

Ballistics and Physics Division

Protocol of the evidence collection, packing and forwarding

Ballistics

1. Arms, their components and ammunition when seized from scene of crime or a suspect should be packed and sealed separately. Plug the breech and muzzle ends and also the chamber in case of revolvers with clean cotton/cloth. Write some identification mark in an inconspicuous place so that you may identify in the court during trial. Photograph the firearm and ammunition.
2. A firearm should be unloaded before forwarding to the laboratory. Before unloading, the number, position & orientation of the live, misfired and fired cartridge cases in the chamber and magazine of the weapon should be carefully observed and forwarded to the laboratory.
3. Fired bullets, cartridge cases and the weapon used in crime should be sent as such. Efforts should not be made to repeat touch/clean them. The bullets and cartridge cases should be wrapped in clean cotton wool and packed in containers to prevent any scratch which might develop /destroyed during transportation.
4. Extracted bullet/ pellet containing blood should be dried first under shade, wrapped in cotton and packed in a suitable glass vial/ plastic container with proper lid.
5. Wads should be collected and kept in a suitable container, label and sent. Gunshot residues should collect from each hand and packed separately in plastic bags with proper labelling.
6. Cloths of the deceased/injured having bullet marks should be sent to the laboratory. The powder marks around the bullet holes should be preserved by covering them and stapling around with a piece of clean polythene sheet.
7. The services of a ballistics expert should be requisitioned for scientific evaluation of an undisturbed crime scene and post-mortem examination in important cases.
8. Position of all exhibits, bullets and ricochet marks at the scene of crime should be noted, measured, photographed and forwarded to the laboratory. Similar guidelines should be allowed in cases of explosives as well.

9. Copies of the post-mortem report/injury sheet, seizure memo and FIR should be sent in cases of death/injury by firearms.
10. Only defused explosive/explosive devices and debris are examined. The defused device and a small representative sample (10gm) of the live chemical explosive should be sent to the laboratory through a messenger. Each exhibit and also control sample should be packed in separately polythene bags/ plastic container with lid.
11. Live detonators should be wrapped in cotton wool and then packed in paper cartons separately and labelled to avoid accidents during transit. Chemical explosives, hand grenades dynamite cartridges should be sent separately.

Physics

1. For examination of paint chips, paint smears, powdered paint and liquid paint from the scene of crime should be collected separately. Control sample of the same under examination should be collected separately and marked. The paint samples should be collected carefully taking care that they do not break during transportation and should be collected in polythene bag.
2. To ascertain the direction of force in cases of broken glasses, remnants of the glass pieces and examine for presence of fingerprints. It should be handled carefully so that any artefact or scratch could be avoided. Small pieces of the glass should be collected using forceps whereas powder glass may be collected using adhesive tape.
3. Soil on a victim' clothes, shoes, on the tyres of the vehicles etc should be preserved carefully. Disputed and control samples soil should be packed and marked separately.
4. In the electric short circuiting the exact origin of fire should be identified and material exhibits should be collected with care after switching of the electric supply.
5. In cases of examination of telephone wires and cases involving the tool marks on objects, the investigating officer should collect the loosely hanging wires and clearly mark the end supposed to have been cut by the culprit to differentiate it from the cut made by the IO in removing a small length of wire. The ends of the recovered wires should be carefully wrapped in cotton wool and tied with strong cotton thread. The wires ends should be packed in

a moist free container. Tool left at scene of offence should be wrapped in cotton wool and should be taken not to use these instruments in obtaining sample ends.

6. In cases of building materials like cement, mortar, concrete and bitumen. About two Kg chunk of concrete should be taken from the suspected building and random samples from the various places should be collected. Similarly in cases of bitumen two Kg sample is required for examination.
7. In cases of the fabrics, small fragments of the cloth which has been torn away by the wheel of the vehicle or otherwise found on the crime scene. These should be collected and sent for comparison with material found and suspected fabrics.