. In these climates night time ventilation is the most effective way to cool a room naturally.	x	x			B
A	Is there sufficient space to maintain the equipment? [Y, N].						x	x			
B	Is the room well ventilated? [Y, N].				5		x	x			
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.2.2	**There is space for packing vaccine for onward dispatch, and the layout of the packing area meets WHO-recommended recommendations.**										
E4:06a	CONDITION: If cold boxes or other passive containers are used. Packing area checklist:	☐				It is rather difficult to assess packing area temperature as it depends on climate, building design, building construction and time of inspection. In temperate climates there is unlikely to be a problem. In cold winter/temperate summer climates, the presence of a permanent heating system should ensure correct temperatures. In cold winter/hot summer (continental) climates heating is needed in winter and air-conditioning is likely to be needed in summer. In hot humid climates indoor temperature is likely to be similar to the outdoor shade temperature unless there is air-conditioning.	x	x			B
A	Is the packing area close to the refrigeration equipment area? [Y, N].						x	x			
B	Are the ice-pack freezers or cool-pack/PCM-pack coolers close to the packing area? [Y, N].						x	x			
C	Is there sufficient lay out space for conditioning ice-packs? [Y,N, n/a if cool-packs or PCM-packs are used, or if container design does not require conditioned ice-packs].						x	x			
D	Are the empty containers stored in, or close to, the packing area? [Y, N, n/a if containers are supplied by the collecting store].						x	x			
E	Is there sufficient lay out space for packing vaccines into containers? [Y, N].						x	x			
F	Is there sufficient space to store packed containers? [Y, N].						x	x			
G	Are there working hand washing or hand sanitizing facilities in, or close to the packing area? [Y, N].					Working' hand washing facilities means that at least cold water comes out of the tap. Hand sanitizer means a wall-mounted device filled with antiseptic gel.	x	x			
H	Can the temperature of the packing area be maintained between 15° and 25°C throughout the year? [Y, N].						x	x			
J	Is the packing area protected against direct sunlight? [Y, N].				5		x	x			
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E4:07a	CONDITION: If refrigerated vehicles are used. Packing area checklist:	☐					x	x			B
A	Is the packing area close to the refrigeration equipment area? [Y, N].						x	x			
B	Are the delivery cartons or delivery crates stored in or close to the packing area? [Y,N]						x	x			
C	Is there sufficient lay out space to assemble vaccine orders for packing into delivery cartons or delivery crates? [Y, N].					Sufficient space' means that there is a clearly designated area with work benches where an order can be assembled and packed in a continuous uninterrupted operation. The amount of space required for a specific store is a matter of judgement.	x	x			
D	Can packed vaccines be loaded directly into the refrigerated vehicle? [Y, N].						x	x			
E	Are there hand washing facilities in, or close to the packing area? [Y, N].						x	x			
F	Can the temperature of the packing area be maintained between 15° and 25°C throughout the year? [Y, N].						x	x			
G	Is the packing area protected against direct sunlight? [Y, N].				5		x	x			
Notes:											
E4:08a	Store keeper's office checklist						x	x	x		B
A	Is the office close to the vaccine storage area, packing area and loading bay? [Y, N].						x	x	x		
B	Is the room large enough? [Y, N].				5	A minimum of 7.5m² is recommended for a single storekeeper. The room needs to be larger if there is more than one person working in the office.	x	x	x		
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.2.3	**There is suitable storage space within or close to the vaccine store for diluents, packaging materials, transport containers and spare parts.**										
E4:09a	Vaccine store: secondary storage space checklist.					Note: 'Secondary storage space' is an area in the vaccine store assigned for diluents and the like. It is not the same as the 'dry store' which is used for syringes and safety boxes.	x	x			B
A	Is there enough storage space for diluents? [Y, N].					Diluents should be stored as close as possible to the vaccine.	x	x			
B	Is there enough storage space for packaging cartons or packaging crates? [Y, N, n/a].					Packaging should be kept close to the packing area.	x	x			
C	Is there enough storage space for cold boxes or passive containers? [Y, N, n/a].					Cold boxes should be kept close to the packing area.	x	x			
D	Is there enough storage space for consumables (spare parts, freeze indicators, stationary, etc)? [Y, N].				1	Consumables need to be accessible, but it is not essential for them to be kept in the vaccine store itself.	x	x			
Notes:											
4.2.4	**There is suitable storage space for syringes and safety boxes.**										
E4:10b	CONDITION: If there is a dry store. Dry store checklist:	☐					x	x			B
A	Does the dry store have well organised shelving, pallet standing or pallet racking? [Y, N]					In a 'pallet standing' store pallets are stored directly on the floor.	x	x			
B	Is there suitable mechanical handling equipment, if needed? [Y, N. Score n/a if there is no need for mechanical handling equipment]					Suitable' mechanical handling equipment means pallet lifters in pallet standing stores and forklifts in high rise (pallet racking) stores. High rise shelving stores require safe and stable step ladders as a minimum.	x	x			
C	If there is suitable mechanical handling equipment, is the equipment in working order? [Y, N]				1		x	x			
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.3	**Cold chain equipment complies with minimum standards.**										
4.3.1	**Cold rooms and freezer rooms comply with the listed minimum standards.**										
E4:11b	CONDITION: If there are cold rooms and/or freezer rooms. Cold room and freezer room checklist.	☐				Ignore any equipment which is out-of-service for a legitimate reason - for example because it is being serviced or repaired. Check that any vaccine that was stored in the out-of-service equipment is being kept under safe conditions.	x	x			E
A	Are all cold room and freezer room enclosures in good condition at time of inspection? [Y, N].					Good condition' means free of corrosion, with all panel joints properly sealed and no sign of excessive condensation or ice build-up on the face of the panels.	x	x			
B	Are all cold rooms and all freezer rooms fitted with dual refrigeration units? [Y, N].						x	x			
C	If all cold rooms and freezer rooms are fitted with dual refrigeration units, is there a duty sharing system for the dual units, either manual or automatic? [Y, N]					Duty sharing': Alternative approaches are 1) manual changeover between units on a periodic basis - typically weekly or monthly; automatic changeover on a periodic basis. 2) Different set-point temperatures for each unit in the pair so that one unit runs more than the other.	x	x			
D	Can doors be locked from the outside but freely opened from the inside? [Y, N].						x	x			
E	Are all rooms fitted with sufficient good quality shelving? [Y, N].					Shelving should be strong enough to support the vaccine without sagging. Preferably it should be supplied by the cold room manufacturer.	x	x			
F	Cold climates only. Do cold rooms EITHER have low temperature protection OR are they located in a permanently heated room? [Y, N. Score 'n/a' if low temperature protection is not required].				5	In the winter in cold climates there is a risk that the vaccine will freeze inside the cold room. To prevent this, the cold room should EITHER have a low temperature protection circuit OR the room in which the cold room is located should be permanently heated.	x	x			
Notes:											
4.3.2	**Protective clothing is provided for staff working in cold rooms and freezer rooms and staff are trained in safe working practices.**										
E4:12a	CONDITION: If there are cold rooms and/or freezer rooms. Checklist for working in cold rooms and freezer rooms:	☐				See: User's handbook for vaccine cold rooms and freezer rooms. WHO/V&B/02.31. Without warm clothing it is unsafe to work in a cold room or freezer room for extended periods. Some tasks, such as physical stock counts, cannot be carried out without this protection.	x	x			E
A	Is warm clothing available for cold store workers? [Y, N].						x	x			
B	Have workers received training in safe working in cold stores? [Y, N].				5		x	x			
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.3.3	**Freezers and refrigerators comply with the listed minimum standards.**										
E4:13b	CONDITION: If there are refrigerators and/or freezers. Vaccine freezer/refrigerator checklist.	☐					x	x	x	x	E
A	Do all vaccine freezers comply with the WHO specifications that were in force at date of purchase, including correct climate zone? [Y, N. Score n/a if no freezers].					Check that the equipment's climate rating is correct for the site.	x	x	x	x	
B	Do all vaccine refrigerators comply with the WHO specifications that were in force at date of purchase, including correct climate zone? [Y, N. Score n/a if no refrigerators].					Check that the equipment's climate rating is correct for the site. PIS and PQS pre-qualified equipment should have a sticker to show the climate rating.	x	x	x	x	
C	Are all ice-lined refrigerators fitted with the correct vaccine storage baskets? [Y, N, n/a].					Chest ILRs must always be fitted with baskets so that vaccine does not come into contact with the bottom or walls of the unit because this can freeze vaccine.	x	x	x	x	
D	For electric and solar equipment only: Are there sufficient daily hours of electricity for the installed equipment throughout the year? [Y, N, n/a].					Sufficient daily hours of electricity' depends on the type of refrigeration equipment installed - >20 hrs per day for domestic and absorption units; >8 hrs per day for normal ILRs; >4 hrs per day for high efficiency ILRs. Solar systems, whether direct drive, or with batteries, must be correctly sized for the location.	x	x	x	x	
E	For kerosene and gas equipment only: Is there sufficient availability of kerosene and/or gas throughout the year? [Y, N, n/a].						x	x	x	x	
F	For cold climates only: Do vaccine refrigerators EITHER have low temperature protection OR are they located in a permanently heated room? [Y, N. Score 'n/a' if low temperature protection is not required].				5		x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.3.4	**The use of CFC gases in refrigeration equipment is phased out in accordance with UNICEF/WHO policy.**										
E4:14a	CONDITION: If there is refrigeration equipment. Inspect refrigeration equipment:	☐					x	x	x	x	E
A	How many refrigeration units are there (dual CR and FR units count as 2, refrigerators and freezers count as 1 each)?						x	x	x	x	
B	How many of these are CFC-free?				1		x	x	x	x	
Notes:											
4.3.5	**An appropriate standby generator is installed, if required.**										
E4:15a	Standby generator.					There should always be a standby generator at the primary store unless mains electricity is completely reliable and/or has a backup supply from a separate transformer. The same requirement applies at sub-national stores equipped with cold rooms. Generators are not required in small sub-national stores, lowest delivery level and service point stores where ice-lined refrigerators are used and there is at least 8 hours electricity per day. Generators are also not required where kerosene, gas or solar refrigerators are used or where a health facility uses cold boxes or vaccine carriers for storing vaccine.	x	x	x	x	E
A	Is a generator required at this store? [Y, N]						x	x	x	x	
B	Is a standby generator installed and connected to the vaccine store? [Y, N]				5	If a generator is installed but is not required then the generator questions are switched off and need not be answered.	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E4:16a	CONDITION: If a generator is required and installed. Standby generator checklist:	☐					x	x	x	x	E
A	Is the generator in working order? [Y, N].						x	x	x	x	
B	Does the generator have a working auto-start system? [Y, N]					There should be a mains failure auto-start system so that the generator starts automatically when there is a power cut. Ideally, there should be an auto-stop system when mains power returns.	x	x	x	x	
C	Can the generator start all the connected equipment in the vaccine store? [Y, N].					The starting load for a refrigeration compressor is much higher than the running load. Ask for a demonstration to prove that the generator is able to cope with the combined starting load of all connected refrigeration units. Well-designed systems may have 'smart switching' which reduces the starting load by automatically phasing in the individual refrigeration units.	x	x	x	x	
D	Is the fuel tank large enough? [Y, N].					72 hours continuous running is recommended, but this is context-dependent. If power cuts are short and/or fuel is readily available, a smaller capacity will be acceptable. The way to assess this is as follows: 1) Establish the longest power cut experienced during the review period. 2) Check the generator fuel consumption in litres per hour. 3) Check the capacity of the fuel tank. If tank capacity/consumption per hour is less than the longest power cut then the tank capacity is too small.	x	x	x	x	
E	Are there sufficient reserve supplies of fuel? [Y, N].						x	x	x	x	
F	Is the generator in a secure compound? [Y, N].				5		x	x	x	x	

Notes:

4.3.6 Voltage regulators are provided for all refrigeration equipment wherever voltage fluctuations exceed +/- 15% of rated voltage (or the refrigeration equipment manufacturer's voltage tolerance, wh

E4:17a	Is the voltage fluctuation sufficiently severe to require voltage regulation equipment? [Y, N, n/a if solar refrigeration or cold boxes/vaccine carriers are used to store vaccine].					Voltage regulation equipment on all refrigeration equipment is essential if voltage fluctuations exceed ±15%. Obtain information from an electrical engineer, or from the local supply company. In some settings, UPS systems (Uninterrupted Power Supply) may substitute for voltage regulators. These units also provide a limited period of back-up power.	x	x	x	x	Z

Notes:

Q no.	EVM QUESTION		Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E4:18a	CONDITION: If voltage regulation is required. Voltage regulator checklist.	☐				If there is no refrigeration equipment in a particular category - e.g. 'freezer room', enter 0 for the equipment number and 0 for the voltage regulator number.	x	x	x	x	E
A	How many freezer rooms are there?						x	x	x	x	
B	How many are attached to a functioning voltage regulator?					There may be a single central voltage regulator for the vaccine store or some sharing arrangement across multiple appliances. In this case score on the basis that every piece of equipment has a regulator and make a note in the comment box.	x	x	x	x	
C	How many cold rooms are there?						x	x	x	x	
D	How many are attached to a functioning voltage regulator of the correct type?						x	x	x	x	
E	How many vaccine refrigerators and vaccine freezers are there?						x	x	x	x	
F	How many are attached to a functioning voltage regulator of the correct type?				1	Note: Solar refrigerators do not require voltage regulators. Absorption refrigerators require a different type of voltage regulator to those used for compression refrigerators. This needs to be checked during the inspection.	x	x	x	x	

Notes:

4.3.7 Temperature monitoring equipment and temperature alarm systems are fitted to all refrigeration equipment used to store vaccine.

E4:19b	CONDITION: If there are cold rooms and/or freezer rooms. Temperature monitoring equipment checklist:	☐					x	x			E
A	Do all cold rooms and freezer rooms have fully functioning continuous temperature recorders? [Y, N].					Fully functioning': Electronic temperature recorders, all attached sensors, and any associated computer equipment are fully operational. Chart recorders have functional pens and an adequate supply of spare pens and blank paper discs.	x	x			
B	Are the temperature sensor(s) located so as to monitor warm and cold spots in the vaccine storage zone? [Y, N. Score n/a if any of the rooms do not have fully documented temperature mapping studies - see question E2:02a].				5	Correct location or locations for temperature monitoring sensors should be established by temperature mapping during cold room/freezer room commissioning. Small rooms up to 40 m^3 usually have a single sensor. Larger rooms should have two or more sensors.	x	x			

Notes:

E4:20b	CONDITION: If there are vaccine freezers. Temperature monitoring equipment checklist:	☐					x	x			E
A	If this is a primary store, do all vaccine freezers have working continuous temperature recorders? [Y, N. Score n/a if this is not a primary store - see guidance note].					Computerized temperature monitoring systems in vaccine freezers are essential at primary store level. Note that 30-day refrigerator loggers are not designed to be used in freezers.	x	x			
B	Do all vaccine freezers have a working thermometer stored with the vaccine? [Y, N].				5	All freezers should have a stem or dial thermometer.	x	x			

Notes:

Q no.	EVM QUESTION		Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E4:21b	CONDITION: If there are vaccine refrigerators. Temperature monitoring equipment checklist:	☐					x	x	x	x	E
A	Do all vaccine refrigerators have working continuous temperature recorders or refrigerator loggers? [Y, N].					Computer-connected temperature monitoring systems or 30-day refrigerator loggers are essential at PR, SN and LD levels and are highly recommended at SP level. Freeze indicators are a useful backup but they are single-use devices and they cannot identify when a freezing event occurs.	x	x	x	x	
B	Do all vaccine refrigerators have a working thermometer stored with the vaccine? [Y, N].				5	A stem or dial thermometer provides essential backup in case the continuous monitoring device fails.	x	x	x	x	
Notes:											
E4:22b	CONDITION: If there are cold rooms and/or freezer rooms. Temperature alarm equipment checklist for cold rooms and freezer rooms:	☐				Ideally alarm systems should also have an external flashing light and/or alarm sounder so that security guards are alerted after working hours and an auto-dialler system to alert responsible staff by landline or mobile phone.	x	x			E
A	How many freezer rooms are there?						x	x			
B	How many have functioning alarm systems?						x	x			
C	How many are connected to an auto-dialler system?						x	x			
D	How many cold rooms are there?						x	x			
E	How many have functioning alarm systems?						x	x			
F	How many are connected to an auto-dialler system?				5		x	x			
Notes:											
E4:23b	CONDITION: If there are refrigerators or freezers used for storing vaccine. Centralised temperature alarm equipment checklist:	☐				This question is only applicable at primary level.	x				E
A	How many vaccine refrigerators and vaccine freezers are there?						x				
B	How many have functioning alarm systems?						x				
C	How many are connected to an auto-dialler system?				5		x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
4.3.8	**National telecommunications links (including mobile networks) are sufficient to manage vaccine arrivals, deliveries and other vaccine management issues.**										
E4:24b	Are telecommunications links adequate for the facility and in working order? [Y, N. Score 'N' if there are no links].				5	Telecommunications links include fixed line telephone, fax, mobile telephone and internet. Primary and sub-national stores should have a telephone with fax and/or internet. Mobile telephones are acceptable for lower level facilities provide call costs are paid for by the programme. Radio links may be acceptable at these facilities if there is no other alternative.	x	x	x	x	E
Notes:											
4.4	**Transport and transport containers used to distribute vaccines down to the next level in the cold chain are satisfactory.**										
4.4.1	**The vaccine transport infrastructure is sufficient and reliable.**										
E4:25a	CONDITION: If vaccine transport is directly operated by this store. General vehicle checklist (excludes refrigerated vehicles):	☐				This checklist is written with road vehicles in mind. Some programmes may own and operate boats. If this situation is encountered, evaluate boats using this indicator. If transport is provided by a parastatal or private sector contractor try to inspect their vehicles, especially if refrigerated vehicles are used.	x	x	x		V
A	Is every vehicle, for which the programme is responsible, in good mechanical condition? [Y, N].					Ignore vehicles that are scheduled for disposal.	x	x	x		
B	Does every vehicle, for which the programme is responsible, have its own user logbook? [Y, N].						x	x	x		
C	Does every vehicle, for which the programme is responsible, have an up to date maintenance and service record (including a record of refrigeration unit servicing where applicable)? [Y, N].						x	x	x		
D	Is fuel available throughout the year [Y, N]				5		x	x	x		
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E4:26a	CONDITION: If refrigerated vehicles are used. Refrigerated vehicle checklist.	☐				Check that all vehicles in the fleet comply. Only score an indicator as 'Y' if all vehicles in the fleet have the feature. Most countries will only have refrigerated vehicles at primary level, but some may use them at sub-national level.	x	x			V
A	Are vehicles and refrigeration units in good mechanical condition [Y, N]					Refrigerated vehicles may not be directly operated by the vaccine store. However, they are such a critical element in the supply chain that their specification and condition must be checked, even if they are operated by a parastatal, PPP or 3PL.	x	x			
B	Do the refrigeration units maintain a temperature of +2°C to +8°C? [Y, N].						x	x			
C	Are vehicles equipped with a self-sustained diesel refrigeration unit which can operate when the vehicle's engine is switched off? [Y, N]					An independently powered refrigeration unit ensures that cooling is maintained when the main engine is switched off.	x	x			
D	Do refrigeration units have a standby electrical power system that can be plugged into a mains supply? [Y, N]					Standby electrical power is desirable where there are overnight stops. It is also desirable for smaller vehicles which do not have an independently powered refrigeration unit.	x	x			
E	If any refrigerated compartment is more than 6 metres long, does it have an air ducting system? [Y, N, n/a]					Needed to equalise temperatures in long vehicles.	x	x			
F	Are vehicles equipped with a thermometer which can be read in the driver's cab? [Y, N]					This is a minimum requirement for any refrigerated vehicle.	x	x			
G	Are vehicles equipped with a temperature recorder which can produce hard copy output? [Y, N]					A temperature recorder is essential for larger vehicles and for long distance deliveries.	x	x			
H	Does the store have an electrical socket for the refrigerated vehicle's standby power system? [Y, N]						x	x			
J	Is fuel available throughout the year [Y, N]				5		x	x			

Notes:

4.4.2 Suitable transport containers are provided to protect vaccines during distribution.

E4:27a	Transport container checklist:						x	x	x	x	E
A	Answer ONLY if passive containers are kept at this facility. Do passive containers kept at this level comply with WHO specifications? [Y, N]					Passive containers include cold boxes, vaccine carriers and palletised or roll containers. Identify products by using the PQS or PIS catalogue.	x	x	x	x	
B	Answer ONLY if refrigerated vehicles are used. Are the disposable cartons or reusable crates used to transport vaccine fit for purpose. [Y, N]				1	No standard set. Use judgement to assess quality. Most important is the way in which cartons or crates are packed and restrained.	x	x	x	x	

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E5 Maintenance of buildings, cold chain equipment and vehicles is satisfactory.

5.1 Planned preventive maintenance of buildings, equipment and transport is carried out.

5.1.1 Buildings: A planned preventive maintenance programme is established and there is evidence that the plan is being followed.

E5:01a	Planned preventive maintenance checklist for buildings:					This question is primarily about planned preventive maintenance (PPM). However, it is possible that the building is in good condition because it is being informally maintained. 01:C covers this option.	x	x	x	x	R
A	Is there a written planned preventive maintenance (PPM) programme? [Y, N]					An effective planned preventive maintenance programme for buildings should preferably cover several years into the future and should set target dates for routine maintenance such as re-decoration, electrical safety inspections, fire-extinguisher maintenance, etc. Some countries have annual plans and budgets.	x	x	x	x	
B	Is there documentary evidence that the programme is being followed. [Y, N]					If the score to question A is 'N' then the score for Question B must also be 'N'. PPM activities should be monitored and recorded.	x	x	x	x	
C	Is there visual evidence that maintenance is taking place. [Y, N]				5	If an effective maintenance programme is in place, the building should be in good condition. Indicators of poor building maintenance include broken light bulbs, leaks and damp stains, blocked drains, flaking paintwork, etc. See answers to E4:04a.	x	x	x	x	

Notes:

Q no.	EVM QUESTION		Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
5.1.2	**Equipment: A planned preventive maintenance programme is established and there is evidence that the plan is being followed.**										
E5:02a	CONDITION: If there is refrigeration equipment. Planned preventive maintenance checklist for refrigeration equipment:	☐				In this context, 'planned preventive maintenance' (PPM) is as set out in the cold chain equipment manufacturers' service manuals. Both the need for and the timing of PPM can be foreseen.	x	x	x	x	R
A	Is there a written planned preventive maintenance (PPM) programme. [Y, N]					See E5:01a A guidance.	x	x	x	x	
B	Is there documentary evidence that the programme is being followed. [Y, N]					PPM should be recorded in a maintenance record book or worksheet.	x	x	x	x	
C	Is somebody assigned to carry out routine maintenance [Y, N]					A permanent member of the facility staff must be formally assigned to carry out the tasks below. They should not be left to ancillary staff such as cleaners.	x	x	x	x	
D	Is there evidence that cold rooms/refrigerators/ freezers have recently been cleaned and defrosted? [Y, N]					Check for excessive ice accumulation on evaporator units or the inside lining. Ice accumulation or condensation along the panel joints in cold rooms and freezer rooms is a sign that panel joints are leaking or poorly designed.	x	x	x	x	
E	If kerosene refrigerators are used, is there evidence that the wicks have been trimmed and chimneys cleaned? [Y, N, n/a]					Frequent trimming and replacement of wicks in kerosene refrigerators is absolutely essential. Chimneys also need to be cleaned regularly, especially if kerosene quality is poor.	x	x	x	x	
F	If solar refrigerators are used, are all solar panels clean and completely unshaded by buildings, trees and overhead cables? [Y, N, n/a]					Shading seriously degrades solar panel performance. Shading problems can increase over the years following the original installation as trees grow, new buildings are built and new overhead cables are erected. All solar panels should be cleaned from time to time to maintain efficiency. This is particularly important in dusty areas and in countries where there is snow.	x	x	x	x	
G	If battery powered solar refrigerators are used, is there evidence that the battery electrolyte has been checked recently? [Y, N, n/a]				5	Some flooded batteries are not sealed and require regular checking of electrolyte levels and topping up with battery acid.	x	x	x	x	
Notes:											
5.1.3	**Transport: A routine maintenance and overhaul programme is established and there is evidence that the plan is being followed.**										
E5:03a	CONDITION: If vaccine transport is directly operated by this store. Transport maintenance and overhaul checklist:	☐				This indicator only applies to government-operated vehicles - see E0:04a.A.	x	x	x		R
A	Are vehicles serviced in accordance with the manufacturer's service manual? [Y, N]					The service regime in the manufacturer's service manual must be followed. Vehicle service tasks include changing the engine oil, checking the condition of tyres, replacing the oil filter, replacing the air filter, etc.	x	x	x		
B	Is there documentary evidence that the service manual is being followed. [Y, N]					Documentary evidence' may be a service log book or a stamp in the service manual supplied with the vehicle.	x	x	x		
C	Is there a written planned preventive maintenance programme. [Y, N]					Vehicle preventive maintenance tasks include the dismantling or replacement of major components, such as clutch linings, engines, transmissions, etc. The timing may vary between similar vehicles, but the need can be foreseen.	x	x	x		
D	Is there documentary evidence that the programme is being followed. [Y, N]				1		x	x	x		
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
5.2	**Arrangements are made to carry out prompt repairs in the event of equipment or vehicle breakdown.**										
5.2.1	**Equipment: Arrangements are made to ensure that cold chain equipment is repaired within 4 weeks of breakdown, and the repairs are recorded.**										
E5:04b	CONDITION: If there are cold rooms and/or freezer rooms. Cold room and freezer room refrigeration unit maintenance checklist:	☐				If the cold room or freezer room has standby refrigeration units, count the number of units.	x	x			R
A	How many refrigeration units are there?					Ignore equipment that has been officially decommissioned. Include any equipment that is temporarily switched off because it is not needed. Check that it operates.	x	x			
B	How many were fully operational at the time of inspection?					Check if the unit has been out of operation for more than 7 days. If so, record this in the notes box.	x	x			
C	Of the non-functional units, how many have been out of use for more than four weeks? Describe the reason(s) for this in the notes.				5		x	x			
Notes:											
E5:05b	CONDITION: If vaccine is stored at the facility AND there are refrigerators/freezers. Vaccine refrigerator and vaccine freezer maintenance checklist:	☐				Include all vaccine refrigerators and freezers in the store, unless it is clear that broken units are genuinely being kept for spare parts or disposal.	x	x	x	x	R
A	How many vaccine refrigerators and vaccine freezers are there (all types, including solar)?					Ignore equipment that has been officially decommissioned. Include any equipment that is temporarily switched off because it is not needed. Check that it operates.	x	x	x	x	
B	How many were fully operational at the time of inspection?					Check if the unit has been out of operation for more than 7 days. If so, record this in the notes box. With kerosene units, check that the burner has been assembled correctly.	x	x	x	x	
C	Of the non-functional units, how many have been out of use for more than four weeks? Describe the reason(s) for this in the notes.				5	A delay of four weeks or more for a repair is unacceptable. A well-managed maintenance system, should aim to repair appliances within one week of breakdown.	x	x	x	x	
Notes:											
E5:06b	CONDITION: If there are dedicated ice-pack freezers or cool-pack coolers. Maintenance checklist for equipment used only for freezing ice-packs or cooling cool-packs:	☐				Include all units in the store unless it is clear that broken units are genuinely being kept for spare parts or disposal.	x	x	x	x	R
A	How many ice-pack freezers/cool-pack coolers are there?					Ignore equipment that has been officially decommissioned. Include any equipment that is temporarily switched off because it is not needed. Check that it operates.	x	x	x	x	
B	How many were fully operational at the time of inspection?					Check if the unit has been out of operation for more than 7 days. If so, record this in the notes box.	x	x	x	x	
C	Of the non-functional units, how many have been out of use for more than four weeks? Describe the reason(s) for this in the notes.				5	A delay of four weeks or more for a repair is unacceptable. A well-managed maintenance system, should aim to repair appliances within one week of breakdown.	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
5.2.2	**Transport: Arrangements are made to ensure that planned vaccine distributions are not affected by vehicle breakdown or poor maintenance planning.**										
E5:07a	CONDITION: If vaccine transport is directly operated by this store or by a PPP or 3PL. Transport availability checklist:	☐				As a general rule, under EVM recommendations, distribution vehicles should not be out of operation for more than 7 days. This question helps establish whether transport availability is high or low.	x	x	x		R
A	During the review period, how many vaccine collections, distributions or outreach immunization sessions were planned?					Outreach immunization sessions' in this context means sessions that required a motorcycle, car or 4WD.	x	x	x		
B	How many were cancelled because of mechanical failure in the vehicle fleet?				1	Cancelled' means that the distribution or immunization session did not occur during the planned working week. 'Vehicle' includes motorcycles, cars, 4WD, trucks and small boats. Air and rail links (if used) are assumed to be outside the programme's control.	x	x	x		
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E6 Stock management systems and procedures are effective.

6.1 Standardized recording and reporting of all stock transactions is carried out. Preferably this is computerized at primary level and in all other large stores.

6.1.1 Where a computerized stock control system is used, the software and computer equipment is suitable for the task and well-maintained and staff know how to use the system.

E6:01a	Is a computerized stock control system in use? [Y, N].						x	x	x		Z

Notes:

E6:02a	CONDITION: If computerized stock control is used. Computerized stock control checklist:	☐					x	x	x		E
A	Is the software fit for purpose [Y, N]					Fit for purpose' means that it can handle the full range of vaccines and commodities, has sufficient data capacity for the country's needs, and records the minimum data set listed in E6:04a and E6:05a	x	x	x		
B	Is the software package supported by the software developer [Y, N]						x	x	x		
C	Is there up-to-date anti-virus software on the computer [Y, N]					Anti-virus software is essential.	x	x	x		
D	Has the storekeeper received training in its use [Y, N]						x	x	x		
E	Is the computer suitable for its purpose and in working order? [Y, N].						x	x	x		
F	Is the printer in working order and supplied with paper? [Y, N]						x	x	x		
G	Is the computer equipment connected to the standby generator or to an UPS? [Y, N]					An UPS (Uninterruptible Power Supply) provides back-up for desk-top computers for short periods. Lap-tops/note-books have batteries which provide in-built UPS capability.	x	x	x		
H	Are stock records printed out and filed as a permanent record at least once a month? [Y, N].					Paper records are needed as a backup and for quality assurance and review purposes.	x	x	x		
J	Are stock records backed up at least once a week? [Y, N].				5	Backup should be on a flash drive, secondary hard drive, CD/DVD or on a secure web-based backup site. Ideally the device should be kept off site.	x	x	x		

Notes:

6.1.2 All stock transactions are recorded in the stock records by the end of the working day.

E6:03a	Are all vaccine arrivals and vaccine dispatches recorded and stock balances updated within one working day of the transaction? [Y, N].				5	The practice of batch processing arrival and delivery slips should be discouraged because it leads to out of date stock records.	x	x	x	x	M

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
6.1.3	**Arrival: Incoming vaccines, diluents, and other consumables are accurately recorded.**										
E6:04a	Do the stock records record the following information for all vaccines:					The stock recording system may be paper-based or computerized. If diluents are packed with the vaccine, they need not be recorded separately.	x	x	x	x	M
A	Type of vaccine [Y, N]						x	x	x	x	
B	Vaccine presentation (vial size) [Y, N]						x	x	x	x	
C	Quantity received in doses [Y, N]						x	x	x	x	
D	Vaccine manufacturer [Y, N]						x	x	x	x	
E	Manufacturing batch or lot number [Y, N]						x	x	x	x	
F	Expiry date of each vaccine batch [Y, N]						x	x	x	x	
G	VVM status where applicable [Y, N, n/a]						x	x	x	x	
H	Location in the store [Y, N, n/a]				5	A record of location in the store is essential at primary level and in larger sub-national stores. It is not necessary in small sub-national stores and at health facility level.	x	x	x	x	
Notes:											
E6:05a	Do the stock records record the following information for all diluents that are packed separately from the vaccine to which they belong:					The stock recording system may be paper-based or computerized. If diluents are packed with the vaccine, they need not be recorded separately.	x	x	x	x	M
A	Type of diluent [Y, N]						x	x	x	x	
B	Diluent presentation (vial size) [Y, N]						x	x	x	x	
C	Quantity received in doses [Y, N]						x	x	x	x	
D	Diluent manufacturer [Y, N]						x	x	x	x	
E	Manufacturing batch or lot number [Y, N]						x	x	x	x	
F	Expiry date of each batch [Y, N]						x	x	x	x	
G	Location in the store [Y, N, n/a]				5	A record of location in the store is essential at primary level and in larger sub-national stores. It is not necessary in small sub-national stores and in health facilities	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
6.1.4	**Distributions: An effective system for receiving, checking and reporting on distributions is established.**										
E6:06a	Does the programme prepare routine reports on internal vaccine distributions, and do these reports summarise the details of each and every transaction? [Y, N].				1	These should be monthly or quarterly depending upon the distribution frequency.	x	x			M
Notes:											
E6:07a	Are vaccine requisition forms used for ordering and receiving vaccine? [Y, N].				1	See model SOP on requisitioning for guidance on good practice. Assess content of existing form(s) against the content of the model forms.	x	x	x	x	M
Notes:											
6.1.5	**Dispatch: A pre-delivery or pre-collection notification system is established.**										
E6:08b	Pre-delivery/pre-collection notification system checklist:					Effective' means that the system is understood and used by the receiving stores and that deliveries or collections are reliably made on or near a day that has been arranged well in advance.	x	x	x	x	M
A	Is there a formal advanced notification process to advise receiving stores of the time of vaccine delivery/collection [Y, N]					Advanced notification should be received at least 24 hours before the expected time of arrival of the delivery.	x	x	x	x	
B	Is the notification process followed? [Y, N]				1		x	x	x	x	
Notes:											
6.1.6	**Dispatch: Vaccines, diluents and other date-limited products are issued and used in Earliest Expiry - First Out (EEFO) order.**										
E6:09a	Do stock records and/or stock in hand demonstrate that vaccine is issued according to the 'earliest-expiry-first-out' (EEFO) principle? [Y, N].				1	Unless VVMs on later-dated stock show Stage 2 exposure, vaccines should always be issued in EEFO order. Health worker use of EEFO is covered in E8. In PR, SN and LD stores, the stock records should contain the data needed to demonstrate compliance. Otherwise physically check the stock.	x	x	x		M
Notes:											
E6:10a	Can the storekeeper make exceptions to the EEFO rule (e.g. because of VVM status)? [Y, N].				1	If VVMs on later-dated stock show Stage 2 exposure whilst early-dated stock is still at Stage 1, the heat-exposed later-dated stock should generally be issued first.	x	x	x	x	M
Notes:											
6.1.7	**Dispatch: Issue vouchers are completed for all vaccines and consumables that leave the store. Quantities of outgoing stock are recorded in the stock records.**										
E6:11a	Based on a representative sample, does the issuing store have a completed issue voucher for every delivery sent out during the review period ? [Y, N].				5	Select a complete set of issue vouchers for one distribution period. There are unlikely to be any legitimate reasons for missing issue vouchers.	x	x			M
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E6:12a	Do the vaccine quantities recorded on the sampled issue vouchers consistently match the relevant entries in the stock records? [Y, N].				5	Use the same sample as for E6:11a and check the issue vouchers against entries in the stock records. If the answer to E6:11a is 'N', enter 'N'.	x	x			M

Notes:

6.1.8 Arrival: The issuing store ensures that all receiving stores carry out arrival checks, complete the arrival sections of all issue vouchers, and return the arrival sections to the issuing store.

E6:13a	Does the store have a completed arrival voucher from the receiving store for every delivery which took place during the review period? [Y, N].				1	The store being assessed is the issuing store. Use judgement. If the review period has just ended, the arrival slip for recent deliveries may not yet have been received by the issuing store. There may be other legitimate reasons for missing forms. The important point is that the incoming goods must be checked and the form must be signed by the receiving store. The issuing store should ensure that the receiving store carry out the checks.	x	x	x		M

Notes:

E6:14a	Does a representative sample of these completed arrival vouchers indicate that arrival checks were carried out correctly by the receiving store? [Y, N].				1	The store being assessed is the issuing store. As with temperature records, suspiciously 'correct' forms may conceal lax practices. If vaccines are put in quarantine for any reason, these vaccines should be ignored.	x	x	x		M

Notes:

6.1.9 Disposal: Damaged or expired stock is disposed of in accordance with standard procedures.

E6:15b	CONDITION: If vaccine is stored at the facility. Checklist for management of damaged or expired stock:	☐				Question does not apply if there is no refrigerated storage at the facility. For example, at health facilities using cold boxes and vaccine carriers.	x	x	x	x	M
A	Is the stock control system designed to record vaccine and diluent wastage in unopened vials due to expiry, freezing or heat-exposure? [Y, N]					If vaccine has to be discarded, any associated diluent must also be discarded. Failure to do this can lead to a stockpile of 'orphaned' diluent.	x	x	x	x	
B	SP LEVEL ONLY: Is the stock control system designed to record vaccine and diluent wastage in opened vials? [Y, N]					If the stock records show that there have been no losses during the review period, ask the storekeeper to confirm whether or not this is true.	x	x	x	x	
C	If the stock control system records wastage in unopened and/or opened vials, do the records and other on-site evidence show that the system is being used? [Y, N]					If vaccine is lost, the storekeeper may suffer personal penalties unless the country operates a 'no blame' policy. For this reason, honest reporting may not take place. Carefully check the stock inside and outside the cold chain equipment to see if there are containers with discarded vials. Also use the temperature records to see if there have been long periods of excessively low or high temperature - see E2. Are any waste reports to Government found for the last five years?	x	x	x	x	
D	Do staff know that expired and damaged vaccine should be clearly labelled and stored out of the cold chain until final disposal? [Y, N]				5	Damaged vaccine must be clearly labelled and stored outside the cold chain to prevent it being issued in error.	x	x	x	x	

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E6:16a	CONDITION: If there is a functioning system for recording damaged or expired vaccine. Select a freeze-sensitive vaccine. Establish how many doses have been discarded during the review period due to freezing or exposure to high temperature.	☐				Carry out this check even if the storekeeper reports that no vaccine has been lost. A score of 5 is only achieved if the percentage of vaccine lost is no more than 1% of the doses issued during the review period. Exposure to freezing must have been confirmed by a shake test. Exposure to high temperature must have been confirmed by VVM colour changes.	x	x	x	x	M
A	Enter choice of vaccine:						x	x	x	x	
B	Record number of doses of chosen vaccine issued during the review period.						x	x	x	x	
C	Record number of doses of chosen vaccine discarded because of incorrect storage temperatures.				5	This indicator can only be assessed if stock records are accurate, informative and truthful. If there is no method to record vaccine damage, the score is 0.	x	x	x	x	
Notes:											
E6:17a	Are disposal facilities and procedures in accordance with WHO and/or national norms? [Y, N].				1	Refer to Guidelines for Safe Disposal of Unwanted Pharmaceuticals in and after Emergencies. WHO/EDM/PAR/99.2	x	x	x	x	M
Notes:											
E6:18a	Have records of discarded vaccine been kept for at least three years, or, if for a lesser period, since the immunization programme adopted the EVSM or EVM? [Y, N]				1		x	x	x	x	M
Notes:											
E6:19a	Are internal reviews of the vaccine loss/damage records carried out at least twice a year? [Y, N]				5		x	x	x	x	M
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
6.2	**Stocks of vaccines and consumables are maintained between the safety stock level and the maximum stock level.**										
6.2.1	**A maximum stock level, a reorder level and a safety stock level are established for each vaccine and for each consumable.**										
E6:20b	CONDITION: If vaccine is stored at the facility. Assess stock level policy:	☐				Use the stock records to assess whether the store held excessive and/or insufficient stock during the review period.	x	x	x	x	M
A	Is a maximum stock level set for each vaccine and commodity? [Y, N]					A maximum stock level should be set to control over-stocking. Overstocking makes store management difficult and increases the risk of expiry.	x	x	x	x	
B	Is a reorder level set for each vaccine and commodity? [Y, N]					A reorder level is needed to take account of delivery lead-time so that safety stocks are not breached.	x	x	x	x	
C	Is a safety (minimum) stock level set for each vaccine and commodity? [Y, N]					A safety stock level needs to be set to reduce the risk of stockouts.	x	x	x	x	
D	Can responsible staff explain the concepts of maximum stock, safety stock and reorder level? [Y. N]						x	x	x	x	
E	If a maximum stock level is set for DTP containing vaccine, did the stock of this vaccine remain below the maximum level throughout the review period? [Y, N]					Note: This calculation CANNOT be done unless a maximum stock level has been set. You may use Worksheet B in the EVM Assistant. The calculation includes an addition of 10% to the store's defined maximum stock level to allow for supply fluctuations.	x	x	x	x	
F	If a minimum stock level is set for DTP containing vaccine, did the stock of this vaccine remain above the minimum level throughout the review period? [Y, N]				5	Note: This calculation CANNOT be done unless a minimum stock level has been set. You may use Worksheet B in the EVM Assistant. The calculation includes a deduction of 10% from the store's defined minimum stock level to allow for supply fluctuations.	x	x	x	x	
Notes:											
6.2.2	**Annual vaccine supply is sufficient to meet forecasted demand.**										
E6:21a	CONDITION: If vaccine is stored at the facility. Assess adequacy of annual supply of DTP containing vaccine:	☐				Use the stock records to assess whether the annual supply of DTP containing vaccine was sufficient to meet forecasted demand.	x	x	x	x	M
A	What is the forecasted demand (doses) for DTP containing vaccine for the review period?					The forecasted demand may be found in the facility annual plan. The national immunization programme determines the forecasting method.	x	x	x	x	
B	What is the total quantity (doses) of DTP containing vaccine received during the review period?				5	The total quantity of vaccine received is adequate if it is equal to or greater than the forecasted demand.	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
6.3	**Periodic physical inventories are conducted.**										
6.3.1	**A physical inventory of vaccine, diluent and dropper stocks is carried out at least once every three months at primary level, and at least equal to the planned supply frequency at lower levels.**										
E6:22a	CONDITION: If vaccine is stored at the facility. Physical inventory frequency checklist:	☐				Question does not apply if there is no refrigerated storage at the facility. For example, at health facilities using cold boxes and vaccine carriers.	x	x	x	x	M
A	Enter the planned vaccine supply period, in months						x	x	x	x	
B	Enter number of recorded physical counts of vaccine stocks carried out during the 12 month review period				5	All stores should carry out a physical count at least 4 times a year. Lower level stores and health facilities should carry out a count at the time of each incoming delivery (for Push systems) or at the time of each order request (for Pull systems).	x	x	x	x	
Notes:											
E6:23b	CONDITION: If vaccine is stored at the facility. Choose a sample freeze-dried vaccine and diluent.	☐				This question does not apply if there is no refrigerated storage at the facility. For example, at health facilities using cold boxes and vaccine carriers. The following checks are carried out:	x	x	x	x	M
A	Enter choice of vaccine:						x	x	x	x	
B	Carry out a physical count of the sample vaccine. Enter number of doses counted:					At service point level it is useful and generally easy to count and record all vaccines and diluents. These data can be used to demonstrate how well-balanced stocks are at the point of use.	x	x	x	x	
C	Carry out a physical count of the sample diluent. Enter number of doses counted:					1) DO NOT count vaccine at or beyond the VVM discard point. If the adjusted vaccine count differs from the diluent count by >±1% a 'Mismatch' message appears. Otherwise a 'Match' message appears.	x	x	x	x	
D	Check stock records for sample vaccine. Enter number of doses recorded as currently in stock:					2) If the vaccine stock records = the vaccine count an '=' sign appears. If they are different, the warning 'Not =' appears.	x	x	x	x	
E	Check stock records for sample diluent. Enter number of doses recorded as currently in stock:					3) If the diluent stock records = the diluent count an '=' sign appears. If they are different, the warning 'Not =' appears.	x	x	x	x	
F	How many doses are at the VVM discard point or beyond?					Discard point': When the inner square matches, or is darker than, the colour of the outer circle. Adjust score downwards if you find examples in your sample.	x	x	x	x	
G	Scoring: Score 4 if stock count and records match exactly AND vaccine and diluent quantities are within 1% of one another AND no VVMs are at the discard point (see results). Use your judgement to adjust the score between 0 and 4.				5	Scoring: Ideally, the physical count and the stock records should always match at the end of the working day. However, there may be discrepancies during the day if the stock records are not updated immediately; check with the storekeeper. There are legitimate reasons why diluent quantities may differ from vaccine quantities. One of these is that vaccine manufacturers sometimes over-supply diluent. Therefore, if there is slightly more diluent than vaccine, there may be no problem. If there is much more, or much less diluent, than vaccine, there must be a problem.	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
6.3.2	**A physical inventory of consumables (AD syringes, safety boxes, consumables, spare parts, etc.) is carried out at least once every three months at primary level, and at least equal to the supply**										
E6:24a	CONDITION: If consumables are held in this store. Choose a sample consumable. Enter it in the box below :	☐					x	x	x	x	M
A	Enter choice of consumable:						x	x	x	x	
B	Carry out a physical count of the sample consumable. Enter number of items counted:						x	x	x	x	
C	Check stock records for sample consumable. Enter number of items recorded as currently in stock:						x	x	x	x	
D	Scoring: Score 4 if stock count and records match exactly. Use your judgement to adjust the score between 4 and 0 for mismatches.				1	Scoring: See notes to E6:23a.	x	x	x	x	
Notes:											
6.4	**Good warehousing practices are followed.**										
6.4.1	**Storage: All vaccines, diluents and droppers are stored securely and correctly in the vaccine store.**										
E6:25a	CONDITION: If vaccine is stored at the facility. Checklist for vaccine storage arrangements:	☐				Question does not apply if there is no refrigerated storage at the facility. For example, at health facilities using cold boxes and vaccine carriers.	x	x	x	x	M
A	Is the vaccine stock secure? [Y, N]						x	x	x	x	
B	Are contents labels fixed to all cold chain equipment indicating vaccine type, lot no. and expiry date [Y, N, n/a].					Check for labels on the lid of refrigerators and freezers, or on the edge of the shelves in freezer rooms and cold rooms. Score 'n/a' where labelling is not needed. Labels are not required at health facility level unless there are several refrigerators.	x	x	x	x	
C	Are vaccines correctly stored? [Y, N].					No freeze-sensitive vaccines stored close to cold room evaporators, stored close to the ice lining in ILRs or stored close to the evaporator plate of service point refrigerators. No vaccines should be kept in the door shelves of domestic refrigerators.	x	x	x	x	
D	Is vaccine laid out in in EEFO order, by type and by lot number? [Y, N]					Ask which vaccines of a particular type are going to be picked first and check whether these items have the shortest expiry date.	x	x	x	x	
E	Is the vaccine store clean, dry and pest-free? [Y, N]				1		x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
6.4.2	**Storage: All syringes and safety boxes are stored securely and correctly in the dry store.**										
E6:26a	CONDITION: If consumables are held in this store. Checklist for dry storage arrangements:	☐					x	x	x	x	M
A	Are dry goods secure? [Y, N]						x	x	x	x	
B	Are dry goods correctly stored? [Y, N].					Correct' means that stocks should be neatly stacked on pallets so that they are accessible and are not affected by floor washing.	x	x	x	x	
C	Are dry goods laid out in an orderly fashion and in EEFO order where applicable? [Y, N]					Syringes have expiry dates and must therefore be organised in EEFO order. Ask which stock is going to be picked first and check whether these items have the shortest expiry date.	x	x	x	x	
D	Is the dry store clean, dry and pest-free? [Y, N]				1		x	x	x	x	
Notes:											
6.4.3	**Data security: All records are secure.**										
E6:27a	Are the records secure? [Y, N]				1	Records should be stored in lockable filing cabinets.	x	x	x	x	M
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E7 Distribution between each level in the supply chain is effective.

7.1 Distribution reports demonstrate compliance with the planned delivery schedule.

7.1.1 A programme for the distribution of vaccine from the issuing store to the each receiving store is maintained. The programme is flexible enough to accommodate variations in demand from the r

E7:01a	During the review period, did the store have a formally communicated vaccine distribution system in place? [Y, N]				5	Throughout this section, the issuing store is the store which is being assessed. Vaccine distribution should follow a clearly defined system, and the system should be communicated to all receiving stores.	x	x	x		M
Notes:											
E7:02b	CONDITION: If a formally communicated vaccine distribution system was in place. Assess actual deliveries/collections against the programme:	☐				Scoring: Actual deliveries should be between 80% and 120% of planned deliveries. The score is then modified by the number that took place during the week planned. If there is no formally communicated vaccine distribution system in place, score 0.	x	x	x		M
A	Enter number of deliveries/collections (to all receiving stores) that were scheduled during the review period?						x	x	x		
B	Record the number of deliveries/collections made during the review period.						x	x	x		
C	Record the number of deliveries/collections that took place within a week of the date scheduled.				1		x	x	x		
Notes:											

7.1.2 An effective reporting system which monitors actual vaccine distributions and compares these with anticipated distributions is established.

E7:04a	CONDITION: If a formally communicated vaccine diustribution system was in place. During the review period, was there a reporting system which monitored actual vaccine distributions and compared these with planned distributions? [Y, N]	☐			1		x	x	x		M
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
7.2	**A system for managing short shipments is in place.**										
7.2.1	**An effective system for managing short shipments to receiving stores is established.**										
E7:05b	Assess number of short shipments issued during the review period and check if they were followed up and corrected.					A 'short shipment' occurs when the supplying store does not have sufficient vaccine to meet the legitimate requirements of a receiving store. Note that if the receiving store over-orders vaccine, the supplying store may adjust the quantity supplied to a lower figure based on evidence of past consumption. This is NOT a 'short shipment'.	x	x	x		M
A	Record number of short shipments issued in the review period (each vaccine for which there was a short shipment counts as 1).					Compare requisition quantities with actual delivery quantities. Question the storekeeper on the actions s/he has taken to reduce the impact of short shipments when they occur.	x	x	x		
B	Record number of short shipments which were corrected before the arrival of the next scheduled delivery.				1	This is a measure of the effectiveness of short shipment management. If the shortfall is not made up by the time of the next scheduled delivery, there is a high risk of a stockout occurring.	x	x	x		
Notes:											
7.3	**Vaccines are correctly packed for transport, either in passive containers or in refrigerated vehicles.**										
7.3.1	**Vaccine is properly packed in passive containers which have a cold-life (or in cold climates, a warm-life) sufficient for the longest expected journey.**										
E7:06a	CONDITION: If cold boxes or other passive containers are used. Assess knowledge of coolant preparation and packing of cold boxes, vaccine carriers and other passive containers:	☐				Ask whether a systematic temperature monitoring, or journey profiling, study has been carried out. Coolant preparation includes ice-pack conditioning, preparation of cool-packs/PCM-packs and preparation of special coolant-packs for palletized or wheeled passive containers.	x	x	x	x	T
A	Do staff carry out ice-pack conditioning or cool-pack preparation is in accordance with WHO guidelines? [Y, N]					For palletized or wheeled containers, follow the manufacturer's instructions.	x	x	x	x	
B	Is packing in accordance with appliance labelling or SOP? [Y, N]				5	Cold boxes, vaccine carriers and other passive containers are designed to suit a particular size of coolant-pack. Sometimes the correct size is not available. In such circumstances it is essential that store staff know what to do.	x	x	x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
7.3.2	**Vaccine is packed into refrigerated vehicles in accordance with the standard operating procedure for the vehicle.**										
E7:07a	CONDITION: If refrigerated vehicles are used. Assess knowledge of refrigerated vehicle packing.	☐				Refrigerated vehicles must be packed so that temperature distribution remains even throughout the load. In addition, the load must be correctly tied down to prevent damage on bumpy roads.	x	x			T
A	Is the refrigerated vehicle pre-cooled before loading [Y, N]					It is essential that refrigerated vehicles are pre-cooled before packing.	x	x			
B	Is there an SOP showing how the vehicle(s) should be packed? [Y, N]						x	x			
C	Is packing carried out in accordance with the SOP? [Y, N]				5		x	x			
Notes:											
E7:08a	Cold climates only. Do staff know how to prevent vaccine freezing during transport? [Y, N, n/a].				5	Refer to SOP on freeze prevention for details.	x	x	x	x	T
Notes:											
7.4	**Freeze indicators and VVMs are used correctly to monitor the quality of the distribution system, and data is recorded.**										
7.4.1	**Dispatch: If a freezing risk exists, freeze indicators are inserted into every shipment of freeze-sensitive vaccine sent from the issuing store to the receiving stores.**										
E7:09a	Are freeze indicators required for the transport of freeze-sensitive vaccines? [Y, N]					Freeze indicators are NOT required if cool-packs or PCM-packs are always used in passive containers and there is no risk of freezing in winter months. Freeze indicators MAY be required when vaccine is transported in refrigerated vehicles with poor temperature control or limited monitoring equipment. Freeze indicators ARE required when freeze-sensitive vaccines are packed with frozen ice-packs, even if these have been conditioned. They are also recommended in very cold climates where warm-packs are needed to prevent vaccine freezing during transport. Cool-packs should be kept for at least 24 hrs at a temperature between +2°C and +8°C. PCM-packs must be prepared as instructed by the PCM-pack manufacturer.	x	x	x	x	Z
Notes:											
E7:10a	CONDITION: If freeze indicators are required. Were freeze indicators packed with deliveries of freeze-sensitive vaccines during the review period? Scoring: Score on a scale of 0-4 where 4 indicates that freeze indicators were used on all deliveries and 0 indicates that they were never used.	☐			5	If freeze indicators are used, there must be an effective zero-reporting system to record the state of the freeze indicator on arrival at the receiving store. Scoring: Score on a scale of 0-4 where 4 indicates that freeze indicators were used on all deliveries, 3 indicates that they were used on more than 2/3rds of deliveries, 2 indicates that they were used on 1/3rd to 2/3rds of deliveries, 1 indicates that they were used on less that 1/3rd of deliveries, and 0 indicates they were not used on any deliveries.	x	x	x	x	M
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
7.4.2	**Arrival: The receiving store returns the arrival section of the issue voucher and records VVM and freeze indicator status (where applicable) at the time of arrival.**										
E7:11a	Select a one month sample of issue vouchers.					The store being assessed is the receiving store. If no system is in place, leave all cells blank. The score will be zero. Note absence of system in notes box.	x	x	x		M
A	How many vouchers were issued by the issuing store?						x	x	x		
B	How many arrival sections of the sampled issue vouchers have been returned to the issuing store?						x	x	x		
C	How many of the returned arrival sections record VVM status? (If vaccines do not have VVMs enter n/a)						x	x	x		
D	Answer ONLY if freeze indicators are required. How many of the returned arrival sections record freeze indicator status?				1	Scoring algorithm ensures that only returned and fully completed vouchers count towards the score.	x	x	x		
Notes:											
7.5	**In case of cold chain failure during distribution, damage is reported and effective action taken.**										
7.5.2	**There is a contingency plan designed to deal with foreseeable emergencies on each and every distribution route.**										
E7:13a	CONDITION: If vaccine transport is directly operated by this store. Distribution contingency planning checklist:	☐				Transport contingency plans are context-specific, but should include the following minimum elements: 1) Identify the general sources of risk (e.g. vehicle breakdown, refrigeration unit failure, lack of fuel).	x	x			M
A	Is there a written transport contingency plan which describes how to deal with emergencies during distribution? Preferably there should be a plan for each distribution route. [Y, N].					2) Identify specific risks on each route (e.g. poor roads, flooded roads, snow and ice, security risks). 3) Prepare a written plan for each route giving relevant contact details, location of emergency cold stores, sources of ice, etc.	x	x			
B	Do drivers have a radio or mobile phone to contact the supplying store and/or the receiving store during transit? [Y, N].					4) Provide each driver with a plan for the routes he covers. 5) Ensure that the information in each plan is kept up to date.	x	x			
C	Does any member of the vehicle crew know what to do in the event of an emergency? [Y, N].				5	6) Ensure that all drivers know that the universal safe storage temperature for ALL vaccines in an emergency is +2°C to +8°C.	x	x			
Notes:											
E7:14a	Outreach activity checklist:								x	x	M
A	Is there a written outreach programme? [Y, N, n/a if there are no outreach activities at the site]					Date and destination of all outreach activities should be recorded. This information can be compared with the programme.			x	x	
B	How many outreach activities were planned in the review period?								x	x	
C	How many of these planned activities took place?				1				x	x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E8 Appropriate vaccine management policies are adopted and implemented.

8.1 Knowledge of vaccine handling is good.

8.1.2 Knowledge of the shake test is good.

E8:01a	CONDITION: If vaccine is stored at the facility. Assess knowledge of the shake test:	☐				This question is not applicable at health facility level in situations where there is no refrigerator	x	x	x	x	T
A	Does the storekeeper or health worker know how to conduct the shake test? [Y, N]					Check knowledge against the Shake test learning guide	x	x	x	x	
B	Does the storekeeper or health worker know when to conduct the shake test? [Y, N]					Check knowledge against the Shake test learning guide	x	x	x	x	
C	Has the storekeeper of health worker carried out a shake test in the last 12 months? [Y, N. Score n/a if there were no events that required a shake test]				5	Only score n/a if you are sure that there were no events in the review period that required a shake test.	x	x	x	x	

Notes:

8.1.3 Health workers use the correct diluent with each freeze-dried vaccine (i.e. same manufacturer and same number of doses as the vaccine).

E8:02b	Use of freeze-dried vaccines and their diluents during immunization sessions. Is the correct diluent always used to reconstitute freeze-dried vaccines? [Y, N].				5	If direct observation during an immunization session is not possible, ask the health worker to show you which vaccine belongs to which diluent. Ask what s/he would do if there was vaccine without diluent. If s/he says that s/he would use diluent from another type of vaccine, this is wrong. Recording of diluent and vaccine lot numbers and matching of diluent and vaccine quantities during storage is covered in E6.				x	T

Notes:

8.1.4 Diluents for immunization sessions are stored and used at the correct temperature (cooled to 2-8°C before and during use).

E8:03b	Diluent management practices at the health facility. Are diluents always kept in the cold chain before and during every immunization session? [Y, N].				5	If direct observation of this practice is not possible, ask the health worker where diluents are kept before and during immunization sessions.				x	T

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
8.1.5	**Opened vials of freeze-dried vaccines are discarded at the end of the session.**										
E8:04b	Discarding opened vials of freeze-dried vaccines at the end of the session. Are opened vials of freeze-dried vaccines discarded within the period stated in the national immunization policy? [Y, N].				5	WHO recommendation is within six hours of reconstitution, or at the end of each immunization session, whichever comes first. National guidance may allow fewer hours, but never more. If direct observation of this practice is not possible, ask the health worker when opened vials of freeze-dried vaccine are discarded, and compare the response to the national policy.				x	T
Notes:											
8.2	**VVM knowledge and practice is good.**										
8.2.1	**The VVM policy is correctly implemented by national EPI.**										
E8:05a	Are written instructions on the use of VVMs, such as posters and stickers, available to storekeepers and health workers? [Y, N, n/a. Score n/a if VVMs are not used.]				1		x	x	x	x	M
Notes:											
E8:06a	Do storekeepers/health workers know how to read VVMs? [Y, N, n/a. Score n/a if VVMs are not used.]				5	Use dummy VVMs and/or sticker samples to check knowledge. To score 'Y', all those responsible in the facility must know that vaccines at or beyond the discard point must not be used (inner square as dark as or darker than the outer circle) and also that vaccines with VVMs closest to the discard point must be used first.	x	x	x	x	T
Notes:											
E8:07a	Are the VVMs on all vaccines in the health facility refrigerator, cold box or vaccine carrier before the discard point? [Y, N, n/a. Score n/a if VVMs are not used.]				5					x	M
Notes:											
E8:08a	Do store keepers/health workers use VVM status for vaccine management purposes (e.g. do they use Stage 2 vaccines first)? [Y, N, n/a. Score n/a if VVMs are not used.]				5	Check health worker knowledge using the following method. Sample 1: a stage 1 VVM on an short expiry date vial; Sample 2: a stage 2 VVM on a long expiry date vial. Ask which one should be used first. The correct answer is Sample 2.	x	x	x	x	M
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
8.3	**If adopted, MDVP knowledge and practice are good.**										
8.3.1	**The MDVP is correctly implemented by national EPI.**										
E8:09a	Has the MDVP been adopted? [Y, N].					Verify this by inspecting written instructions. Adoption of MDVP is a national decision and some countries choose not to do so. Others may modify WHO guidance. For example, five days maximum after opening is a rule used by some. In this example, keeping for up to 5 days is correct; keeping for more than 5 days is incorrect, even though WHO guidance allows up to 28 days.				x	Z
Notes:											
E8:10a	CONDITION: If MDVP has been adopted. Can health workers explain how to apply the MDVP? [Y, N].	☐			5	See previous note. The health worker should be able to explain national policy on MDVP.				x	T
Notes:											
E8:11b	CONDITION: If MDVP has been adopted.	☐				Ask health workers to show which opened vials they will use for the next session and verify this information through immunization records.				x	M
A	Are there opened vials of liquid vaccine in the refrigerator? [Y, N].									x	
B	If there are opened vials in the refrigerator, are they all marked with the dates of opening? [Y, N].					Date of original opening should be marked on the vial.				x	
C	If there are opened vials marked with the dates of opening, are the dates all no more than 28 days before today's date? [Y, N].				5	Check that no opened vials have been kept for longer than the period stated in national policy, or 28 days if WHO guidance is followed.				x	
Notes:											
8.4	**Vaccine wastage data are collected and monitored at all levels.**										
8.4.1	**There is a vaccine wastage monitoring system.**										
E8:12b	Do immunization reports and/or other standard reporting forms contain data that can be used to calculate the vaccine wastage at the facility? [Y, N]				1	At national level this question should be addressed to the EPI Manager. At lower level stores wastage rates may not be calculated. However, the information needed for the calculation should be collected and reported up the supply chain. For example, number of children immunized, doses used and doses lost, destroyed or expired.	x	x	x	x	M
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
8.4.2	**When vaccines are ordered, wastage rate information is used to establish the quantities required.**										
E8:13b	Wastage calculation checklist:					At national level this question should be addressed to the EPI Manager.	x	x	x	x	M
A	Can the storekeeper/health worker at PR, SN, LD and SP levels correctly explain the main types of unopened vial wastage? At SP level, can the health worker also explain the main types of opened vial wastage? [Y, N]					Unopened vial wastage': PR, SN, LD and SP: Expiry; VVM exposure; Freezing; Breakage; Theft or missing inventory. SP only: Unopened vials returned from outreach. 'Opened vial wastage': SP only: Discard at end of session; Incorrect reconstitution; Suspected contamination (e.g. opened vial submerged in water); Patient reaction requiring more than one dose.	x	x	x	x	
B	Can the responsible person explain how the wastage rate is calculated? [Y, N]					The assessor needs to understand the correct calculation method for PR, SN and LD levels and the correct method of calculation at SP level. Refer to the formulae in paragraphs 2.2 and 2.3 of the following reference document.	x	x	x	x	
C	For the review period, is there a complete set of wastage rate data or a complete set of data that can be used for calculating wastage rates? [Y, N]					http://whqlibdoc.who.int/hq/2003/WHO_V&B_03.18.pdf	x	x	x	x	
D	If there is a complete set of data, is there evidence that the data are used to monitor vaccine management performance? [Y, N, n/a]				5	Score n/a if the facility collects the data to calculate wastage, but is not directly responsible for wastage rate calculations.	x	x	x	x	
Notes:											
8.5	**There is an effective system for disposal of sharps and vials.**										
8.5.1	**Used syringes and vials are safely disposed of.**										
E8:15b	Syringe and vial disposal checklist:									x	M
A	Is there a sufficient number of safety boxes (or containers for de-fanged syringes and cut needles) in stock? [Y, N]					There should be a sufficient number of safety boxes in stock to last until the next scheduled delivery. If needle cutters are used, there should be a sufficient number of suitable containers for cut needles and de-fanged syringes.				x	
B	If safety boxes are used, is there an assembled safety box in the immunization room? [Y, N, n/a. Answer n/a if safety boxes are not used]					Check if a box is in place in the immunization room and if it contains used syringes.				x	
C	Is there an effective waste segregation system? [Y, N]					Filled safety boxes (or needle containers) and used vials must be stored in a safe place pending final disposal.				x	
D	Is there a safe method of waste disposal, either on-site or off-site [Y, N]					Safe methods' include high temperature incineration, steam sterilization or scheduled removal from site to properly regulated disposal facility. Burial on site in a securely fenced off pit is acceptable only if well-controlled.				x	
E	Is the site compound free of used syringes, needles and vials [Y, N]					Walk round the compound and check for used syringes, needles and vials.				x	
F	If there is a high temperature on-site incinerator or a waste sterilizer, is it fitted with a working temperature indicator? [Y, N, n/a]				5	High temperature' means operation between 650°C and 1,200°C. Burning in an uncontrolled low temperature incinerator or a pit is never acceptable.				x	
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E8:16b	National level waste management checklist:						x				M
A	Has a waste management assessment been carried out? [Y, N]					http://www.who.int/water_sanitation_health/medicalwaste/hcwmtool/en/index.html	x				
B	Has a waste management plan been implemented? [Y, N]				1		x				

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat

E9 Information systems and supportive management functions are satisfactory.

9.1 Standard operating procedures are in place.

9.1.1 Standard operating procedures are presented in a form which can be easily understood by all staff who carry out the procedures.

E9:01a	Is there a Standard Operating Procedures (SOP) manual? [Y, N].						x	x	x		Z
Notes:											
E9:02b	CONDITION: If there is an SOP manual.	☐				Question for EPI manager. Where training materials exist, but there are no SOPs, assess the training materials in their own right. Training materials should cover all the key issues outlined in the EVM guidelines.	x				M
A	Do the individual SOPs cover the key requirements in the nine EVM criteria? [Y, N]					Check SOPs against the list of EVM Model SOPs which are organized by criteria.	x				
B	Are the SOPs written specifically in the context of national procedures and the national supply chain infrastructure? [Y, N]					SOPs which have been copied directly from another setting are unlikely to be useful.	x				
C	Are the SOPs written in an official government language? [Y, N]				5	SOPs are only useful if staff can read and understand them.	x				
Notes:											

9.1.2 Every cold store facility has a copy of relevant standard operating procedures.

E9:03b	CONDITION: If there is an SOP manual.	☐				Question for EPI manager. Where training materials exist, but there are no SOPs, assess the training materials in their own right. Training materials should cover all the key issues outlined in the EVM guidelines.	x				M
A	Is a qualified member of staff assigned to writing and managing SOPs? [Y, N]					Qualified' means that the assigned person has received SOP training or has expertise in writing technical guidance material.	x				
B	Is there a formal change control system for updating SOPs? [Y, N]					All new SOPs and all significant revisions must be peer reviewed and approved by a nominated senior manager before release.	x				
C	Is there an up to date recording system for the circulation of new and revised SOP and the withdrawal of those that are out of date? [Y, N]				1	It is essential that issue and withdrawal of SOPs is documented.	x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E9:04b	CONDITION: If there is an SOP manual.	☐					x	x	x		M
A	Does the facility have an up-to-date set of relevant SOPs? [Y, N]					Check that relevant SOPs are available. For example there is no need to have an SOP for looking after cold rooms at LD level.	x	x	x		
B	Are the SOPs accessible to workers at their assigned work stations [Y, N]					Accessible' means that the SOPs are freely available and not kept in a locked office.	x	x	x		
C	Have individual staff members received training based on the SOPs which apply to their assigned tasks? [Y, N]				1		x	x	x		

Notes:

9.3 Field data are collected and used to support management decision-making.

9.3.1 An evidence-based method to forecast the need for vaccines and consumables is used.

E9:07a	Checklist for vaccine needs forecasting:					Use one of the options described in the Mid-level Management training series. Namely: 1) At primary and sub-national levels: Target population or previous consumption data. 2) At service point level: Session size. Check to ensure that there is compatibility/convergence with the method used in developing the country's comprehensive multi-year plan (cMYP).	x	x	x	x	M
A	Is a standard method used to estimate annual vaccine need? [Y, N]					Standard method' means the UNICEF vaccine forecasting tool or equivalent. 'Evidence-based' means that data have been systematically collected - for example national population census, updated as necessary.	x	x	x	x	
B	Is evidence-based target population data used in the calculation? [Y, N]					Calculations can be based on target population data and assumed vaccine wastage rates, but it is much better to use evidence-based wastage data collected from the field.	x	x	x	x	
C	Is evidence-based coverage data used in the calculation? [Y, N]					Coverage data will generally be taken from the routine reporting system. Ideally these data should be verified by periodic coverage surveys.	x	x	x	x	
D	Is evidence-based vaccine wastage data used in the calculation? [Y, N]				5	Calculations can be based on target population data, coverage data and assumed vaccine wastage rates, but it is much better to use evidence-based wastage data collected from the field.	x	x	x	x	

Notes:

E9:08a	Checklist for safe injection equipment needs forecasting:					See previous guidance note.	x	x	x	x	M
A	Is a standard method used to estimate annual need for syringes and safety boxes? [Y, N]						x	x	x	x	
B	Is evidence-based target population data used in the calculation? [Y, N]						x	x	x	x	
C	Is evidence-based coverage data used in the calculation? [Y, N]				5		x	x	x	x	

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
9.3.3	**Accurate cold chain equipment and vehicle inventories are maintained.**										
E9:10a	Cold chain equipment inventory checklist:					All programmes require an up-to-date cold chain equipment inventory, even if cold storage at the upper levels of the supply chain is outsourced.	x	x	x		M
A	Is there a cold chain equipment inventory? [Y, N]						x	x	x		
B	If yes, how frequently is the inventory updated? [Scoring: Score between 0 and 4 depending on the frequency of update. See the guidance notes for assistance.]				5	Check the inventory against the equipment found in facilities visited during the EVM assessment.It is recommended that districts (LD) update their inventories monthly, that the sub-national level (SN) does so quarterly, and that the national (PR) inventory be updated annually. Score 0 if there is no inventory. Score 4 if the inventory is updated with a frequency no more than double the recommended frequency. Use judgment to assign a score of 1, 2 or 3 to intermediate cases.Use the Notes section below to describe the process used to update the inventory.	x	x	x		
Notes:											
E9:11a	CONDITION: If vaccine transport is directly operated by this store. Vehicle inventory checklist:	☐				If the programme relies on government-owned vehicles, there should be an up-to-date inventory of these. The inventory may be managed by another department, but it should exist.	x				M
A	Is there a vehicle inventory? [Y, N]					An inventory is unnecessary only if all transport is completely outsourced throughout the vaccine and commodities supply chain.	x				
B	If YES, how frequently is the inventory updated? [Scoring: 4 if updated once or more in the past year; 3 if once in the past two years; 2 if once in the past three years; 1 if once in the past four years; 0 if only once in the past five years, or never updated]				1	Check the inventory against a recent known sample of equipment identified at a sample of locations in the cold chain.	x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
9.4	**An annual work plan is in place.**										
9.4.1	**An annual work plan to manage the human and financial resource needs of the programme is maintained.**										
E9:12a	Does a work plan/budget exist for the review period? [Y, N]					There should be a work plan or itemised budget covering the review period.	x	x	x		Z
Notes:											
E9:13a	CONDITION: If a workplan/budget exists. Considering the completed assessment of Criteria 1 to 8, did the plan cover the following topics:	☐					x	x	x		M
A	Cold chain equipment? [Y, N].						x	x	x		
B	Vehicles? [Y, N. Score n/a if transport is not directly operated by this store].						x	x	x		
C	Healthcare waste management? [Y, N].					This question is not a substitute for a proper waste management assessment.	x	x	x		
D	Maintenance issues? [Y, N].						x	x	x		
E	Staff resources? [Y, N].						x	x	x		
F	Staff training? [Y, N].				1		x	x	x		
Notes:											
9.5	**Where a contracted-out service is used, it is fully funded and resourced and it conforms with EVM requirements.**										
9.5.1	**Contracted-out services: Where entire services are contracted out and facilities are owned and operated by others, an effective and enforceable contract is in place and service response is acce**										
E9:14a	Which services are outsourced at this facility?					The operational aspects of any contracted-out services should be assessed under criteria E1 to E8. All that these questions deal with is the adequacy of the contract conditions.	x				Z
A	Customs clearance services [Y, N, n/a]						x				
B	Storage services [Y, N]						x				
C	Transport services [Y, N]						x				
D	Equipment maintenance services [Y, N]						x				
Notes:											

Q no.	EVM QUESTION		Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E9:15a	CONDITION: If customs services are outsourced. Customs clearance services performance checklist:	☐					x				M
A	Is there a written contract? [Y, N]					Check to see if there is a written contract and that it covers the current period.	x				
B	Is there an enforceable penalty clause for non-compliance? [Y, N]					Check the contract wording.	x				
C	Does the contract include key performance indicators? [Y, N]					Key performance indicator (KPI)': An indicator which can be used to demonstrate whether or not the contractor is complying with a specific contract requirements.	x				
D	Are key performance indicators reported by the contractor and monitored by the Employer? [Y, N]				5	Check that programme staff are formally allocated to this task. Check for written reports which demonstrate that KPIs are being monitored and that action has been taken where there are performance failures.	x				
Notes:											
E9:16a	CONDITION: If storage services are outsourced. Storage services performance checklist:	☐					x				M
A	Is there a written contract? [Y, N]					Check to see if there is a written contract and that it covers the current period.	x				
B	Is there an enforceable penalty clause for non-compliance? [Y, N]					Check the contract wording.	x				
C	Does the contract include key performance indicators? [Y, N]					Key performance indicator (KPI)': An indicator which can be used to demonstrate whether or not the contractor is complying with a specific contract requirements.	x				
D	Are key performance indicators reported by the contractor and monitored by the Employer? [Y, N]				5	Check that programme staff are formally allocated to this task. Check for written reports which demonstrate that KPIs are being monitored and that action has been taken where there are performance failures.	x				
Notes:											
E9:17a	CONDITION: If transport services are outsourced. Transport services performance checklist:	☐					x				M
A	Is there a written contract? [Y, N]					Check to see if there is a written contract and that it covers the current period.	x				
B	Is there an enforceable penalty clause for non-compliance? [Y, N]					Check the contract wording.	x				
C	Does the contract include key performance indicators? [Y, N]					Key performance indicator (KPI)': An indicator which can be used to demonstrate whether or not the contractor is complying with a specific contract requirements.	x				
D	Are key performance indicators reported by the contractor and monitored by the Employer? [Y, N]				5	Check that programme staff are formally allocated to this task. Check for written reports which demonstrate that KPIs are being monitored and that action has been taken where there are performance failures.	x				
Notes:											

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
E9:18a	CONDITION: If equipment maintenance services are outsourced. Equipment maintenance services performance checklist:	☐					x				M
A	Is there a written contract? [Y, N]					Check to see if there is a written contract and that it covers the current period.	x				
B	Is there an enforceable penalty clause for non-compliance? [Y, N]					Check the contract wording.	x				
C	Does the contract include key performance indicators? [Y, N]					Key performance indicator (KPI)': An indicator which can be used to demonstrate whether or not the contractor is complying with a specific contract requirements.	x				
D	Are key performance indicators reported by the contractor and monitored by the Employer? [Y, N]				5	Check that programme staff are formally allocated to this task. Check for written reports which demonstrate that KPIs are being monitored and that action has been taken where there are performance failures.	x				

Notes:

9.6 Key management posts are filled and staff are adequately trained and supervised.

9.6.1 Key national level management posts are filled.

E9:20a	National staffing checklist:						x				M
A	Is there a national EPI Manager in post? [Y, N]					If the position of national EPI manager does not exist, is there a person responsible for the management of the national EPI program?	x				
B	Is there a national Logistics/Cold Chain officer in post? [Y, N]					If the position of national Logistics/Cold chain officer does not exist, is there a person responsible for logistics/cold chain at the national level?	x				
C	Is there a senior member of staff who is responsible for Quality Management (QM)? [Y, N]					This may not be a full time position.	x				
D	Are there sufficient supporting staff? [Y, N]				5		x				

Notes:

9.6.2 Suitable vaccine management training materials are used.

E9:21a	Are vaccine management training materials for storekeepers and health workers clear and correct? [Score on a scale of 0-4].				1	Question for EPI manager. Where training materials exist, but there are no SOPs, assess the training materials in their own right. Training materials should cover all the key issues outlined in the EVM guidelines.	x				T

Notes:

E9:22a	Are these training materials consistent with WHO recommendations/standard operting procedures? [Score on a scale of 0-4 and elaborate in the commentary].				1	NOTE: Question for EPI manager. Assessor guidance needed.	x				T

Notes:

Q no.	EVM QUESTION	☐	Result	Score	Max	Guidance notes for assessors	PR	SN	LD	SP	Cat
9.6.3	**Staff are trained in vaccine management.**										
E9:23a	Staff training checklist:						x	x	x	x	M
A	Did the storekeeper/health worker receive on-the-job or classroom training in vaccine management during the review period? [Y, N]					Use Notes to describe any training received.	x	x	x	x	
B	Are there records of training given? [Y, N]				5	There should be a training record of some kind. This could be a certificate of attendance for a classroom course or copies of guidance notes used during on-the-job training.	x	x	x	x	
Notes:											
9.6.4	**Regular supportive supervision takes place.**										
E9:24a	Supportive supervision checklist:						x	x	x	x	M
A	How many supervisory visits did the facility recieve during the review period?					Supportive supervision should take place at least once per quarter.	x	x	x	x	
B	Are there records of supportive supervision? [Y, N]				5	Supportive supervision visits should be logged in a log book or visitor book.	x	x	x	x	
Notes:											